PROTECTION OF AUTHOR’S COPYRIGHT

This copy has been supplied by the Library of the University of Otago on the understanding that the following conditions will be observed:

1. To comply with s56 of the Copyright Act 1994 [NZ], this thesis copy must only be used for the purposes of research or private study.

2. The author's permission must be obtained before any material in the thesis is reproduced, unless such reproduction falls within the fair dealing guidelines of the Copyright Act 1994. Due acknowledgement must be made to the author in any citation.

3. No further copies may be made without the permission of the Librarian of the University of Otago.
pp 295 - 296

Missing
Claiming from WM
16/9/04

N/A from WM 9/02

Requested from author
12. 9. 02.

28/10/02 Dr Donnelly
Unable to find pp 295, 296

v Append C p140 (Sect E)
Samoan Women's Voices:
Alternative Ways of Doing Birth
Samoan Women's Voices:

Alternative Ways of Doing Birth
Samoan Women's Voices:
Alternative Ways of Doing Birth

by Patricia Donnelly

A Thesis submitted for the degree of
Doctor of Philosophy

at the University of Otago, Dunedin, New Zealand

August 1992
The aim of this thesis was to examine the way in which migrant Samoan women did birth in Wellington in the mid 1980's. The thesis draws on interviews conducted with fifty Samoan women and interweaves the findings of these interviews with analyses of material drawn from the hospital records of a larger cohort of two hundred and forty eight Samoan women who gave birth in Wellington in 1985-86. The cross-cultural context in which this research was conducted demonstrated the need for such research approaches to be developed in a collaborative manner. The problems of establishing contact with Samoan women through standard letter/phone approach highlighted the need to explore alternative methods in ascertaining the needs of Samoan health consumers in New Zealand. Samoan and obstetric expert accounts of birth are examined through written and oral data sources and compared and contrasted with the way in which Samoan women constructed pregnancy and birth.

The thesis demonstrates that the construction of knowledge about reproduction is not confined to experts. Samoan women gave meaning to the changes which were occurring in their bodies by drawing on their own experientially created knowledge as well as drawing from and re-creating the knowledge of Samoan and obstetric experts. Expert knowledge about reproduction is shown to co-exist for the Samoan women, demonstrating that for Samoans, though not necessarily for health professionals in Wellington, Samoan and obstetric ways of doing birth are viewed as complementary rather than competitive approaches.

In following Samoan womens' voices, theoretical and methodological approaches, which frame explanations of migrant behaviour in terms of differences in migrant adaptation to the host society, were shown to fail to do justice to the active ways in which women constructed their pregnancy and birth experiences. The way in which Samoan women drew from both Samoan and obstetric understandings of reproduction could not be simply explained by fitting women into classificatory boxes, such as cultural orientation, being a first time or experienced mother, being
married or single or engaged in a planned or unplanned pregnancy. Such assumptions failed to account for the richness and diversity in the ways in which Samoan women made sense of and acted to shape their experiences.

The thesis demonstrates the continuing importance for Samoans living in New Zealand of Samoan ways of explaining physiological changes which result from pregnancy and Samoan approaches to caring for a pregnant woman and her unborn baby. For most of the Samoan women going to the fofo (traditional healer), was as much a part of their pregnancy experience as making antenatal visits to their doctor.

The power of obstetrics to control and shape the encounter between women and their doctors is demonstrated at many points in the thesis. During pregnancy Samoan women were able to largely control their own agenda. This was less true for most women during labour. Birth in hospital meant that women were more intensively exposed to obstetric control of their bodies than during pregnancy. For many of the Samoan women birth was a medically constructed event.

The thesis evidences the need for effective cross-cultural communication between health professionals and the women for whom they provide services. The Samoan women's voices show this need.
ACKNOWLEDGEMENTS

I would like to acknowledge and thank the many people who have contributed in diverse ways to assist with the birthing of this thesis. To the Samoan women whose voices in this thesis illuminate many of the issues which other women also face as they seek to do birth with pride and dignity, I express my heartfelt thanks. My thanks go also to all the women who have supported me in the conduct of this research. My particular thanks go to my friend and colleague Sene Neich for her guidance and advice.

There are a number of people I would like to thank who have provided me with academic and professional supervision over the years. The gestation of this thesis began under the guidance of the late Professor Ken Newell, whose vision and inspiration I continue to miss. I owe him much. My thanks go to others who provided early supervision and guidance in the development of this thesis in particular Bill Cowie and Jim Robb. I owe an enormous debt of gratitude to Geoff Fougere, my principal supervisor in recent years, both for his provocations and his support in helping me work through the issues which unfolded from the research. I express by grateful thanks to Tricia Laing for her support and for sharing with me, her own understandings and insights gained from her research with Samoan people. Philippa Howden-Chapman has been a tower of strength during the final gestation of this thesis. Her comments and criticisms on drafts drawing on her professional and personal knowledge bases are gratefully acknowledged.

I am grateful for the support which Professor Laurence Malcolm and members of the Department of Community Health have given me over the years. I would particularly like to thank Gordon Purdie for his assistance with the statistical analysis involved in the thesis. I would also like to thank Maggie McFall-Oliff, Cara Fleming and Hilary Hubbard for helping me get this thesis produced.
The support of the Medical Research Council in carrying out the study of Samoan childbirth in Wellington is gratefully acknowledged.

Two people have through their love and support done much to ensure that this thesis finally got done. This thesis is dedicated to my mother Molly and my husband Tony Haas.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter One - THEORETICAL FRAMEWORKS</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>19</td>
</tr>
<tr>
<td>Listening to Womens' Voices</td>
<td>21</td>
</tr>
<tr>
<td>DOING BIRTH THE OBSTETRIC WAY</td>
<td>24</td>
</tr>
<tr>
<td>Medical Power in Reproduction</td>
<td>27</td>
</tr>
<tr>
<td>SOCIAL CONTEXT OF PREGNANCY AND BIRTH</td>
<td>38</td>
</tr>
<tr>
<td>THE CULTURAL CONTEXT OF PREGNANCY AND BIRTH</td>
<td>41</td>
</tr>
<tr>
<td>Medical Pluralism</td>
<td>42</td>
</tr>
<tr>
<td>Samoan Medical Paradigm</td>
<td>45</td>
</tr>
<tr>
<td>MIGRATION AND ADAPTATION</td>
<td>56</td>
</tr>
<tr>
<td>Social Network Characteristics</td>
<td>62</td>
</tr>
<tr>
<td>Studies of Samoan Migrant Adaptation in New Zealand</td>
<td>66</td>
</tr>
<tr>
<td>Summary</td>
<td>70</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>71</td>
</tr>
</tbody>
</table>

| Chapter Two - METHODS                | 79 |
| INTRODUCTION                         | 79 |
| THE WELLINGTON STUDY                 | 80 |
| Research Process                     | 80 |
| Samoan Researcher                    | 82 |
| Identifying Pregnant Samoan Women     | 83 |
| QUANTITATIVE APPROACH                | 85 |
| The Total Study Population           | 85 |
| Data Collection Schedule             | 86 |
| Data Coding                          | 87 |
| Data Entry and Analysis              | 88 |
| QUALITATIVE APPROACH                 | 88 |
| Interview Group                      | 88 |
| The Research Interview               | 93 |
| Data Entry                           | 94 |
| OPERATIONALISING THE CONCEPT OF ACCULTURATION | 95 |
| Indicators Included in Summary       | 99 |
| Analysis and Writing up of the Interview Material | 103 |
| SECONDARY SOURCES                    | 103 |
| Obstetric Texts                      | 103 |
| Samoan Sources                       | 105 |
# TABLE OF CONTENTS con't.

<table>
<thead>
<tr>
<th>Chapter Three</th>
<th>THE SAMOAN WOMEN IN THE WELLINGTON STUDY</th>
<th>108</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td></td>
<td>108</td>
</tr>
<tr>
<td>PART ONE</td>
<td></td>
<td>108</td>
</tr>
<tr>
<td>Migration History</td>
<td></td>
<td>108</td>
</tr>
<tr>
<td>Socio-demographic Characteristics of the Samoan Women in the Study</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>Conclusions</td>
<td></td>
<td>124</td>
</tr>
<tr>
<td>PART TWO</td>
<td></td>
<td>127</td>
</tr>
<tr>
<td>Classification of Categories of Cultural Orientation</td>
<td>127</td>
<td></td>
</tr>
<tr>
<td>Case Studies of Women Classified as Less Samoan Oriented</td>
<td>129</td>
<td></td>
</tr>
<tr>
<td>Characteristics of Women in the Less Samoan Oriented Category</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td>Case Studies of Women Classified as More Samoan Oriented</td>
<td>138</td>
<td></td>
</tr>
<tr>
<td>Characteristics of Women in the More Samoan Oriented Category</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>Case Studies of Women Classified as Biculturally Oriented</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>Characteristics of Women in the Bicultural Category</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td>CONCLUSION</td>
<td></td>
<td>152</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Four</th>
<th>CONCEPTION</th>
<th>156</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td></td>
<td>156</td>
</tr>
<tr>
<td>SAMOAN PARADIGM</td>
<td></td>
<td>158</td>
</tr>
<tr>
<td>Samoan Understanding and Management of Infertility</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td>Samoan Fertility Control</td>
<td>165</td>
<td></td>
</tr>
<tr>
<td>OBSTETRIC PARADIGM</td>
<td></td>
<td>168</td>
</tr>
<tr>
<td>COMPARISON OF THE SAMOAN AND WESTERN MEDICAL PARADIGMS</td>
<td>177</td>
<td></td>
</tr>
<tr>
<td>WOMEN'S CONSTRUCTIONS OF CONCEPTION</td>
<td>178</td>
<td></td>
</tr>
<tr>
<td>Doing Contraception - Contraceptive Users Among the Wellington Women</td>
<td>182</td>
<td></td>
</tr>
<tr>
<td>Womens' Constructions Of Infertility</td>
<td>185</td>
<td></td>
</tr>
<tr>
<td>CONCLUSION</td>
<td></td>
<td>191</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Five</th>
<th>FROM CONCEPTION TO PREGNANCY</th>
<th>197</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td></td>
<td>197</td>
</tr>
<tr>
<td>SAMOAN PARADIGM</td>
<td></td>
<td>197</td>
</tr>
<tr>
<td>OBSTETRIC PARADIGM</td>
<td></td>
<td>199</td>
</tr>
<tr>
<td>Evaluating Symptoms of Pregnancy</td>
<td>201</td>
<td></td>
</tr>
<tr>
<td>Doctor observed indications of pregnancy</td>
<td>203</td>
<td></td>
</tr>
<tr>
<td>OBSTETRIC TIMETABLES</td>
<td></td>
<td>205</td>
</tr>
<tr>
<td>COMPARISON OF SAMOAN AND WESTERN MEDICAL PARADIGMS</td>
<td>209</td>
<td></td>
</tr>
<tr>
<td>WOMEN'S CONSTRUCTIONS OF PREGNANCY</td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>Missing a Period</td>
<td></td>
<td>210</td>
</tr>
<tr>
<td>Sickness Symptoms and Other Changes</td>
<td>211</td>
<td></td>
</tr>
<tr>
<td>Combination</td>
<td></td>
<td>212</td>
</tr>
<tr>
<td>Factors Involved in Self-diagnosis</td>
<td>213</td>
<td></td>
</tr>
<tr>
<td>WOMENS' CONSTRUCTIONS OF PREGNANCY</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td>Confident In Own Diagnosis Of Pregnancy</td>
<td>218</td>
<td></td>
</tr>
<tr>
<td>Women Who Needed Confirmation</td>
<td>218</td>
<td></td>
</tr>
<tr>
<td>CONCLUSION</td>
<td></td>
<td>221</td>
</tr>
<tr>
<td>TABLE OF CONTENTS cont..</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chapter Six - BEING PREGNANT</strong></td>
<td>226</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>226</td>
<td></td>
</tr>
<tr>
<td>SAMOAN CONSTRUCTION OF PREGNANCY</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>The Nature of Pregnancy</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>SAMOAN WOMENS' CONSTRUCTIONS OF PREGNANCY</td>
<td>233</td>
<td></td>
</tr>
<tr>
<td>Ma'i Aitu and Pregnancy</td>
<td>233</td>
<td></td>
</tr>
<tr>
<td>Acceptance Of A Samoan Construction Of Pregnancy</td>
<td>236</td>
<td></td>
</tr>
<tr>
<td>Ambivalence And Situational Relevance In Acceptance Of A Samoan Construction Of Pregnancy</td>
<td>238</td>
<td></td>
</tr>
<tr>
<td>Ambivalence</td>
<td>239</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>241</td>
<td></td>
</tr>
<tr>
<td>OBSTETRIC CONSTRUCTION OF PREGNANCY</td>
<td>243</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>251</td>
<td></td>
</tr>
<tr>
<td>SAMOAN WOMENS' CONSTRUCTION OF PREGNANCY</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>Pregnancy as a State of Health or Sickness?</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>256</td>
<td></td>
</tr>
<tr>
<td>FEELINGS ABOUT BEING PREGNANT</td>
<td>258</td>
<td></td>
</tr>
<tr>
<td>Happy to be Pregnant</td>
<td>258</td>
<td></td>
</tr>
<tr>
<td>Ambivalent or Unhappy to be Pregnant</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td>WOMEN'S FEELINGS DURING PREGNANCY</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>Being Unhappy</td>
<td>263</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>266</td>
<td></td>
</tr>
<tr>
<td>Role Changes</td>
<td>266</td>
<td></td>
</tr>
<tr>
<td>'BAD' PREGNANCIES</td>
<td>268</td>
<td></td>
</tr>
<tr>
<td>THE MANAGEMENT OF TIME</td>
<td>272</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>276</td>
<td></td>
</tr>
<tr>
<td><strong>Chapter Seven - DOING PREGNANCY</strong></td>
<td>281</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>281</td>
<td></td>
</tr>
<tr>
<td>PREGNANCY THE SAMOAN WAY</td>
<td>282</td>
<td></td>
</tr>
<tr>
<td>Cold and Heat</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>286</td>
<td></td>
</tr>
<tr>
<td>Massage in Pregnancy</td>
<td>288</td>
<td></td>
</tr>
<tr>
<td>DOING PREGNANCY THE OBSTETRIC WAY</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>DOING PREGNANCY - WOMENS' CONSTRUCTIONS</td>
<td>299</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>299</td>
<td></td>
</tr>
<tr>
<td>Eating and Drinking</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>'Good Food' and Pregnancy</td>
<td>301</td>
<td></td>
</tr>
<tr>
<td>Cold and Heat</td>
<td>302</td>
<td></td>
</tr>
<tr>
<td>Movement, Activity and Rest</td>
<td>303</td>
<td></td>
</tr>
<tr>
<td>Sexual Relations in Pregnancy</td>
<td>305</td>
<td></td>
</tr>
<tr>
<td>Samoan Massage in Pregnancy</td>
<td>310</td>
<td></td>
</tr>
<tr>
<td>Samoan Women and Antenatal Care</td>
<td>319</td>
<td></td>
</tr>
<tr>
<td>DIFFERENT FRAMES OF REFERENCE</td>
<td>328</td>
<td></td>
</tr>
<tr>
<td>SUMMARY</td>
<td>331</td>
<td></td>
</tr>
<tr>
<td>INFORMATION NEEDS OF PREGNANT WOMEN</td>
<td>332</td>
<td></td>
</tr>
<tr>
<td>Professional Sources</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td>Women's Recommendations</td>
<td>338</td>
<td></td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>340</td>
<td></td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS cont..

Chapter Eight - DOING BIRTH ........................................... 346
INTRODUCTION ............................................................... 346
THE ONSET OF LABOUR ..................................................... 348
   Samoan and Obstetric Understandings ............................. 348
WOMENS' UNDERSTANDINGS ............................................... 349
LOCATION OF BIRTH ...................................................... 352
   Samoan Approach .................................................... 352
   Obstetric Approach ................................................ 353
PHILOSOPHIES OF LAISSEZ-FAIRE AND/OR INTERVENTION .......... 357
   Samoan Understandings and Practices ......................... 357
   Obstetric Understandings and Practices ....................... 359
INDUCTION AND AUGMENTATION OF LABOUR AMONG SAMOAN
   WOMEN ........................................................................... 366
      A Samoan Woman's Account Of Induction .................... 367
PAIN AND THE MEANING OF LABOUR .................................... 370
   Samoan Understandings and Practices ......................... 370
   Obstetric Understandings and Practices ....................... 372
   Samoan Womens' Expressions Of The Emotions and
      Sensations of Labour ............................................... 373
HOW WOMEN DID PAIN ...................................................... 376
   Pain Relief and the Medical Context of Labour ............. 377
SAMOAN WOMEN AND PHARMACOLOGICAL PAIN RELIEF ............ 381
   Feeling Prepared For Labour - Samoan Womens' Experiences 383
      Social Support During Labour .................................. 385
   Samoan Men And Birth .............................................. 387
MEDICAL AND MATERNAL FRAMES OF REFERENCE ................. 391
MANAGEMENT OF NORMAL LABOUR ....................................... 393
   Samoan Paradigm ................................................... 393
   Obstetric Paradigm .................................................. 395
   Womens' Experiences ............................................... 400
MANAGING COMPLICATIONS ............................................... 402
   The Samoan Way ..................................................... 402
   The Obstetric Way .................................................. 404
   Caesarean Section - Samoan Womens' Experiences .......... 406
ENDING LABOUR ................................................................ 411
   Samoan Paradigm ................................................... 411
   Obstetric Paradigm .................................................. 414
   Samoan Women ....................................................... 416
THE EARLY PERIOD AFTER BIRTH ...................................... 420
   Samoan Approach .................................................... 420
   Obstetric Paradigm .................................................. 421
   Womens' Feelings After Birth ..................................... 423
CONCLUSIONS .................................................................... 429
CONCLUSIONS .................................................................... 438
RECOMMENDATIONS ......................................................... 455
DIRECTIONS FOR FUTURE RESEARCH ................................. 457
TABLE OF CONTENTS cont..

BIBLIOGRAPHY

GLOSSARY

APPENDIX A - Profiles of Samoan Taulasea and Fa'atosaga Interviewed in Wellington
APPENDIX B - Information Leaflet to Samoan Women
APPENDIX C - Quantitative Study Coding Schedule
APPENDIX D - Interview Schedule
APPENDIX E - Profiles of Samoan Women Interviewed
APPENDIX F - A Note on Samoan Traditional Massage and the Biomedical Paradigm
APPENDIX G - The Increase in Caesarean Rates
APPENDIX H - Unpublished Paper - Caesarean Section: A Study of Samoan Women in Wellington by P. Donnelly
# LIST OF TABLES

| Table 2.1 | Way of Declining by Mode of Contact | 90 |
| Table 2.2 | Telephone Availability | 92 |
| Table 2.3 | Obstetric Texts Reviewed | 105 |
| Table 3.1 | Home Village of Migrant Women | 109 |
| Table 3.2 | Area of Origin by Age at Migration | 110 |
| Table 3.3 | Primary Reason for Migration | 111 |
| Table 3.4 | Age of Samoan Women Interviewed and Not Interviewed | 114 |
| Table 3.5 | Marital Status of the Samoan Women in the Wellington Study | 114 |
| Table 3.6 | Educational Status of Samoan Women in Wellington Study | 116 |
| Table 3.7 | Occupation of Samoan Women in Wellington Study | 117 |
| Table 3.8 | Religious Affiliation of Wellington Samoan Women | 118 |
| Table 3.9 | Length of Residence of Samoan Women in Wellington Study | 119 |
| Table 3.10 | Comparison of Length of Residence of Samoan Migrants in New Zealand | 119 |
| Table 3.11 | Parity of Samoan Women in Wellington Study | 120 |
| Table 3.12 | Samoan Crude Birth Rate (CBR) and General Fertility Rate (GFR) in New Zealand | 122 |
| Table 3.13 | Residential Distribution of Samoan Women in Wellington Study | 122 |
| Table 3.14 | Place of Residence by Length of Residence in New Zealand | 123 |
| Table 3.15 | Cultural Orientation by Timing of Interview | 128 |
| Table 4.1 | Contraceptive Use by Type in Western Samoa 1981 | 168 |
| Table 5.1 | Obstetric Texts Reviewed | 201 |
| Table 5.2 | Symptoms of Pregnancy | 210 |
| Table 5.3 | Pregnancy Diagnoses and First Baby | 213 |
| Table 5.4 | Pregnancy Diagnosis Among Women in Oakley Study | 215 |
| Table 5.5 | Knowledge of Date of Last Menstrual Period | 217 |
| Table 5.6 | Parity by Need for Confirmation of Pregnancy | 217 |
| Table 6.1 | Dos and Don't's of Pregnancy by Interview Timing | 234 |
| Table 6.2 | Distribution of Classification of women by Cultural Orientation of Dos and Don't's Interview Group with Total Interview Group | 235 |
| Table 6.3 | Dos and Don't's of Pregnancy by Cultural Orientation | 235 |
| Table 6.6 | Women's Feelings About Being Pregnant | 258 |
| Table 6.2 | Hyperemesis Gravidarum by Parity | 270 |
| Table 6.3 | Hyperemesis Gravidarum by Previous Experience | 270 |
| Table 6.4 | Pattern of Help Seeking Behaviour | 271 |
LIST OF TABLES cont.

| Table 7.1 | Use of Fofo During Pregnancy by Category of Cultural Orientation | 311 |
| Table 7.2 | Use of Fofo by Parity | 312 |
| Table 7.3 | Weeks Pregnant at First Antenatal Visit | 322 |
| Table 7.4 | First Antenatal Attendance | 324 |
| Table 7.5 | Number of Antenatal Visits Made by Samoan Women | 325 |
| Table 7.6 | Number of Antenatal Visits by Pregnancy Complications | 326 |
| Table 8.1 | Pethidine by Parity | 378 |
| Table 8.2 | Artificial Rupture of Membranes (ARM) in Labour by Pethidine use at Wellington Womens' Hospital | 379 |
| Table 8.3 | Epidural by Parity | 380 |
| Table 8.4 | Epidural for Pain Relief by Parity | 381 |
| Table 8.5 | Pethidine Injection by Cultural Orientation | 382 |
| Table 8.6 | Episiotomy Rate by Parity by Hospital | 400 |
| Table 8.7 | Comparative Caesarean Section Rates per 100 Hospital Deliveries | 404 |
| Table 8.8 | Comparative Caesarean Rates | 407 |
| Table 8.9 | Comparative Caesarean Section Rates by Maternal Age | 408 |
| Table 8.10 | Caesarean Section by Birth Weight | 410 |
| Table 8.11 | Cord Disposal Cultural Orientation of Respondent and Non Respondent Groups | 419 |
"Childbirth is an intimate and complex transaction whose topic is physiological and whose language is cultural".

This thesis was for me a voyage of discovery. In sharing the story of that voyage I would like first to place the development of my work in context. A piece of academic work such as a thesis does not emerge out of a vacuum. Each is framed in the particular configuration of the research tradition the writer follows, the wider socio-political context in which the research is set and the personal characteristics of the writer. The selection of a topic, the way the research is conducted and for what purposes, as well as the manner in which it is subsequently reported, are all influenced by the understandings and practices, past and present, characteristic of the particular research tradition from which the writer begins his or her work. The understandings and practices of allied traditions may also shape the questions asked and the direction of the research. Further, the conduct of all research, but more explicitly that associated with the social sciences, is also influenced by the socio-political climate of the day. In addition, the selection of a thesis topic and the subsequent way the research develops, is influenced by the personal characteristics and interests of the writer. Although I have isolated out for ease of discussion, elements of the academic, socio-political and personal contexts in which this thesis emerged, in reality these elements merge and interweave.

PERSONAL CONTEXT

As this thesis was as much a product of factors to do with my own life, as that of the social and academic contexts in which it was formally fostered, I will begin with my story. Telling that story may help the reader understand why this topic rather than another, became the focus of my work. When I began work as a community health researcher in the early 1980's, I brought with me the intellectual baggage of my past. These included a familiarity with both biomedical and social science perspectives. This familiarity was the result of exposure to a biomedical model
of understanding health and disease gained during my nursing training in the 1960's and my subsequent discovery of alternative ways of seeing the world which emerged out of my studies in sociology and political science in the 1970's. I recall the liberation and excitement I felt at that time, in discovering what were for me, new ways of viewing the world of which I was a part. Some of these new understandings fed back into my teaching as a nurse educator. However it was not until I began work in the field of community health that I saw the possibilities of integrating understandings about the role of social and political forces into the practical world of health and illness which had been my field of practice. Theory and practice slowly came together when I entered the field of community health. It was in this context that I was able to draw from my clinical and sociological understandings in framing research into health issues and problems.

This thesis had its beginnings in the coming together of my personal and professional interests. These concerns included the delivery of health services for women particularly in their reproductive years. Also included were my personal and professional interests and concerns with the health of Pacific Island migrant communities in New Zealand. I set out to learn how Samoan women felt about having a baby in New Zealand; what they thought about their experiences with the health services during pregnancy and birth; what sorts of experiences they had and what changes they would like to see introduced. My motivation in conducting this research was twofold. Firstly, to provide information which migrant women themselves could use to lobby for changes on their own behalf; secondly to sensitise health professionals to take account of the health beliefs and practices of women from Pacific Island cultures.

In the early 1980's, I became increasingly conscious of New Zealand's position as a Pacific nation. This was partly to do with my study of international politics, partly to do with a move from Christchurch to the more multicultural environment of Wellington and a great deal to do with the establishment of
personal relationships with Pacific Island people, which began when I met the man who is now my husband. These relationships with Pacific peoples have deepened in the last decade, to the extent that my life and that of my husband's, is irrevocably intermeshed with the lives of members of a Tongan family who consider us, as we consider ourselves, to be part of their kainga (extended family). It was through these personal relationships that I first became aware of the health concerns of Pacific Islanders. The women I knew were, as they continue to be, primarily concerned about their own health as it affected their families. One particular area of such concern was with pregnancy and birth. In formulating my research ideas for this thesis, I attended a number of meetings with women from PACIFICA. Its members include women from a variety of Pacific Island ethnic groups. They talked about their experiences of birth in their country of origin as well as in New Zealand and were keen to support research which would benefit other Pacific women. Women spoke to me of their feelings about the services provided at the time by general practitioners, antenatal clinics and hospitals. Common themes were that such services were not always culturally sensitive to the needs of Pacific Island women. It was felt that health professionals were often ignorant of or ill informed about the particular health beliefs and practices of Pacific Island women. These concerns were central in framing the work of this thesis.

My decision to explore issues of pregnancy and birth as these affected Pacific Island women in New Zealand was also strengthened by an increasing awareness that there were few first hand accounts of the pregnancy and birth experiences of women in New Zealand (Hood 1977; Driscoll 1980; Dawson 1983). Few studies have been reported in the literature of the experiences of migrant women. As Wendy Larner has noted of the literature on labour migration, "for the most part male experiences were emphasised, or aggregate data were examined without any recognition that the experiences associated with migration may be fundamentally different for women and men. If women were not ignored, they were usually seen as dependents" (Larner 1990, 19). In Australia and New Zealand there have been very few studies
concerned specifically with the health of migrant women. On reviewing a 1984 Australian bibliography on migrant women I found that twelve out of sixty five articles were concerned with reproduction (Australian Department of Immigration 1984). Of these four were concerned with physical or social problems associated with reproduction, another four with health provider issues while the remaining five concerned the provision and uptake of family planning services and birth control methods. A similar review of a 1980 New Zealand bibliography on Immigration and Immigrants revealed only two articles on women and reproduction - both concerned with physical and social problems (Spoonley 1980). Thus it would seem that in both the New Zealand and Australian literatures on immigration and immigrants there has been little research which has specifically focused on women's experiences and even less research on migrant women and reproduction.

In the early 1980's issues related to reproduction were of considerable concern to Pacific Island migrant women, many were in the peak of their reproductive years and were a high group of users of the maternity services. In the late 1970's, the Crude Birth Rate (CBR) of Pacific Islanders in New Zealand, was three times that of the non-Maori population and more than twice that of the Maori population. My decision to concentrate on Samoan women rather than some other Pacific Island ethnic group was largely made on the basis that as the most numerous group of Pacific Island migrants they were also likely to be the largest group of health consumers. In addition, because of New Zealand's former colonial relationship with Samoa, there has been a strong influence on the way in which the health services which women experienced in Samoa developed. I was also aware that despite the fact that the general term 'Pacific Islander' is used in New Zealand to describe a large number of ethnic groups, there is in reality no such being. There are however, to name a few, Tongans, Samoans, Tokelauans, who while recognising they have common interests which can sometimes be achieved by presenting a united front, identify primarily with their own ethnic community or island of origin.
My interest in issues related to pregnancy and birth was also heightened at the time, by my own attempts to have children. I was thus extremely interested in how other women felt about being pregnant and becoming a mother, and how they cared for themselves and their unborn child. Unlike the Samoan women whose lives I entered for brief periods in 1985-86, but whose stories form the central thread of this thesis, I did not become a mother. The development of this study of Samoan women in Wellington, was marked for me by a number of failed pregnancies. For me the work of this thesis in particular talking with Samoan women, was a healing as well as an investigatory process.

This thesis reflects the community health orientation in which it was conceived. It is very much the product of a cross-fertilization of ideas, the result of a decade of working in the interdisciplinary arena of community health. My research approach to pregnancy and birth, reflects my exposure to and involvement with the thinking of women, particularly mothers, anthropologists and others working in cross-cultural settings, medical and non medical epidemiologists, health activists, medical sociologists, as well as medical and nurse clinicians working in the community and hospital contexts. The interdisciplinary nature of this thesis is also reflected in the fact that supervisors of my thesis have come from a variety of different disciplines. These have included a community health specialist, two medical sociologists, a social anthropologist and a clinical psychologist.

Among the rewards in adopting a broad conceptual and methodological approach, has been discovering the complexity and diversity of explanations about pregnancy and birth which exist both in and between cultures. Not only between women and birth practitioners, but also between anthropologists, sociologists and psychologists. Such an interdisciplinary approach to cross-cultural research is not new. Kleinman argues that cross-cultural studies of health care must include "ideas, methods, problem-frames, and solution-frames from social science and clinical science" (Kleinman 1980, 1). In this voyage I have become increasingly aware not only of the need for improving
communication between health professionals and lay people but also the need to improve communication between clinicians and social scientists. Like Kleinman I consider that all too often clinical practitioners such as doctors and nurses, and social scientists such as medical sociologists and medical anthropologists, locked in their own explanatory models talk past each other. I consider that community health practitioners who could be said to occupy a pivotal position between such groups, can provide a bridge or link in forging exchanges of understanding between clinicians and social scientists which can have important implications for users of health services. This thesis is attempting to communicate to a wide audience, which includes Samoan and non-Samoan women, clinical practitioners, health administrators and social scientists.

Working in an interdisciplinary environment brings its own challenges. Community health does not represent an academic discipline in the traditional sense of a single discipline with its own bounded body of knowledge, but rather represents a way of thinking and practice, which has drawn and continues to draw on the knowledge base and skills of a number of disciplines in forging its own identity. In doing so it both enriches those who work within the field, by exposing them to the conceptual and methodological tools of others, as well as having the potential to isolate a person from the main stream of the particular academic discipline in which their original training might have occurred. Community health specialists and researchers thus also need to maintain their bridges to their own parent discipline in good repair.

Research studies such as this thesis, which has as its foundation the goal of improving the birth environment for migrant Samoan women, are framed within a community health tradition which is essentially action oriented. This is not to imply that sociological and anthropological research lacks practical applications, but rather that this is often a byproduct of the research rather than its primary purpose. In general, a higher priority is given in sociological and anthropological research to the furtherance of theoretical understandings pertinent to the
discipline. Consequently much of the scholarly research undertaken, is of a more abstract nature. However, neither do I wish to suggest that all community health research is atheoretical, on the contrary, community health researchers look to theoretical frameworks in the development of research and to help explain their findings. However they do so in a more eclectic fashion than for example researchers who consider themselves to be primarily sociologists or anthropologists. This eclecticism reflects the essentially interdisciplinary nature of community health, which draws on both biomedical and social science knowledge bases, in constructing its own understandings of health and illness in communities.

This thesis reflects in its genesis, and empirical approach, the interdisciplinary nature of the community health context in which it was conceived. Though this thesis drew from the stocks of knowledge of such traditions as sociology and anthropology, it is primarily not located within those traditions and should not be so read. One of the characteristics of community health research, is that it takes questions/issues/problems, which arise in relation to the health of communities and seeks answers/directions/solutions in order to improve health status, usually but not always by influencing the development of public policy. Research and policy are seen as closely linked. While much community health research is likely to contain conclusions which recommend changes to the character, availability and access to health services, they are also likely to recognise the need for changes in the social, political and economic context in which the health services operate.

SOCIAL CONTEXT

In the early 1980's when this thesis had its beginnings, consumer-oriented studies (including those of women as consumers of maternity services), were an established part of community health research. Such studies were influenced by the popular consumer movement which gathered strength in the 1970's and out of which the patient rights movement evolved. In examining a particular health issue, such studies focused on the perspective
of the consumer rather than the provider of health care and were often motivated by a recognition that the current health service was not providing what people wanted or needed. The conclusion of such research was often that there was a need to develop more effective, and socially acceptable health services, which were characterised by greater consumer participation. Perhaps the most contentious of the consumer-provider debates has revolved around the practice of modern obstetrics. Since the mid 1970's there has been a great deal of popular debate which has focused largely around the concept of "the medicalisation of childbirth". This debate has included such issues as where birth should occur, who should be present and how the birth should be conducted. This debate has also reflected the emergence of alternatives to obstetric understandings and practices, in the form of the home birth movement and the restoration of a midwifery model of birth. Central themes of these alternative approaches to birth, (that is, different to the obstetric approach) are to reclaim pregnancy and birth as natural events, to reduce the technological nature of modern birth and to restore the woman centred and controlled nature of birth.

As indicated earlier, there was a two fold motivation in my decision to explore issues to do with Samoan women and reproduction in New Zealand. Firstly to assist in empowering Samoan women to speak for themselves and secondly by enabling health professionals to hear the voices of the Samoan women to consequently sensitise them to their needs. I was not alone in considering this was a valid and important task to be undertaken. Others also had similar motivations. These works were useful in developing this thesis not only for their content, but also for the questions they raised about some of the difficulties and tensions inherent in achieving my stated goals.

In the early 1980's two relevant and valuable publications were launched. One was directed to providing information about migrant women for health professionals. The other publication was to provide information to migrant women about health professionals. The first book was published in 1983 under the auspices of the Wellington Multicultural Educational Resource Centre. This
publication presented migrant women's personal accounts of birth in the society of origin in order to illustrate cultural similarities and differences (Dawson 1983). The author's purpose in writing the book reflected one of my own motivations. Her motivation in conducting the research was prompted by a concern to improve the environment in which migrant women gave birth, by providing health service providers with knowledge about the birth customs of non Western cultures. The goal being to encourage people, "to learn more about each other, in the hope that greater knowledge of each other's customs will make it easier for people to understand and enjoy cultural differences, instead of being puzzled by them, or misinterpreting them" (Dawson 1983, 3). Realising the ideals of this goal are not easy. Knowledge is a strategic resource which people can use selectively to support or buttress their own preconceptions. In order to make sense of new knowledge, individuals particularly those who are used to working from a mono-cultural perspective, frame that knowledge within their existing world view. Thus a goal of providing health professionals with knowledge about the cultural beliefs and practices of Samoan women, in the hope of encouraging greater cultural understanding may have unintended results. An example of this was the interpretation some health professionals made of information published in one of these publications about the practice of Samoan massage in pregnancy (Becroft and Gunn 1985). The health professionals concerned made sense of this 'new' knowledge by linking it to existing medically established knowledge that Pacific Island mothers had a medically unexplained high rate of stillbirths from intracranial haemorrhage. The outcome of this assimilation of knowledge was to provide a 'legitimation' of the superiority of medical knowledge over other forms of knowledge. This event illustrates the ethical questions which cross cultural researchers are faced with in introducing into the public arena of one culture, material which may for one reason or another be considered culturally sensitive. For me it raised the question as to whether my stated goal to sensitise health professionals to the needs of Samoans by increasing their knowledge about the health beliefs and practices of Samoans would on the contrary be used as a further resource for selective critique from a biomedical, mono-cultural perspective. I do not
have a ready answer to this dilemma. My way of dealing with it here, is to make my concerns explicit to the reader at the outset.

A different problem faced the publication of the second book which as the title suggests, "Having a Baby in New Zealand" was an information source for pregnant women. This book was written for migrant women particularly from the Pacific Islands and Asia and was translated into some Asian and Pacific languages, including Samoan (Dawson and Jansen 1983). At the time there were very few health publications available in the Samoan language from either the Department of Health or the then Wellington Hospital Board, this book was therefore potentially of considerable use to migrant women, in that it provided the only comprehensive source of information about common birth practices in a New Zealand hospital available to Samoan women. The authors had considerable problems in getting sufficient support with funding and distribution. The funding problem underlined the difficulties which community based and consumer oriented projects face in setting out to empower individuals to make informed choices about their own health care. Such problems reflect the relative powerlessness of the groups concerned in relation to the health care system.

The 1970's and 80's were also characterised by social movements concerned with advocating the cause of social justice such as the rights of minority groups whether they were indigenous peoples or migrants. In New Zealand during the 1970's there was considerable academic popular discussion of the implications of the demographic changes which were occurring in the 1970's, particularly in Auckland and Wellington as a result of a marked increase in migration from the Pacific Islands (Macpherson 1977a; Graves and Graves 1973; Macpherson 1977b; Social Development Council 1978; Trlin 1977). Unlike migrants from the United Kingdom, these migrants brought different cultural values, languages, and kinship systems to that of the dominant palagi culture. Pacific Island migrants had education, housing and health needs which also differed from those of earlier migrants. Public debate was often heated, particularly over such issues as
the existence and treatment of 'overstayers'. The prejudices of Pakeha New Zealanders were played on in television advertising by the National party in the 1975 election which fostered a perception of threats to jobs, health care and lifestyle from high rates of Pacific Island immigration. Attempts to counteract these prejudices were made by individuals working in concert with institutions charged with implementing social justice to foster positive attitudes towards cultural diversity. The needs of their communities and the attitudes of some New Zealanders fostered the growth of social and political organisation among the Island communities. A dominant belief among Pacific Island leaders at the time, was that strength lay in unity, if communities came together to speak with one voice, it was felt this would be a more effective way of achieving their felt needs.

In the early 1970's during the term of the third Labour Government, Pacific Island Advisory Councils were established in Auckland, Wellington and other centres. These combined councils were composed of accountable representatives of each of the individual Island communities. The advisory councils continued to be the official bodies representing that ethnic community in New Zealand cities where there was a concentration of the respective Island people. During the early 1980's, there was a shift in the way in which Pacific Island advice in national policy making was sought. The community appointed Pacific Island advisory councils were displaced by councils appointed by the Minister of Pacific Island Affairs. In addition they now operated alongside a Ministry of Pacific Island Affairs. In addition they now operated alongside a Ministry of Pacific Island Affairs. During the early 1980's the Samoan Wellington Advisory council was the official body representing the Samoan community in Wellington and it was with members of that council that I initially discussed my research ideas. The consultative process I followed in developing the research proposal is fully described in the Chapter Two.

Pacific Island women have been at the forefront of migrant attempts to establish social and political organisations which would cater for the needs of their communities. Pacific women
gained a national medium for expressing their voices, with the establishment (around 1974) of PACIFICA. Although PACIFICA has always been concerned with all aspects of women's lives, it has placed more emphasis on matters related to education. This reflected the important role which Pacific Island migrants attributed to education, seeing it as the key to a better future as well as the fact that many of the leaders in the organisation were themselves educators. Many of the migrant Samoan women came to New Zealand because they considered there was more chance of a better education for themselves — or more commonly — their children (Pitt and Macpherson 1974). The early 1980's saw the development of another organisation for women, the Pacific Island Women's Project, which was set up to cater for those needs which some women felt PACIFICA was not adequately addressing. It may be that the empowering which this process gave Pacific Island women may prove of relevance to meet some of the needs identified through the women's voices as they were expressed in this thesis.

**SUMMARY**

As stated at the outset, though for ease of discussion I isolated out elements of the personal, academic and social contexts in which this thesis evolved, they are also united by common themes. I would like to draw those themes together here. The overarching theme is that of exploring, understanding, explaining and living with diversity. These took a number of forms. Cultural diversity exists in my everyday relations with my family, in the character of contemporary New Zealand society and in the topic of this research. My own view of what is 'right behaviour', is frequently challenged in my relationships with my Tongan kainga. Such challenges can make me uncomfortable, disconcerted and annoyed. What they also do is require me and conversely my family to recognise that my/their way is not the only way. The diversity of my family relationships are a microcosm of New Zealand society. In order that we can live together in understanding we must find a road wide enough to share. Intellectual diversity also exists in the way academics and clinicians have sought to understand and explain illness and health care. Their explanatory
models are informed by different epistemological views. Is there a 'right' model or approach? Or is there rather a need for a mix of ideas and approaches? Biomedical approaches which focus on physiological causes of disease and technologically based treatment differ from sociological and anthropological approaches which argue for the social construction of illness in a cultural context.

Diversity encompasses attitudes and values, social relationships, language differences, ways of thinking and problem solving. Such diversity contains a dialectical tension. It carries the seeds of cultural and intellectual creativity as well as destruction, the prospect of co-operation as well as division. The search at all levels, the personal, the social and the academic is for medium and bridges that will enable difference to be a creative and energising source rather than a destructive and draining power.

Another linking theme on which this thesis research was based, was that of empowering or enabling the Samoan women's voices to be heard. Consumer rights, patients rights, women's rights - are all socio-political movements designed to transfer power from the powerful to the less powerful. Helping Samoan women and health professionals develop a dialogue is basic to bridging differences. But the provision of information alone is not enough. There is a potential conflict between empowering health consumers and informing health providers. Knowledge is power, a strategic resource which may be used by those who are powerful to strengthen their position.

A goal of this thesis is to provide information on the collective reproductive experience of Samoan women, which can be used by women themselves in changing the birth environment in ways which will improve the quality of their experience. However, empowering requires more than information. It involves access to resources which are controlled by those with power - resources which are not always willingly shared. So it is with some caution that I ask, 'when Samoan women speak, what do those in power hear and what will be their response'?
In embarking on this voyage, like all well prepared travellers I sought to find out as much as I could about the unknown waters ahead. I looked for good authoritative guide books preferably with reliable maps which might help explain Samoan women's experiences of pregnancy and birth in New Zealand in the mid 1980's. Such as, were these experiences similar or different to those of other women reported in the literature? How much did being Samoan shape a woman's experience of birth in New Zealand? What are the impacts of migration on the way Samoan women do pregnancy and birth? - does more limited access to female kin change the way a woman manages her pregnancy and labour experiences? What maps do Samoan women use in making sense of what their bodies are doing during pregnancy and birth? Do women, Samoan or other, make their own maps of pregnancy and birth or are these largely drawn for them by others that is, experts, be they Samoan fofo or obstetric practitioner? What is similar and different about Samoan and obstetric ways of doing birth? The guidebooks I drew on and the maps I sought to interpret are not the only ways in which this journey could have been prepared for and/or conducted. The reader should be warned that others, including the Samoan women themselves, Samoan fofo or obstetric practitioners may have done this journey differently. This thesis is very much about how Samoan women mediate between alternative ways of doing birth. In laying out the Samoan and obstetric ways of doing birth, I am describing the general understandings and practices which appear to be common to each as a group. I do not mean to imply that all Samoans or indeed that all obstetric practitioners (doctors and hospital midwives) subscribe to all of these ideas and practices in the way in which they are described in this thesis. But I do believe that both Samoans and obstetric practitioners would identify from my descriptions, certain understandings and practices which each would consider to be uniquely their own.

In Chapter One I describe some of the guide books which others have developed to explain various dimensions of the journey. Given that Samoan women were doing birth in a cultural context in which the obstetric paradigm is considered to be the major force shaping a woman's experience, I first discuss that
literature which examines pregnancy and birth in terms of the power differential between women and their doctors. The main ideas which emerge from these analyses, both those which emphasise the gendered nature of the power differential between women and their doctors and those which focus on the professional nature of that power, is that obstetrics controls women's experiences of birth. Women are portrayed essentially as victims, who are powerless to alter the reproductive map which is drawn for them by obstetric practitioners. Secondly I explore the idea that pregnancy is not only a physiological phenomenon but also a socially constructed phenomenon. The social context in which pregnancy occurs for example, if a woman is married or not, has been shown to affect the meaning a woman gives to pregnancy as well as the response of others to her pregnancy. Other studies have suggested that the differences in meaning which women give to becoming a mother for a first-time in comparison to having another baby are differences of degree rather than qualitatively different experiences. Another way of explaining how Samoan women do birth in New Zealand is to look back to Samoa and to explore the cultural context in which Samoan beliefs and practices related to sickness and healing are shaped. Examination of the literature suggests that the way in which Samoan women construct their experience of having a baby in New Zealand is framed by their understandings of the relative contribution of indigenous Samoan and those which have been introduced to Samoa through Western medicine. The final theme examined in this chapter focuses on Samoan women as migrants and examines that literature which seeks to explain differences in the way in which migrants adapt to their new environment impacts on their health status and the way in which they will do health and sickness. The threads which interweave these different dimensions are the stories and experiences from the voices of Samoan women who gave birth in Wellington in the mid 1980's.

Chapter Two outlines the methods which were used in the thesis to explore the questions and the conceptual themes described above. This chapter describes the study which was conducted of Samoan women in Wellington in the mid 1980's, the findings of which are an integral part of the thesis. The central thread in
this exploration of alternative ways of doing birth is the voices of Samoan women themselves. Women's voices are juxtaposed with how the experts, obstetric practitioners and Samoan fofos map the doing of birth. This pattern forms the basic structure of Chapters Four to Eight.

Chapter Three examines variation among the Samoan women both in terms of their migration history as well as the way in which they have adapted to life in New Zealand. It describes the way in which I developed classification categories of cultural orientation based on attributes I saw the women having. I used this typology as a tool of analysis in order to help explain variation among Samoan women in the way they did pregnancy and birth.

Chapter Four marks the beginning of the journey which Samoan women are making. This chapter explores and contrasts the way in which Samoan women, obstetric practitioners and Samoan fofos give meaning to conception and the avoidance of or failure to conceive.

Chapter Five explores the socially constructed nature of pregnancy and the way in which Samoan women draw from a variety of sources of knowledge in the diagnosis of their pregnancy.

Chapter Six highlights themes of unpredictability and ambivalence about the nature of pregnancy as manifested in both Samoan and obstetric understandings of pregnancy as well as through women's voices.

Chapter Seven explores issues of the social control of the pregnant woman through cultural beliefs and practices related to pregnancy as manifest in Samoan and obstetric cultures.

Chapter Eight compares and contrasts Samoan and obstetric approaches to the conduct of birth and the way in which the context in which birth occurs shapes the way in which women do birth. This chapter also explores the outcome of birth for Samoan women in Wellington, both in terms of measures of physical
morbidity as well as psycho-social morbidity. Chapter Eight represents the end of Samoan women's journey on the path of pregnancy which was begun in Chapter Four.

The concluding chapter identifies the major themes which have emerged from the analysis of the preceding chapters and ends with some thoughts for the future.
1. Jordan 1978, 1

2. Giving an account of the position of the researcher and the research process, is recognised as an important methodological resource by others such as Roberts 1984 and Rogers 1991.

3. PACIFICA was the first organisation begun by Pacific Island women for Pacific Island women in New Zealand.

4. I became a member of PACIFICA after I had completed my fieldwork.

5. Tongans for example, while considering themselves Tongan, also have a strong sense of loyalty to the particular island group to which they belong.

6. Some examples of studies conducted in New Zealand are Salmond 1975 and Hood 1977.

7. Samoan word for European.

8. Word used to describe New Zealanders from European origin.

9. The emphasis in the 1980's in New Zealand as it is likely to be in the foreseeable future has been more concerned with issues of biculturalism than multiculturalism. Biculturalism is often expressed only in terms of Maori-Pakeha relationships. It is widely acknowledged that the most difficult and contentious issues concern the Maori-Pakeha relationship. Addressing these issues is urgent and important but there are also issues which need to be worked through between Maori and Pacific Island migrants as well as issues specific to the relationship between Pacific Island migrants and Pakeha. That tensions exist between these groups is increasingly evident in the major urban areas in New Zealand.

10. The social history of Pacific Island political organisation in the 1970's and 1980's from a Pacific Island point of view remains to be written.

11. An illuminating discussion of the relationship of a researcher to the community she has been involved in researching is given in Kinloch 1983.
INTRODUCTION

This thesis both draws from and seeks to contribute to different theoretical understandings in seeking to explain Samoan migrant women's experiences of pregnancy and birth in New Zealand. This thesis is not framed within the perspective of a single theory which it seeks to advance or reject. Rather it argues that to make sense of how Samoan women do birth in New Zealand requires drawing from separate and different theory-bases. This idea of drawing from more than one theory-base to explain phenomena, theoretic complementarity, is discussed by Rogers in relation to present day psychology. She says,

applied to present day psychology, the principle of theoretic complementarity proposes that no single theory will ever be able to 'make sense' of the social phenomena that we are seeking to understand. Just as both wave and particle theories are necessary to 'make sense' of the properties of light, so too must more than one theory be used to 'make sense' of people's thoughts and actions. They cannot be subsumed, because the very basis of complementarity is that there are - and always will be - alternative universes of meaning and explanation (Rogers 1991, 7-8).

In seeking to explain the reproductive experiences of migrant Samoan women in New Zealand I begin from the position that pregnancy and birth are states that women actively engage in doing. Pregnancy it has been said is something a woman is, while childbirth is something a woman does (Rothman 1982, 38). This thesis explores different constructions and applications of knowledge about pregnancy and birth, that of the experts, whether they are Samoan fofo or obstetric practitioners and that of Samoan women. It asks not only what these different knowledge bases are about, but also how they are made and subsequently used by experts and women. In so doing it utilises a social constructionist analytic framework, which considers that knowledge about health and illness is socially constructed
(Berger and Luckmann 1966). From a social constructionist point of view, doing pregnancy and birth are understood as "not a simple, 'natural' biological occurrence, but a human product - something people make" (Rogers 1991). Thus the physical symptoms of pregnancy or pain during labour are only given human meaning through social processes of definition. From this perspective pregnancy and birth are socially constructed as well as physiological phenomenons.

In following women's voices and in constructing accounts of Samoan and obstetric understandings of pregnancy and birth, I did not begin from the position that any one account was more or less 'correct' than any other account. Rather equal weight was given to all accounts. Knowledge about health and sickness is not just something which experts make or do but something in which ordinary people are also involved. This approach draws from both the understandings of sociology and anthropology. In sociology, Dingwall (1976) argues from a social constructionist point of view that as illness is a socially determined state, there is no reason to consider why one account or explanation is more or less valid than another. Lay systems of explanation should be regarded as, "functional within their own domain, and accorded equal epistemological status with other systems" (Rogers 1991). A similar argument is made by anthropologists such as Kleinman (1980) who challenge the assumption that Western biomedicine is intrinsically different from the explanatory systems of other cultures. From this viewpoint the medical systems of all cultures including lay accounts, are considered to be functional within their own domain and thus at an epistemological level equal to biomedicine.

The central thread in the telling of this story is women's voices. Samoan and obstetric expert accounts of pregnancy and birth were constructed in order to compare and contrast these with what Samoan women said and did. Samoan and obstetric accounts occupy the background or context in this thesis. Samoan women's stories occupy the foreground.
Listening to Women's Voices

In seeking to explain the process by which Samoan women did pregnancy and birth in New Zealand, I want to make clear the position from which I started. I set out primarily to listen to and ensure that women's voices were heard. It is their voices rather than those of experts or others which is central to this thesis. In following the women's voices, I attempted to do justice to and make heard, the subjective and unique but also overlapping experiences of birth for each woman. At the same time, I recognised that birth is a human experience, which Samoan women share not only with each other but also with other women. I felt the findings of this study would improve the birth experience for other New Zealand women.

Much of what gets written about pregnancy and birth, is based on the perspective of those who are considered to be experts within the particular cultural context. Obstetric texts and much of the information which pregnant women are encouraged to read come into this category. Similarly, some ethnographies of birth in preliterate cultures have also drawn primarily if not exclusively from the indigenous experts involved in constructing an account of pregnancy and birth in those societies. Where these differ from much of the obstetric literature is that such ethnographies reflect the understandings of experts who are themselves women and often also mothers. Obstetric texts and antenatal literature on the other hand are written by medical practitioners, who have since obstetrics took over from female midwifery in Western societies, been almost exclusively male and whose understandings of birth I will argue continue to reflect a male perspective.

I wanted to produce an account of Samoan birth in a New Zealand context, which was grounded in the accounts of those directly involved - pregnant and birthing women. Such an account is likely to differ from that which the experts involved might give. But it is important also to acknowledge that this account differs from an account which women themselves might have given. In constructing this account, I must as Wendy Rogers so vividly expressed it, "inevitably do violence to the ideas and
understandings as they were originally expressed" (Rogers 1991, 10). While this account is grounded in women' voices rather than expert or other voices, it is I acknowledge only one of a number of accounts which could be given including that given directly by the women themselves.

An account of Samoan pregnancy and birth, grounded in the first-hand experiences of women, may influence not only the way that migrant and other women do birth in New Zealand but would add to the stocks of knowledge about reproduction of both the medical and social sciences. In this, I was responding in particular to Oakley's criticism that sociological theories of reproduction at least in the early 1980's, had failed to take into account the subjective realities of birthing women. Consequently what was lacking was a grounded theory of reproduction. Oakley argued that in order for women's subjective experience to be made explicit an approach was needed that would enable the birthing woman to be restored as the central figure in the bio-cultural drama of birth (Oakley 1979, 628). This, as I will show in the section, in this chapter, on medical power in reproduction, is what Oakley and other feminist writers have attempted to do.

The core assumption of this thesis is that Samoan women are active participants in the process of birth. As with other facets of their lives Samoan women make choices about pregnancy and birth, based on the knowledge they currently have available from whatever source, on attitudes shaped by previous personal experience and their perceptions of the current situation, on access to material resources, and on the nature of their social relationships with relevant others. On the other hand the power of biomedicine to control the choices a woman can make is considerable. Medicine does act to ensure that its knowledge and understandings are considered the only legitimate ones. The balance of power in the relationship pregnant women have with their doctors is not an equal one. This is particularly so when women are from different social classes or ethnic group to doctors. Medicine does act to control and shape the medical encounter. While pregnant women are not puppets, the potential of professional power to set the agenda and to dominate the
relationship should not therefore be underestimated, any more than the gendered nature of the relationship between women and obstetrics.

In setting out to identify those factors which might best explain how Samoan women do pregnancy and birth in New Zealand I became increasingly aware of the complexity of the task I had set myself. Considerable literatures exist on such topics as the nature of obstetric power in reproduction; the way in which being pregnant and giving birth is interpreted differently depending on social factors such as marital status, social class or existing motherhood; the cultural context in which Samoan health beliefs and practices are framed; and the process by which change occurs in migrant attitudes to and involvement in their culture of origin and the culture of adoption. Each body of literature seemed to offer a different window through which to view and offer explanations as to how migrant Samoan women did pregnancy and birth in New Zealand. Rather than selecting one approach and rejecting the others, I adopted a more eclectic approach. In this chapter I lay out themes from those sociological, anthropological and psychological literatures which I considered contributed to developing a framework of analysis in this thesis. The four themes which I develop include those which seek to explain:

1. Women's experiences of doing pregnancy and birth in terms of the power differential between women and their doctors.

2. Differences in women's experiences of doing pregnancy and birth on the basis of particular social and demographic characteristics of the woman.

3. Samoan health beliefs and practices as socio-cultural systems.

4. Differences among migrants in their attitudes to and involvement in their culture of origin and that of the host culture.
DOING BIRTH THE OBSTETRIC WAY

In exploring those approaches which sought to explain women's experiences of pregnancy and birth in relation to the bio-medical model, I was particularly interested in those approaches which sought to identify differences in the views about reproduction held by women and obstetric practitioners and the social organisation of birth in the context of a biomedical perspective. In New Zealand in the 1980's one set of beliefs and practices about pregnancy and birth is more powerful than others. In part that power arises from the claims of modern obstetrics that its knowledge and practice is derived from a biomedical scientific paradigm. As paradigm is a concept which is used in a number of different contexts in this thesis I will briefly elaborate here on how others have used it and the meaning it is given in this thesis. The word paradigm which in its established usage means 'model' or 'pattern' was appropriated by Kuhn to conceptualise the nature and construction of a special form of knowledge that is, scientific knowledge. A paradigm Kuhn argued provides a map for the scientist which focuses and bounds the way in which knowledge is constructed. Not only do paradigms provide a map for the scientist, but they also provide some directions for map-making. "In learning a paradigm the scientist acquires theory, methods, and standards together, usually in an inextricable mixture" (Kuhn 1970, 109). Thus new theories are framed within the paradigm. Embodied in the concept of paradigm is the holding of a "shared world view that succeeds in providing a comprehensive explanation of phenomena, thus inspiring its adherents and providing theoretical and methodological guides for further explanation" (Pescosolido 1987, 5).

The way in which the concept of paradigm is used in medical sociology and the implications of this usage was discussed by Pescosolido (1987) in a review of a range of publications in medical sociology. The term is used she says in at least two ways. The first, "to distinguish Western, scientific, orthodox, or modern medicine (ie, medicine based on the scientific paradigm) from others (the holistic paradigm; the traditional indigenous paradigm)". The second "to describe certain
theoretical approaches used to analyze health and healing (eg, the Marxist paradigm) from others (all other explicit or unconscious world views)\(^{10}\) (Pescosolido 1987, 5).

The theories which are drawn on in this thesis, use the concept of paradigm in the first sense identified by Pescosolido to distinguish between medicine based on the scientific paradigm and traditional indigenous medical paradigms. While the concept is widely used it is also often used somewhat loosely. Oakley distances her use of paradigm from the Kuhnian sense of the word, by defining paradigm in terms of the established sense of 'pattern' or 'example'. However she uses 'medical paradigm' of reproduction interchangeably with that of 'medical model' or 'medical ideology and practice' (Oakley 1980, 5-26). Similarly Macpherson and Macpherson in their examination of Samoan medical beliefs and practices argue that the sum of the relationships between "what members of a society believe about illness; how these beliefs are organised, preserved, transmitted and acted on in a given society at a particular time", in all cultures represent a society's medical model or paradigm". At an epistemological level they consider that all medical paradigms are no more than "sets of beliefs about health and illness which give rise to bodies of practice" (Macpherson and Macpherson 1990, 23-24). While the Macphersons explicitly use paradigm to distinguish between Samoan indigenous and introduced Western forms of medicine to Samoa, like Oakley (1980) the term paradigm is often substituted for that of model or system throughout their book. Nonetheless there are family resemblances in the way in which paradigm is used. The concept of paradigm as it was conceptualised at the outset of this thesis draws on these resemblances. Paradigm in this thesis is used as others have done, (Pescosolido 1987) to distinguish between an obstetric way of doing birth, which draws from the scientific paradigm, and a Samoan way which draws on a traditional indigenous paradigm. Paradigm is defined as a model which embodies a relatively coherent set of understandings about reproduction.

This thesis focuses on obstetric understandings of pregnancy and birth rather than those derived from a Western 'midwifery' or 'home birth model'\(^{11}\). It could be argued that such models are based on beliefs and practices which are more similar to an
indigenous Samoan model than either are to an obstetric model (Rothman 1982). My reasons for comparing obstetric rather than other Western derived understandings of pregnancy and birth with indigenous Samoan understandings is that the majority of women in New Zealand including the Samoan women in the study do pregnancy and birth within a medical interpretation of reproduction. Obstetrics remains the dominant 'expert' model or paradigm of reproduction in New Zealand despite evidence of popular support for a more holistic approach to birth. In addition at the time this study was undertaken alternatives to the obstetric paradigm were not readily available to women in Wellington and this was particularly so for Pacific Island migrant women. Their care in pregnancy was provided by medical practitioners and nurse/midwives as practice nurses or antenatal clinic midwives, while all Samoan women in the study gave birth or planned to give birth in hospital. Though differences undoubtedly do exist between specialist obstetricians, general practitioners and hospital midwives as to what constitutes appropriate or proper ways of doing pregnancy and birth, their practice is as others have shown, by and large informed by a shared conceptual model (Arney 1982; Winter 1988).

There was considerable evidence that the obstetric paradigm occupied a dominant position in New Zealand society in the mid 1980's. Legal responsibility for and control of the conduct of birth was vested in medical practitioners (Midwives at that time did not have the legal right to attend a woman in labour without a doctor in charge)12. The majority of births occurred in hospital. There was a continuing increase in the medicalisation of pregnancy and birth with new developments in medical technology. The social organisation of birth was characterised by a marked degree of specialisation of those attending the woman in labour. Social distance was maintained between the provider of medical care during birth and a pregnant woman. Despite changes in the clinical management of birth such as the abandonment of such rituals as perineal shaves and enemas, the increased availability and use of medical technology has in reality decreased a woman's ability to control her own pregnancy and birth experience13.
One way in which the obstetric paradigm has been modified in the past to perceived threats to the position it occupies in the birth arena is to incorporate some of the less threatening ideas of alternative approaches. Oakley suggests that this is what happened to the natural childbirth movement (Oakley 1979). This incorporation on the one hand 'legitimates' and thus reduces the threat of challenges from alternative sets of beliefs and practices and on the other gives the impression that change has occurred. In reality as Arney has suggested despite apparent change in clinical practices, the growth of reproductive technology in the past few decades has meant that obstetric power has not only been retained but in reality extended (Arney 1982).

**Medical Power in Reproduction**

A dominant theme in the sociological literature which has examined women's relations with the obstetric paradigm, has been the nature of medical power in childbirth. Two broad perspectives were identified. One perspective explained medical power as a form of professional power involving experts and lay persons; (Winter 1988; Arney 1982;) while a largely feminist perspective focused on the gendered nature of medical power involving male doctors and female patients within a male-dominated ideology (Oakley 1980; Rothman 1982; Martin 1987). A feminist perspective was also adopted in recent studies in New Zealand of the nature of medical power in reproduction (Coney 1988; Bunkle 1988). As both perspectives contribute to understandings of the nature of medical power in childbirth I have drawn from the contributions of each.

Feminists have had a lot to say about the health care system in relation to women, most of which is highly critical. Specific complaints about health care are widely shared and accepted not only by feminists but by women in general. All feminist analysis recognises that women's problems with the way health care is organised and delivered, cannot be solved within the context of the medical system alone, but requires radical change in the organisation of society itself. But feminist analysis differs in
the diagnosis and consequent treatment of the problem advocated. As Elizabeth Fee suggests,

a feminist consciousness grows from the surfacing of anger at being constantly manipulated, harassed, limited, and repressed into the social role of "woman"; but the answers to the obvious questions of why this thing happens and how to best struggle against it are not self-evident (Fee 1982, 18).

There is a substantial literature which explores medical dominance of childbirth from a feminist perspective. Reproduction along with production, sexual relations, and child socialisation is considered to be one of the structures that make up the "position of women" (Oakley 1980, 293). The women's health movement has both stimulated and been stimulated by research into women and the health care system over the last two decades. The main health issue of concern to women has continued to be the struggle for control over their own bodies, especially as this relates to reproduction and sexuality. What distinguishes women's interaction with the health care system in relation to these aspects of their lives, is that this interaction occurs when women are predominantly healthy rather than sick. While the medical control of women in labour is considered in all the feminist literature to reflect the general societal oppression of women by men, feminist writers vary in how they consider this control came about and what needs to be done to change it.

Writers such as Oakley have argued that obstetric understandings of reproduction are framed by obstetric views of women as reproducers. She concludes that

two paradigms of women jostle for first place in the medical model of reproduction. In the first, women are seen not only as passive patients, but in a mechanistic way as manipulable reproductive machines. In the second, the mechanical model is replaced by an appeal to notions of the biologically determined 'feminine' female (Oakley 1980, 34).
The feminist argument that the obstetric view of women is based on an extension of the medical metaphor of the 'body as machine' is said to reflect the philosophical foundation of modern obstetrics. As with all of medicine, obstetrics emerged out of developments in 17th century thinking which perceived the universe as mechanistic, and following predictable laws. By applying scientific rationalist principles, man could discover and manipulate nature through technology, thus demonstrating the superiority of technology over nature. Medicine took the mechanical model as its philosophical foundation (Davis-Floyd 1990). Obstetrics incorporates not only the scientific, rationalist metaphor of the 'body as machine', but also the prevailing patriarchal ideology which perceived women to be the inferior sex both biologically and morally.

The men who established the idea of the body as a machine, firmly established the male body as the prototype of this machine. In-so-far as it deviated from the male standard, the female body was regarded as abnormal, inherently defective, and dangerously under the influence of nature, which due to its unpredictability and its occasional monstrosities, was itself regarded as inherently defective and in need of constant manipulation by man (Davis Floyd 1990, 178).

The obstetric paradigm incorporates a technological orientation with a "man's eye view of women's bodies" (Rothman 1982, 23-24). This obstetric view of women, Oakley (1980) has suggested is the one which has been most associated with the increase in technological control of reproduction while Davis-Floyd (1990) argues that the medicalisation of birth can be seen as the ultimate triumph of technology over nature.

Arney in his analysis of the professional nature of obstetrical power argued that prior to World War II, the obstetric profession as with all of medicine was informed by the metaphor of 'body as machine', based on the logic of scientific rationalism. "All births like all machines, carried in them the potential for pathology, the potential for breaking down. Technology that controlled and dominated the forces of a machine replaced midwives's attendance of birth". During World War II according
to Arney, a new logic and a new metaphor changed the conceptual basis of medicine and thus transformed the obstetric profession. "The body was no longer looked on as a machine which was made up of other machines; instead it became a system composed of other systems articulated at many points and levels". This reconceptualisation of birth was characterised by a change in technology from "a technology of domineering control to a technology of monitoring, surveillance and normalisation". However this change to a structure of control which Arney terms 'monitoring' rather than providing greater freedom and control for the labouring woman, in fact has further alienated women and their professional deliverers from the event and experience of childbirth (Arney 1982, 8-9).

The other paradigmatic representation of women which feminist writers identify in the obstetric paradigm is that women are biologically destined to reproduce, to nurture and to keep their husbands happy. Truly feminine women are those who 'adapt' or 'adjust' well to pregnancy, birth and motherhood, experience deep 'maternal' feelings for their babies and are able successfully to integrate the competing demands of motherhood and wifehood" (Oakley 1980, 39). Such medical understandings of women reflect the sex role stereotypes inherent in the dominant male-supremacist ideology of Western society (Koutroulis 1990). Thus values and ideas are presented in the obstetric context under the guise of science. There is empirical evidence for this argument. A number of studies using different approaches, have documented sexist ideology in medicine. Some studies have based their analysis on the medical literature, while others have explored the nature of medical talk about and to women (Scully and Bart 1973; Koutroulis 1990; Rothman 1982; Oakley 1980)\textsuperscript{15}.

A useful contribution to the literature on medical power in reproduction was made by Graham and Oakley in their exploration of medical and maternal perspectives on pregnancy and birth (Graham and Oakley 1981). Based on their separate but complementary research they found that women and doctors held fundamentally different views about the meaning of pregnancy and
They concluded that the difference between first hand accounts of birthing women and obstetric accounts, is not simply a difference of opinion about approach and procedures - about whether pregnancy is normal or pathological or whether or not labour should be routinely induced. Rather we are suggesting that doctors and mothers have a qualitatively different way of looking at the nature, context and management of reproduction (Oakley 1980, 9).

These different 'ways of looking', comprise a 'frame of reference' which doctors and mothers use. This conceptual tool, "embraces both the notion of an ideological perspective - a system of values and attitudes through which mothers and doctors view pregnancy - and of a reference group - a network of individuals who are significant influences upon these sets of attitudes and values" (Oakley 1980, 9). The medical frame of reference seeks to legitimate its knowledge base by locating it within a biomedical paradigm. Women on the other hand locate their knowledge base within their own bodily experiences. The strength and utility of the concept of 'frame of reference' lies in that it provides a framework to compare lay and expert approaches to reproduction. The medical frame of reference embodies both the gendered and professional nature of medical power in reproduction.

The differences in medical and maternal frames of reference identified by Graham and Oakley revolve around four issues - what is the nature and context of reproduction, how is success measured and how is it controlled. As these issues are ones which will be explored throughout the thesis, I will briefly outline their arguments about the medical and maternal frames of reference.

The Nature of Childbearing

Defining reproduction as a medical subject the authors suggest reflects another aspect of the trend towards the medicalisation of life. Reproduction is portrayed primarily as a physiological
process akin to other processes which form the bases of medical knowledge. As such reproduction is portrayed more as a potentially pathological process than an essentially normal process in which abnormalities can occur from time to time. As has been discussed earlier this view of reproduction is framed by medical understanding of the female body as a 'reproductive machine' which requires constant monitoring and regulating of body performance. However, obstetrics also has to cope with the contradiction that while it conceptualises childbirth as inherently hazardous, the self evident fact is that childbirth is normal and satisfactorily accomplished without the need of medical intervention by the vast majority of women. Oakley suggests that this contradiction is manifest in the ambiguous nature of much medical pronouncements particularly that found in antenatal literature. Thus pregnancy is pronounced 'normal' as long as it is under medical surveillance. Birth is 'normal' as long as it occurs in a medically controlled context (Oakley 1979, 610). This inherent contradiction is aptly summed up in this aphorism from Arney. "Birth is pathological and it is not; men should intervene and they should not" (Arney 1982, 56).

Oakley suggests that obstetrics copes with this contradiction by routinisation of as many technological, pharmacological and clinical procedures applied to as many women as possible (Oakley 1980, 21). If only a few women are seen to 'need' such procedures, this emphasises the essentially normal nature of reproduction. If however most women are seen to 'need' such interventions this underpins the potential abnormality of birth. Oakley explains routinisation of obstetrical procedures essentially in terms of legitimation of the extension of medical power.  

Mothers on the other hand are said to see childbearing as a natural biological process which like menstruation is rooted in their bodies and in their lives and not in a medical textbook (Graham and Oakley 1981).
The Context of Childbearing

Graham and Oakley 1981 argue that obstetrics divorces reproduction from its social context. Pregnant patienthood becomes a woman's only relevant status. From the time a woman first attends the doctor for confirmation of or assessment in pregnancy until the time she leaves the hospital, in medical terms she is first and foremost a 'pregnant patient'. Though the entry and exit points are characteristic of patienthood in general, the path to pregnant patienthood is somewhat different. Pregnant women are by and large healthy on their first visit to the doctor and remain so despite the label of patient. Medical management of pregnancy and birth underlines the medical separation of mind and body. The psychological and social dimensions of childbirth are more likely to be referred to in passing. This focus on the anatomical and physiological nature of childbirth is highlighted in that medical literature which refers to 'the uterus' as the labourer or worker in birth, rather than the women in whose body 'the uterus' is but one of a number of organs. Observations of obstetric encounters have shown that these tend to be managed so that there is no place for discussion of social/emotional factors (Comarroff 1977; Shaw 1974). In such encounters, a woman's other social roles, paid worker, wife, sister etc, are only considered relevant when in medical terms, they conflict with the goal of producing a live, fullterm infant. Women who do question medical advice because it conflicts with other roles, are likely Oakley suggests to be accused of selfishness or ignorance. It is however through such exchanges that the underlying conflict between 'maternal and obstetric frames of reference is made explicit.

Women on the other hand do not view pregnancy as an isolated event but one which is interlinked with all the other parts of her life. Getting pregnant changes a woman's life if a first baby to a degree that never quite happens with subsequent children. First she becomes a mother, and acquires a new social status. But other children also bring changes in all her other social relationships. Pregnancy is not a medical event for a woman but an integral part of her social being.
Control of Childbirth

According to Graham and Oakley medicine acts as if it had a monopoly on reproductive 'knowledge' (Graham and Oakley 1981). They suggest that obstetrics considers that all knowledge about reproduction which is obstetrically derived is superior to all other knowledge. This includes knowledge which is held by other birth practitioners, such as midwives whether they are operating in traditional or Western cultures and the experiential knowledge which women hold as the primary actors in birth. This conflict has been located by other writers in terms of the lay-expert debate. A useful contribution to this literature is Winter's study in which she explored the different understandings of pregnancy and birth held by obstetric practitioners and women who were members of a homebirth association. Winter located the tension between the two groups in terms of the different world views of the expert and the layperson. She argued that this tension was discernable in, "two competing traditions in European cultural history; that of the liberal tradition of individuality and a belief in the right of individuals to be responsible for and determine events in their own lives and the tradition of the expert" (Winter 1988, 20). Winter chose not to address the gendered nature of medical power.

While this conflict about what constitutes 'legitimate' reproductive knowledge reflects the struggle between the world view of the lay person and that of the expert, it also reflects the struggle to maintain male control of childbirth. Claims for the superiority of obstetric knowledge are often expressed in the medical literature as hostile to female culture. This is seen in statements which negate the truth or value of female based knowledge by damning woman to woman knowledge transfer as 'old wives' tales'. Claiming a monopoly of 'knowledge' about birth, also legitimates obstetric control of the physical and technical resources required for a medical birth. It also legitimates the social organisation of birth defining where it should occur, who should be present and how the woman should act.
Mothers also claim a special knowledge about reproduction which is based on an awareness of their own bodies as well as on knowledge acquired through previous pregnancy and birth. Rather than being an abstract knowledge it is grounded in women’s experiences.

Criteria of Success

There are three main ways in which the outcome of pregnancy or the consequences of any obstetric intervention can be measured (Oakley 1984). The first measure is whether or not the mother or baby died. The prevention of death particularly the 'avoidable' death of the mother and/or infant has tended to dominate obstetric criteria of reproductive success. The medicalisation of pregnancy and birth over the past few decades has been accompanied by a decline in perinatal mortality rates (stillbirths plus deaths in the first week of life per thousand total birth) and maternal mortality rates (maternal deaths due to complications of pregnancy per thousand total births). While it has been frequently asserted by obstetricians that a simple cause and effect relationship existed, epidemiological studies would suggest that such assertions ignore such population changes as improved nutrition, a lower birth rate and greater spacing of pregnancies as well as more accessible basic maternity services (Taylor 1979). Obstetric claims that an increased use of induction of labour reduced perinatal mortality has been challenged by some epidemiological studies (Chalmers et al 1976). It has also been argued that the obstetric focus on biological causes of complications and death associated with pregnancy and birth has obscured the effect of social class on perinatal and maternal mortality rates. Perinatal mortality rates have been shown to have a social class differential in a number of industrialised countries (Taylor 1979; Oakley 1980, 25).

The second way to measure outcome is to consider whether the mother and/or baby is physically ill as a consequence of the birth or the way the birth was conducted. In contrast to the claims of adherents of the obstetric paradigm as to the benefits of wider application of obstetric technology, other studies have
pointed to the iatrogenic (illness resulting from medical intervention) effects of the use of such technologies as induction and fetal monitoring (Taylor 1979).

The debate as to where birth should occur is also couched in terms of measures of outcome. Obstetric measures emphasise the risk to mother and baby of home birth versus hospital, or small low technology hospital versus large high technology hospital. Thus much of the debate revolves around attempts to prove or disprove the safety or hazard of location (Ashford 1978; Barron et al 1977; Campbell et al 1984).

The third measure that of psychosocial morbidity is one which obstetrics tends to underestimate or to ignore. This Oakley suggests includes such problems as postnatal depression, developmental difficulties in the baby, or just plain feeling unhappy (Oakley 1984). Though the iatrogenic possibilities of obstetric intervention are well documented, there have been relatively few studies which have been carried out to establish the 'real' incidence of complications associated with particular procedures for example, with induction of labour (Tilyard 1989). To concentrate on quantitative measures and selective ones at that, is to emphasise the physical nature of birth at the expense of the psycho-social. Rather than recognising that the quality of the experience for mother and baby is also important in building the parent-child relationship, quality is often presented as an optimal extra. Mothers who choose to ignore medical warnings of the potential 'risks' they are taking, for example, to have a home birth, in order 'to achieve what they as women perceive to be a safer experience for themselves and their baby are frequently labelled as 'selfish' or irresponsible.

Mothers also measure reproductive success in terms of giving birth to a healthy baby and ensuring the mother's safety. But their criteria is wider than that. It also involves how a woman felt about the experience, whether she had a 'good birth' or a 'bad birth'. For a woman, having a baby is a holistic experience which does not begin at birth and end on discharge from hospital. A woman's measures of success begin in pregnancy, continue
through labour and the early period after birth and blur into integrating motherhood into her lifestyle.

In conclusion, a number of themes emerge from the literature which examines the nature of medical power in reproduction. The obstetric position is that its beliefs and practices represent a coherent body of knowledge based on scientific 'truths' and that in applying that knowledge to reproduction the obstetric profession has women's interests and those of their babies at heart. Social analysts of medical power in reproduction on the other hand have deconstructed the gender and professional character of obstetric power. Feminist writers argue that obstetric beliefs about reproduction are framed from an ideological interpretation of women and that contrary to obstetric claims many obstetric practices do not necessarily reflect women's interests. Other writers have argued that obtaining and maintaining control over reproduction served and continues to serve the interests of the obstetric profession. Professional power has been facilitated and continues to be facilitated by obstetric access to and utilisation of medical technology.

The literature suggests that in societies such as New Zealand in which the obstetric paradigm would seem to be the greatest influence on the way in which pregnancy and birth is done, the potential for conflict exists between pregnant and birthing women and their doctors. While the choices which women can make about doing pregnancy and birth are limited by the power which the obstetric paradigm has to frame the choices, women are not hapless victims of the obstetric paradigm. They also act to ensure that their interpretation of pregnancy and birth is considered. Because much of the conflict between women and doctors is usually implicit rather than explicit, analyses which are not grounded in women's experiences will understate the extent of this conflict.

Much of the analysis of the professional and the gender based nature of obstetric power, has emerged out of studies of obstetric practices in the United States and Britain. Studies
which have explored women's perspectives of pregnancy and birth (Graham and Oakley 1981) in the United Kingdom and (Shaw 1974) in the United States of America have involved mainly white often middle class women. If distinct medical and maternal frames of reference exist, which have their origins in gender and expert/lay divisions then one would expect to find such differences among Samoan women and obstetric practitioners. Further one would expect the cultural differences between Samoan women and obstetric practitioners to compound those differences.

Until recently there were few sociological and anthropological studies of childbirth. In particular relatively few anthropological or sociological studies exist which deal with the potential conflicts which exist between traditional and Western obstetric forms of birth management (Jordan 1978; Kay 1982). In introducing her comparative work of birth in traditional and industrialised societies, Jordan criticised earlier ethnographic studies saying, "while fairly detailed information on ritual ways of disposing of the afterbirth or the umbilical cord [exist], we know little about the nature of the decision making processes during parturition or the extent of material, physical and emotional support for the woman during pregnancy and labour" (Jordan 1978, 6). This study contributes to understandings of the reproductive experiences of the family of women and explores the similarities and differences which emerge when the account/s which Samoan women give are compared with those of other women giving birth in an obstetric context.

SOCIAL CONTEXT OF PREGNANCY AND BIRTH

A number of studies have shown that pregnant women are differentially treated on social as well as clinical criteria. Differences have been shown to exist in the way obstetric practitioners and others respond to women on the basis of their marital status, age, social class, or number of children. Such social factors have been shown to frame the doctor's interpretation of the meaning of pregnancy for that woman and thus the appropriate obstetric response. Thus in societies where the ideological framework of reproduction continues to encourage
a close connection between marriage and children it is expected on the one hand that those who marry will have children and on the other hand that those who want to have children will marry (Busfield 1974; Cameron 1990; Wearing 1984). This ideology was shown by Sally Macintyre to be reflected in the way that health professionals distinguished between unmarried and married motherhood. A married woman in contrast to an unmarried woman was expected to want to get pregnant, do something about it if she failed to, be happy once she was, be the best person to care for the baby and be grief stricken if she lost a baby by miscarriage or stillbirth. Macintyre showed that the accounts proffered by women themselves, and their definitions of the situation were not the same as those imputed by professionals and women's accounts did not fit into neat boxes of married or unmarried (Macintyre 1976).

Other studies have raised questions about the extent to which clinical decision making is influenced by the social class of the woman. Oakley (1980) found in her study that middle class women were more likely to attend the 'special' as opposed to the routine antenatal clinic and thus receive more intensive specialist monitoring. Similarly a study of caesarean section rates in the United States showed that more caesareans were performed in women with the least medical risk that is, middle and upper class women. The authors found that much of the variation in caesarean rates could be explained by factors other than medical need (Hurst and Sumney 1984).

Primiparous women, those having a first baby, are distinguished in the medical literature from women having a second or subsequent baby that is, multiparous women. The concept of birth as a rite of passage for women, a test to be passed is incorporated in the medical language used. A primiparous woman has yet to prove her capacity to give birth. Thus a first labour becomes a 'trial of labour'. If a woman passes the 'trial' that is, if she is able and allowed to give birth vaginally she passes into the ranks of those multiparous women who are considered low risk until a subsequent pregnancy may prove otherwise. Failure to pass a trial of labour results in a caesarean birth which
increases the chance that subsequent births will also be by caesarean section.

Giving birth for the first-time in comparison to having another baby, was also considered in the social science literature in the 1970's to be a qualitatively different experience for a woman (Graham 1977, 83). Such conclusions were based on assumptions, that a woman's primary status in society stemmed first from her role as a wife and subsequently from that of a mother. Adapting to role changes from wife to mother was felt to involve greater changes and create more problems for a woman than changing from mother of one to mother of two. The nature of the psychological experience of having a first baby was also considered to be qualitatively different. These assumptions Graham suggests are rooted in both psychoanalytic and status passage theories of the transition to motherhood (Graham 1977, 83). Such theories tended to evolve from studies of sub-groups of women for example, demographic surveys of married women of childbearing age, or studies of 'normal' married women having their first baby, or studies of women who deviated from the norm for example, unmarried women. The emphasis as Graham said was on the divisive qualities of childbearing rather than conception and pregnancy being seen as a "unifying process in which women of differing social backgrounds and psychic constitutions are drawn together in a shared physiological experience" (Graham 1977). In contrast, Graham's study of fifty expectant mothers was based on a heterogeneous randomly selected sample of women having a baby. It included both women having a first baby and experienced mothers. Despite the assumptions of psychoanalytic and status passage theories of the transition to motherhood, regardless of a first baby or not there were marked similarities in how women felt and experienced pregnancy and birth (Graham 1977).

Samoan women differed as to whether this was a first baby or not, whether they were married or not, whether they were born in Samoa or not and whether they were in paid employment before, during and after the birth of the baby. In exploring differences between women in terms of parity, having a baby whether it is a first or a fourth, has implications not only for a woman's relationship
with the father of the baby but for all of her other roles. Giving birth for the first-time undoubtedly represents a rite of passage for a woman, in that becoming a mother will significantly change the way she perceives herself and others will perceive her. But each pregnancy and birth is separate, different and transforming. Subsequent pregnancies and births represent times for reconstructing, recalling and remembering. Having another baby not only affects a woman's personal relationship with her partner but all of her other relationships. It is also likely to affect her financial status and occupational options. Unlike first-time mothers, women who have already given birth are able to draw not only on the knowledge of others, both lay and expert, but on their own experientially derived knowledge in making decisions which may impact on how they do pregnancy and birth.

In conclusion, the socially constructed nature of pregnancy is evident in the different meanings which are given to having a baby. These are dependent on a variety of social factors associated with the woman. Earlier studies overemphasised the divisive qualities of childbearing such as having a first baby and whether a woman was married and thus failed to recognise the shared experiential qualities of pregnancy. In this study such differences are explicitly examined among ethnically homogeneous women.

THE CULTURAL CONTEXT OF PREGNANCY AND BIRTH

In all societies sets of beliefs and practices related to pregnancy and birth can be identified. Considerable variation has been shown to exist in the understandings which different cultures bring to the doing of pregnancy and birth (Mead and Newton 1965; Jordan 1978; Kay 1982; MacCormack 1982; Oakley 1977). The extent to which there is general agreement within a society about the proper way of doing pregnancy and birth also varies. Small-scale preliterate, traditional societies have seemed to some anthropologists to contain more or less homogeneous social realities shared by all individual members of those societies in contrast to modern societies which have been described as fragmented into many distinct social worlds
Samoa and New Zealand differ in terms of geography, size and nature of population, historical and cultural background and status of economic development. One would expect then to find differences between contemporary Samoan and New Zealand ways of doing pregnancy and birth.

**Medical Pluralism**

In order to establish what was different for Samoan women giving birth in New Zealand I sought to describe how Samoan women currently did pregnancy and birth in Samoa. In constructing a Samoan account of pregnancy and birth, I drew on what others had written as well as what Samoan healers and older Samoan women told me. A major source was the Macphersons' account of the social organisation of Samoan and Western medical belief and practice in contemporary Samoa (Macpherson and Macpherson 1990). This account is located within an approach which anthropologists have called 'medical pluralism'. The field of medical pluralism has been described as, "concerned with the ways in which alternative medical systems co-exist and compete together within a culture; how they jostle with one another for dominance; and how they interact with each other" (Rogers 1991, 21).

The Macphersons make the argument for the need to study illness within its cultural and social contexts. In doing so they draw from the theoretical understandings of Kleinman and others that in all societies health care activities are more or less interrelated. Kleinman argues that,

"in the same sense in which we speak of religion or language or kinship as cultural systems, we can view medicine as a cultural system, a system of symbolic meanings anchored in particular arrangements of social institutions and patterns of interpersonal interactions. In every culture, illness, the responses to it, individuals experiencing it and treating it, and the social institutions relating to it are all systematically interconnected. The totality of these interrelationships is the health care system (Kleinman 1980, 24)."
The medical pluralism approach holds that all medical systems, whether Western scientific medicine or traditional indigenous medicine, have certain generic characteristics. These characteristics include recognising sets of biological and non-biological symptoms as illness rather than a state of health that is, symptomatology; distinguishing between illness symptoms of a similar kind and thus enabling the attachment of the proper label that is, diagnosis; assigning a cause of the illness that is, aetiology; providing the appropriate response to the labelling that is, treatment (Macpherson and Macpherson 1990, 19-23). In Kleinman's view though the context of health care systems will vary with social, cultural and environmental circumstances, the inner structures of health care systems remain similar. Kleinman considers that there are several 'core clinical functions' which all health care systems have to perform. These are what enable people to know what to do when they are ill, to devise strategies for seeking health care and healing, and to respond to the outcomes of therapy. Kleinman also considers that in making sense of any episode of ill health or misfortune individuals draw on 'explanatory models'. Such models are generated in different ways, from the personal knowledge and experience of the lay person to the scientific deductive models of doctors. The social organisation of all health care systems he suggests includes three overlapping parts; the professional, popular, and folk sectors (Kleinman 1980).

The professional sector comprises the organised healing professions. In most societies Kleinman suggests this equates with modern scientific medicine. However some societies such as India, Japan, Taiwan and China also have professionalised, indigenised medical systems as well as introduced scientific systems (Kleinman 1980; Pescosolido 1987; Ohnuki-Tierney 1987).

The popular sector comprises 'the lay, non-professional, non-specialist, popular culture arena in which illness is first defined and health care activities initiated. The popular sector Kleinman suggests interacts with each of the other sectors, which are usually separate from each other. Kleinman 1980 describes the popular sector as a "matrix containing several levels:
individual, family, social network, and community beliefs and activities" (Kleinman 1980, 50). In defining the popular sector as the central part of the health care system, Kleinman stresses the active involvement of individuals in their own health and sickness. He argues that lay people do not passively receive health care from 'experts', but rather, "activate their health care by deciding when and whom to consult, whether or not to comply, when to switch between treatment alternatives, whether care is effective, and whether they are satisfied with its quality". Despite its central position in the health care system, Kleinman suggests the popular sector has received far less attention in anthropological, sociological and cross cultural studies of medicine than the professional or folk sectors. The folk (non-professional, non-bureaucratic, specialist) sector Kleinman suggests merges into the other two sectors. The folk sector contains both specialists in sacred and secular healing. In societies, such as pre-European contact Samoa, the popular and folk sectors would have comprised the total health system (Kleinman 1980, 51).

The concept of medical pluralism, the Macphersons argue, allows for the same analytical approach to be used whether examining indigenous Samoan medicine or contemporary medical beliefs and practices in the United States. As the Macphersons argue, "both are, despite differences in content, no more than sets of beliefs about health and illness which give rise to bodies of practice. Such an approach can reveal intriguing similarities in apparently different systems, and unexpected differences in apparently similar ones" (Macpherson and Macpherson 1990, 24).

In conclusion a major contribution of the work of medical anthropologists such as Kleinman is the idea that in any society at any one time different explanations exist as to how people get sick and what is necessary to restore them to health. Such explanations co-exist and compete with each other for dominance. Although one or other explanation may at a particular time appear to be the majority view, other families of explanations exist alongside.
Another contribution was the demonstration that medico-religious and biologically derived beliefs and practices existed in all medical systems, including Western scientific medicine. Unlike earlier studies, anthropologists and others did not begin from the assumption that Western scientific medicine was superior to other medical systems, but rather represented one form of medical system of beliefs and practices to be understood within a cultural context. Kleinman like Oakley, argues that despite evidence that relationships between doctors and patients are predicated on inequality of power, individuals are not passive pawns in a medical 'game' but are actively involved in the construction of their own health and illness diagnosis and treatment. This argument is one which will be explored throughout this thesis.

This thesis explores relationships between and within all three parts of what Kleinman calls the total health care system. It systematically compares and contrasts the folk sector that is, Samoan indigenous beliefs and practices to the professional sector that is, Western obstetric beliefs and practices and compares and contrasts both of these sectors with the popular sector that is, the beliefs and practices of pregnant women themselves.

Samoan Medical Paradigm

In constructing a sociological account of Samoan medical beliefs and practice the Macphersons argue, that in contemporary Samoa two distinct medical paradigms-an augmented indigenous paradigm and an imported Western medical paradigm-co-exist in "a unique synthesis". The systems co-exist, they argue, "because users believe that both are required to explain and manage their illnesses". In their account the Macphersons set out to establish how co-existence of the two systems developed and the basis and nature of the relationship between them. The Macphersons use the concept of medical paradigm, to describe the sum of the relationship between "what members of a society believe about illness and how these beliefs are organised, preserved, transmitted and acted on in a given society at a particular
time". The Macphersons acknowledge that even competent accounts of a society's medical paradigm are limited, in that medical systems like other cultural systems are constantly changing. There are three themes which emerge out of the Macphersons work which I will discuss in relation to Samoan pregnancy and birth (Macpherson and Macpherson 1990, 10, 23).

1. The way in which the Samoan paradigm has responded to contact with other medical paradigms.

2. Variation in Samoan medical beliefs and practices.

3. Co-existence of a Samoan and Western medical paradigm.

Response to Other Paradigms

Using a historical reconstruction, the Macphersons argue that indigenous Samoan medicine as practised today, is an expanded or augmented version of a pre-European contact paradigm. Before European contact the authors suggest there was a limited range of Samoan medical belief and practice and explanations of illness and disease was largely dependent on a supernatural paradigm. The Macphersons considered that "the availability of this supernatural paradigm apparently meant that the development of a secular, biological paradigm was unnecessary" (Macpherson and Macpherson 1990, 41). They also suggested that based on early European accounts, Samoan healers appeared to have access to a more limited range of treatments than healers from Tonga or Fiji. The Samoan paradigm became augmented over time as such treatments became incorporated into Samoan medicine.

This reconstruction of pre-contact Samoan healing practices has been criticised by Laing for failing to explore other than supernatural explanations of health, illness and healing (Laing 1992). Laing suggests that in their reconstruction the authors appear to have given greater weight in historical accounts of the existence of 'medical' indicators for example, the practice of internal medicine, or surgery and failed to recognise the contribution of other factors such as the role of food, which she
considers to be intrinsic to understanding Samoan explanatory models of health illness and healing. In her view, the pre-contact paradigm, as constructed by the Macphersons, understated the depth and breadth of Samoan knowledge about the nature and treatment of illness.

Unlike reports of some other Polynesian societies where contact with a Western medical paradigm resulted in abandonment of indigenous beliefs and practices, in Samoa contact resulted in expansion or augmentation of the indigenous paradigm. This is not to say that medical practitioners in Samoa have not tried and succeeded in directly influencing and changing indigenous beliefs and practices. The Macphersons consider that reproductive beliefs and practices have been the most influenced by contact with the introduced paradigm. They feel this has not been a chance happening, but reflected a 'deliberate and structured' approach on the part of Western trained health professionals (Macpherson and Macpherson 1990, 184). In particular, district nurses with their close relationship with women's committees were felt to have played an important role in diffusion of introduced beliefs and practices. The Macphersons do not however suggest why clinical and public health policies targeted reproductive rather than other practices.

One explanation may be that deliberate promotion and targeting of alternative practices is easier with a condition like pregnancy, which is common and public. Another explanation for the greater readiness of Samoans to incorporate introduced ideas, may be because of the ambiguous character of pregnancy. Pregnancy lies at the interface between nature and culture, between normality and abnormality.

Some of these attempts to promote Western style ideas about birth practices to women in the villages have explicitly sought to augment traditional Samoan birth practices. One such attempt which began in 1977 under WHO encouragement and continues today, was designed to impart Western based knowledge and skills to Samoan women who specialised in midwifery. A number of training courses were held at the district hospitals. Though these courses
were said to have been directed at practising fa'atosaga (midwife), one third of the women who attended the courses were said not to have been fa'atosaga. Kinloch concluded, that the outcome of the courses was the creation in the perception of many Samoans, of two classes of indigenous midwife (1985). One class being the midwife who attended the course for traditional birth attendants (TBA), the other the woman who did not attend. However it seems that both sorts of indigenous midwife have a harmonious working relationship, with each having their own clients.

It is difficult to predict the long-term impact these courses will have on birthing systems in Samoa. In the short-term it appeared there was little difference in the midwifery practices, beliefs or attitudes between fa'atosaga and TBA's (Kinloch 1985). The main difference between fa'atosaga and TBA was that the latter saw pregnant women less frequently than the former. Antenatal care for TBA particularly those who were not practising midwives before the course mainly involved sending the woman to hospital for iron tablets. The fa'atosaga massaged the woman throughout pregnancy, but the TBA seemed to limit massage to late pregnancy as part of palpating the woman to establish the lie of the baby. Further Kinloch suggested that TBA were more willing to refer women to hospital at an earlier stage if they suspected there might be some difficulty in labour.

Kinloch did not however specifically address the impact of the introduction of new birth technology in the form of a WHO midwifery kit on the beliefs and practices of those who attended the courses. She does however implicitly acknowledge differences in practices in the account she gives of the TBA with the WHO kit, who used tweezers to rupture the membranes, in contrast to the fa'atosaga who used her fingers to break the waters (Kinloch 1985). The kits in fact would seem to have represented the potential for significant change in indigenous midwifery practices. Some of these changes would have included the use of artery forceps to clamp the cord prior to cutting instead of using cotton or other ties; the use of scissors instead of razor blades; of disposable swabs instead of old linen to clean the
vulval area; and of a suction catheter to clear out the baby’s airways, instead of direct mouth to nose suction. These changes would have required other changes in a midwife’s practice such as needing to boil up the instruments and equipment used between births, and to bring material with her previously available domestically.

In conclusion it would seem that Samoan culture unlike some other Polynesian cultures has not only retained an indigenous medical paradigm but culture contact has resulted in expansion or augmentation of that paradigm. As Samoans have been exposed to illness or injury which were previously unknown they have incorporated these, explanations and treatments into the indigenous model. The process of augmentation of the Samoan indigenous paradigm as described by the Macphersons, appears to have features in common with the way in which Oakley described the incorporation of the natural childbirth model into the obstetric paradigm. The Macphersons argue that following augmentation the Samoan paradigm continued to be distinguished from the sets of beliefs and practices of the introduced medical paradigm. Similarly, Oakley argues that by reinterpreting the natural childbirth perspective and incorporating these views into the obstetric paradigm potential challenges to its dominant position were defused. The question which is explored in part in this thesis is the extent to which the Samoan paradigm changes in a non-Samoan context in New Zealand.

Explanations of Variance

The Macphersons found a great deal of variance in the accounts which adult Samoans gave. They conclude that though adult Samoans appeared to share a Samoan model of belief and practice about health and illness, on closer examination this seemed to be somewhat of an illusion. Other than at a very general level, they concluded, there was little evidence of a "single integrated model of medical belief and practice among adult Samoans. Apparent convergence on certain general propositions about belief, diagnosis, and practice belies a considerable divergence in the way in which these are defined and are thought to be
linked". The Macphersons did not appear to find this knowledge differential between expert and lay person so strange, as they consider that lay knowledge is a more limited or superficial form of specialist knowledge. "In most societies, certain areas of belief and practice, such as medicine and art, are considered to be the province of specialists. Most people only need and acquire a superficial knowledge of these subjects and turn to specialists, who they believe have more knowledge, when needed" (Macpherson and Macpherson 1990, 140). Such a view is contrary to that expressed by Rogers who set out to challenge the view that 'lay health beliefs' were watered down or simplistic versions of professional or expert knowledge (Rogers 1991, 3).

However, the Macphersons also found more divergence than they had expected among the models held by Samoan healers themselves. In fact the dominant theme of their account is variability, a theme they return to throughout their work, whether discussing a healer's knowledge base, training, relationship with patients or diagnostic and treatment models. Although the Macphersons identified a "body of belief on which fofo (healer) draw to identify, understand and manage illness", they found that none of the healers had access to all the beliefs or used all the practices which the authors were able to identify. The Macphersons offer a number of explanations for this variability. At one stage they suggest that variation in healers models may be explained by the influence of religion. "In societies, such as Samoa, in which the influence of religion is strong, both the generation and evaluation of this category of knowledge may rest on different foundations" (Macpherson and Macpherson 1990, 140).
The Macphersons also consider that,

we may have to accept that the models of belief and practice which underlie indigenous medical practice in Samoa exist only at a very high level of generalisation and show relatively little internal integration. It may be that the anthropologist Bradd Shore is correct when he notes that 'the medicines and methods, when taken as a general system, appear to be more ad hoc than systematic except for the general stress on massage and the use of herbs (Macpherson and Macpherson 1990, 141).

The Macphersons acknowledge that Samoan healers implicitly acknowledge and accept "that there may be several different but correct explanations of any given phenomenon". This acknowledgement by the Macphersons of the existence of considerable diversity and variation in Samoan accounts of health, illness and healing does not seem to fit easily with their use of the concept of medical paradigm with its implication of coherency of beliefs and practices nor with a systems framework of analysis with its implications of integration of parts (Macpherson and Macpherson 1990, 144).

The diversity and variation which the Macphersons found in relation to Samoan health beliefs and practices has also been noted in other areas23. The issue of diversity and variation in Samoan culture is said to be at the heart of the often acrimonious debate which raged in both the anthropological and popular media in the early to mid 1980's, as to whether Malia Mead's or Derek Freeman's interpretation of Samoan society and personality, was the 'right' or 'true' interpretation. Discussion of the relative contribution of culture or biology to Samoan personality lies outside of the scope and competence of this thesis24.

The Macphersons suggest that given the variation which exists in Samoan culture at any one time, neither Mead's nor Freeman's account should have become the basis for generalisations about Samoan society and personality as both accounts were based on fieldwork in single locations. The Macphersons imply that this variation has its origins in geographical or locational
differences and suggest that, "those who wish to generalise will have to adopt research designs which allow them to identify and chart the nature and basis of variability" (Macpherson and Macpherson 1990, 6-7).

Others have sought to explain variation somewhat differently. Laing has suggested that Samoan socio-cultural systems are predicated on variation and that variation is one of the underlying principles or generative principles of Samoan institutions. Rather than seeking after the one 'true' version she challenges anthropologists and others to accept "diversity within cultures, between cultures, and within our discipline as exciting, inspiring and creative" (Laing 1992).

In conclusion I have some reservations about the way in which the Macphersons interpret lay beliefs about health and illness as lay versions of expert understandings. I also have some reservations about the appropriateness of the use of the concept of 'paradigm', in view of the diversity of accounts which exist among both Samoan healers and adults. It may be that other terms such as 'account' which Rogers uses or 'frame of reference' which Graham and Oakley use may be more relevant. Rogers uses the term account to depict the knowledge and understanding base upon which explanation can be formed and which "incorporates aspects of meaning, of moral evaluation, and of broader ideology or world view" (Rogers 1991, 2). This has similarities to the Graham and Oakley concept of frame of reference which they suggest, "embraces both the notion of an ideological perspective - a system of values and attitudes through which mothers and doctors view pregnancy - and of a reference group - a network of individuals who are significant influences upon these sets of attitudes and values" (Oakley 1980:9).

What does seem to be a relevant factor is that cultures like Samoa where acceptance of variation appears to be the cultural norm are also likely to exhibit greater flexibility in adapting to new or different explanations of phenomena. This flexibility may have contributed to the continuing meaningfulness of Samoan centered explanations and responses to illness. Variation and diversity in the way individuals explain health and illness may
not be confined to Samoan culture but as Rogers argues may be a more universal characteristic. Rogers begins her analysis of explanations of health and illness from the perspective that "individuals and collectives draw upon and live constantly within multiple realities". People, Rogers argues, are clever weavers of stories, "whose supreme competence is that they can and do create order out of chaos, and moment to moment make sense of their world amid the cacophony" (Rogers 1991, 10).

Co-existence

The Macphersons contend that in contemporary Samoa, two sets of medical belief and practice co-exist in relative harmony without overt evidence of tension or competition for clients. This situation they suggest is the result of particular historical developments. In the contemporary situation the coexistence of parallel systems is acknowledged by practitioners of both systems and by their patients. But this appearance of co-operation may mask underlying tensions between the two systems. Some practitioners, particularly those trained in Western medicine have reservations about the practices and theories of those from the alternative tradition, but these reservations are not often made explicit to the patient. Patients also construct meanings of the encounter with a practitioner of either system, which may be significantly different from that understood by the practitioner. Thus enquiries by one practitioner as to whether a person is taking another treatment at the same time, may be interpreted by the patient as an expression of interest or validation of the alternative system. The practitioner concerned may explain the enquiry in terms of reducing the possibility of conflict with their proposed treatment. These, for example, may be herbal remedies and pharmaceutical products.

The Macphersons suggest that coexistence of the two medical systems gives the appearance of being complementary rather than competitive because of the nature of Samoan beliefs about illness. Samoans they suggest believe that there are two types of illness, those indigenous to Samoa, 'ma'i samoa', and those introduced by Europeans, 'ma'i palagi'. The logical extension of
this belief is that the nature of the illness defines what treatment should be instigated and by whom. This divergence in the two types of illness is explained in that,

Samoan illnesses comprise a group of physical and psychological disorders which are best understood and most effectively treated by Samoan practitioners. This is natural, because they have had most experience with these illnesses and are better able to diagnose and treat them. Conversely, introduced illnesses are best understood and most effectively treated by European practitioners, or those trained in this tradition, because they are clearly more familiar with them and better able to diagnose and treat them (Macpherson and Macpherson 1990, 88).

Thus it is not a matter of palagi or Samoan causes about illness being right or wrong, but rather that certain illnesses such as those caused by ma'i aitu (supernatural origin) are better understood and treated by Samoans because such conditions were around before the missionaries came. The Macphersons locate their explanation for the persistence of parallel medical systems in Samoa, in the fact that the natural, material and social conditions which gave rise to ma'i Samoa' have not changed substantially since European contact. Further they suggest that tensions which might arise from conflict between Samoan and introduced values may also be manifested as Samoan illness (Macpherson and Macpherson 1990, 239).

In both Samoa and New Zealand alternative birthing systems compete, co-exist and jostle for dominance. In New Zealand as I argued earlier, pregnancy and birth tends to be dominated by the understandings and practices of the bio-medical paradigm. Birthing women and others, for example, domiciliary midwives and those doctors who seek to promote alternative understandings and practices must compete with the powerful bio-medical paradigm. Some alternative approaches such as the natural childbirth model were incorporated into the obstetric paradigm while others such as the 'home birth movement' continue to compete with the obstetric paradigm. However while the medical profession effectively controls the right to define the nature and context
of birth the appropriate criteria of success and ways to manage birth such alternatives are likely to have limited impact on the birth experiences of most New Zealand women.

In Samoa pregnancy and birth is less dominated by the biomedical paradigm. Samoan women utilise two quite different ways of doing pregnancy and birth. A pregnant woman may visit a fofo or fa'atosaga for care in pregnancy and/or a Western trained nurse or doctor (obstetric practitioner). She may give birth at home with the services of a fa'atosaga or in a hospital with varying levels of technological sophistication available, attended by a Western trained midwife and/or doctor with varying levels of specialist training. In New Zealand the situation for Samoan women is somewhat different. The opportunity for women to be attended at birth only by a Samoan fa'atosaga does not exist in New Zealand. In New Zealand, until quite recently, the only persons legally allowed to practice as autonomous obstetric practitioners, were medical practitioners. Since 1986 this definition has expanded to include registered midwives. The expansion of the Nurses Amendment Act 1988 does not however include lay midwives such as fa'atosaga. It therefore continues to be illegal for a Samoan fa'atosaga to attend a woman in childbirth in New Zealand without the presence of a designated person. This represents a major difference in the social organisation of birth between Samoa and New Zealand.

In conclusion, Samoan women come to New Zealand already aware of an obstetric or medical way of doing birth as well as a distinctly Samoan way. The Macphersons have shown that in Samoa, Samoans draw from both Samoan and Western stocks of knowledge and practice in diagnosing and treating illness, while studies of Samoans living in New Zealand and the United States have also shown that migrant Samoans continue to draw from Western medical and Samoan healing systems in the treatment of illness (Kinloch 1980; Lazar I. 1985; Lazar T. 1985). Little has been written however of the understandings and practices which Samoan migrant women draw on in doing pregnancy and birth (Neich and Neich 1974). By exploring the way in which Samoan women construct their understanding of pregnancy and birth in a migrant context, this
thesis will contribute to the existing body of knowledge about health beliefs and practices in the context of Samoan culture.

**MIGRATION AND ADAPTATION**

The twentieth century has been characterised by world-wide migratory patterns which have resulted in substantial social, cultural and economic changes in both the host and originating societies. The migrations from the South Pacific to New Zealand which developed momentum during the 1970's represent a very small part of that world-wide trend. Migration has been described as "a process which by putting individuals in a new environment, necessitates a new adaptation" (Baker 1986, 3). On the aggregate level, migration affects the age/sex structure of both the migrant and non-migrant populations. On an individual level migration may, because of contact with the new environment, result in psycho-social, biological and economic changes in the lives of individuals. Migration studies are studies of one form of social change. They vary in the conceptual and methodological frameworks which they have adopted. Social research on the outcome of contact between a migrant, usually minority, group and the host majority culture has been considerable since the publication of the now classic paper on migration by Robert Park (Park 1928).

In this thesis the focus is not just what it means to be a woman giving birth in New Zealand, but what it means to be pregnant and give birth as a Samoan migrant woman in New Zealand. In order to understand what being a migrant might mean for the pregnancy and childbirth experiences of these women, I turned to the literature on the ways in which migrants adapt to their new environment and the implications this might have for other aspects of their lives. This thesis started with the assumption that the Samoan migrant women in the study were not a culturally homogeneous group but that differences would exist in attitude and involvement to the palagi culture and to Samoan culture. This assumption was based on Macpherson's conclusion that, "it will soon be impossible to portray the Samoan population as a single,
socially homogeneous entity. Being Samoan will mean different things to different people and analyses of Samoan migrants will have to acknowledge this trend" (Macpherson 1984, 107). In acknowledging this trend towards greater heterogeneity among Samoans in New Zealand, I turned to what others had written about the adaptive processes involved when a person migrates from one cultural environment to another. It is this literature which I will discuss in this section.

Social scientists have, for some time been interested in the process by which migrants adapt to complex urban settings. Adaptation, it was considered, involved not only tolerance on the part of the majority culture to the ways of a minority culture, but also a willingness to learn the rules of the majority culture on the part of the minority. This process of learning is known as acculturation (Smither 1982). Though early acculturation research had its origins in cultural anthropology, it has since been adopted by other disciplines. While anthropologists have tended to focus on examining cultural patterns in relation to acculturation, sociologists and psychologists have attempted to explain the process by focusing on social institutions and on intra-psychic changes in the individual. Acculturation is undoubtedly a complex process which to be fully comprehended needs to be understood from a multidisciplinary perspective. However most theories of acculturation as well as empirical studies tend to reflect the single disciplinary bias of the theorist giving greater emphasis to either demographic, psycho-social or socio-structural factors.

Earlier studies of acculturation echoed the dominant belief of the period that assimilation was the inevitable and often desirable end point of acculturation and portrayed acculturation as a linear process, in which a person moved from being less acculturated or assimilated to being fully acculturated or assimilated. Most studies concluded that the longer the term of residence the more likely the migrant would be assimilated into the new culture, while relinquishing the culture of origin. More recent research has suggested that conclusions that acculturation is an inevitable linear process may neither be an accurate
reflection of migrant patterns of adaptation nor necessarily psychologically or socially desirable (Richman et al. 1987; Szapocznik and Kurtines 1980). The way in which migrants adapt to their new environment is dependent not only on the actions of the migrant but also on the response of the host society. In New Zealand society over the last few decades social policy related to migrants has been developed from a basis designed to encourage an ethos of integration or cultural pluralism.

A number of studies have examined changes which have occurred both in Samoa and in migrant communities in the United States and New Zealand as a result of contact with more technologically advanced societies (Baker et al., 1986; Bertram and Watters, 1985). However there have been comparatively few studies which have examined the impact of migration on the health status of Samoans or on changes in their health beliefs and practices (Kinloch 1980; Lazar I., 1985; Lazar T., 1985; Neich 1974). However, two major studies which combined epidemiological, sociological and anthropological approaches were conducted in the 1970's. These studies examined the impact of social change on the health of Samoan and Tokelauan peoples. Both studies examined changes occurring in the island of origin as a result of modernisation as well as changes occurring as a process of adaptation from migration (Baker 1986; Wessen 1992). One of these studies, the Tokelau Island Migrant Study, was concerned with migration to New Zealand of people who are near neighbours of Samoans (Wessen 1992). This longitudinal study compared Tokelauan migrants in New Zealand with non migrant Tokelauans. Like the study by Baker et al., it used concepts of 'modernization and adaptation' in examining the migrant and non-migrant populations. An underlying assumption of the study was, "that experience of migration is likely to be stressful for the individual, who is confronted with a changed reality which may not conform to his expectations" (Wessen 1992, 239).

A number of studies including the Tokelau Island Migrant Study have sought to describe different patterns of migrant adaptation by identifying what seem to be the key dimensions of acculturation and developing valid and reliable quantitative
measures on which to base predictive models (Richman 1987; Padilla 1980; Szapoznik and Kurtines 1980). Some dimensions were common to all these studies, though some dimensions were considered more important in determining acculturation than others.

In the Tokelau Island Migrant Study, the dimensions which were explored involved on the one hand orientation and involvement with the host culture and on the other hand orientation and involvement with the culture of origin. Acculturation was conceptualised in the study as a linear process that is, migrants were classified as more or less assimilated or more or less oriented to traditional Tokelauan values and institutions. While the original conceptual framework of the study did not seem to explicitly allow for other forms of adaptation such as biculturalism, the study found that most Tokelauan migrants "steered a middle course, relying on kinsmen and friends from their own atoll for friendship and help while energetically working to establish themselves and their families in their adopted land" (Wessen 1992, 385).

Studies have shown that certain socio-demographic factors are associated with different patterns of acculturation, though again there is disagreement about the relative emphasis which should be given. There are five socio-demographic factors most commonly used in studies of acculturation. The presence of children often measured by marital status, though a matter for debate, is considered by some to be associated with different patterns of acculturation (Richman et al 1987). Individuals with children are being considered to be more likely to be more oriented to the dominant culture through their children. Some studies have shown that age at migration contributes to acculturation, with those who migrate as children that is, under twelve years, manifest a greater degree of acculturation to the dominant culture than those of the same generation who migrate later (Richman et al, 1987). Migrants in paid employment, it has been argued, who have regular contact with members of the dominant culture are likely to be more acculturated than those not in paid employment (Richman et al, 1987; Wessen 1992). Level of education has been
shown to be one of the most useful predictors of acculturation (Goldlust and Richmond 1974; Smithers 1982, 61; Wessen 1992). Richman found that the differences are greatest between migrants with no formal education and those with some schooling, while differences are less between those with high school or post high school education (Richman 1987). A number of studies have shown length of residence to be closely related to level of acculturation. The longer the length of residence the more acculturated the migrant (Goldlust and Richmond 1974; Szapocznik et al 1978; Pescosolido 1986; Wessen 1992).

Language use has been shown to be associated with different patterns of acculturation (Padilla 1980; Richman 1987; Deyo 1985; Wessen 1992). A greater degree of fluency in the host language tends to be associated with greater acculturation to the host culture, while retention of the language of the culture of origin reflects less acculturation.

Customs such as food and music preferences have been shown to be associated with different patterns of acculturation (Richman 1987). There has been little study done on the extent to which variation in the diet of migrant Samoans is associated with different levels of acculturation. However a study conducted in Wellington in 1988 suggested that significant changes have occurred generally in the diet of Samoan migrants (Pollock 1988).

Ethnic loyalty has been shown to be associated with different patterns of acculturation (Padilla 1980; Richman 1987). Early studies suggested that the Samoan community in New Zealand showed little inclination to give up Samoan values and institutions, but rather consciously strove to retain their language, values and the social institutions which reflected them. In 1974, Pitt and Macpherson found that "within the Samoan community there was evidence of a strong sense of ethnic identity and a pride in that identity; of a sense of commitment to the community of origin typical of sojourners; and of being an extension of that community of origin rather than a separate and distinct entity. These sentiments were expressed in frequent contacts between the
migrant and parent communities, in a constant flow of remittances to families in Samoa" (Pitt and Macpherson, 1974). While in 1984, Macpherson wrote that studies in the early 1970's showed that, "Samoans consciously sought to retain their language, values and the social institutions which reflected them" (Macpherson 1984, 108).

A number of explanations of the continued ethnic loyalty of Samoans have been pursued. Some studies have focused on the structural dimensions of Samoan migration. Samoan migration it was suggested represented a form of chain migration which produced aggregations of Samoans in residential and occupational environments, which further reinforced the continuity of Samoan values and institutions (Pitt and Macpherson 1974; Macpherson 1975, 1977; Kallen 1982). It was also suggested that as the purpose of much migration was to ensure a flow of remittances to the family at home, the Samoan family tried to ensure that those who were sponsored to migrate by the New Zealand branch, would continue to support Samoan values and institutions after migration. Thus the process by which prospective migrants were 'selected' and supported resulted in the continuity of a distinctive Samoan community in New Zealand (Macpherson 1975, 1981; Kallen 1982). Structural and attitudinal factors related to New Zealand society are also considered to have contributed to Samoan retention of culture. The adaptive option which individual migrants and collectives will choose it has been argued, is also dependent on the degree of societal pluralism and receptivity to ethnic minority groups which exists. Macpherson suggests that in New Zealand in the 1970's, despite official policies favouring cultural pluralism, there was often a negative reaction of the dominant culture to Samoan migration, which reinforced feelings of ethnic loyalty among the migrant community. Sociological studies carried out in the 1970's revealed New Zealanders held stereotypical images of Polynesian migrants. Increased contact rather than breaking down cultural barriers was shown to heighten the perceived differences between the host and immigrant groups (Macpherson 1984).
The economy has contracted, and the jobs which migrant Samoans filled no longer exist. On the other hand the New Zealand born Samoan is coming of age reflecting, as Macpherson suggests, various forms of being Samoan. A strong sense of Samoan identity continues to exist in New Zealand in the 1990's as evidenced in such developments as the growth of A'oga Amata (Samoan language nests); newspapers in Samoan; a Samoan radio station; the continuing flow of Samoan fundraising often by church based groups, and the ongoing flow of remittances to aiga back in Samoa which peaks when natural disasters such as hurricanes occur (Bertram and Watters 1985).

Social Network Characteristics

The nature of a migrant's social network, including the extent to which migrants mix with members of their own ethnic group or other ethnic groups, has been shown to be associated with different patterns of adaptation (Padilla 1980; Richman et al 1987; Macpherson 1984; Wessen 1992). While full assimilation, it has been suggested, might reduce the level of tension or conflict a migrant experiences in relations with the adopted culture, rejection of the social institutions of the culture of origin means a migrant loses the potential buffer support which these institutions can provide (Wessen 1992).

The contribution of social network to the process by which individuals move into new social positions as a result of migration, is discussed by Pescosolido 1986. In exploring this process the interplay of two fundamental features of social organisation - 'context and networks' are discussed.

Both formal (contextual) and informal (network) organization contribute to initiates' experience. While context sets the stage and determines the particular conditions, networks provide the mechanism through which context is embraced or scorned. At each stage, then, networks constrain or facilitate contact with members, condition members' reactions to initiates, and influence initiates' attitudes, values and beliefs.
Pescosolido examines the relationship of context and networks in Taiwan, a society which has a strong tradition of medical pluralism. The study involved the movement of migrants from the rural to the urban areas as well as from the urban to the rural areas in Taiwan. She considers that migrants preference for medical care systems, reflects both the context in which the system operates and the influences of social networks. In considering the influence of networks on the relationship between migration and medical care, she notes that it is not just 'strong' ties (family and close kin) which play an important role, 'weak' ties (friends and neighbours) do so as well. This study is particularly interesting as it links a number of the themes which have been discussed in this chapter with the concept of social network. Contextual changes occur when Samoans move from a society in which 'parallel' medical systems are socially recognised to one in which they are not. At the same time change in context is accompanied by change in the character of a migrant's social network (Pescosolido 1986, 525).

The kinship network of most Samoans is potentially very large and in times of need, Samoans can expect to receive assistance from or be expected to provide assistance to kin, who are more distantly linked, whether they are in Samoa or in New Zealand. In a study of Samoan migrant social networks in California, Janes suggests the network structure is composed of three parts. The core group consisting of other household members including spouses, the core 'aiga network (siblings) and friends and other kin with whom an individual has interests in common. This group has the characteristics of a close-knit network, in which individuals have their most intense relationships and which involve a good deal of economic reciprocity (Janes 1990). Macpherson also demonstrated the importance of extended kin groups in the social organisation of the migrant Samoan community in New Zealand (Macpherson 1975, 66). Radiating out from this core group Janes suggests are,
less intense, less frequently reinforced ties to distant relatives, church members, and acquaintances. Kin support to those furthest away from the core group Janes suggests, tends to be restricted to certain events for example, fa'alavelave affairs, or material support in an emergency and is based on formal social involvement and kin obligation. Farthest from one symbolically and affectively are those people with whom one engages in transitory, formal or impersonal interactions. These may be workmates, community leaders, or non-Samoan neighbours (Janes 1990, 135).

Social Support and Migrant Networks

That being a migrant also involves significant changes in an individual's social relationships, is a common theme in the literature on migration. Less frequently discussed, is what these changes mean for immigrant women in coping with childbirth and the care of young children or what such changes mean for the marital relationship between a migrant woman and her partner. Pregnancy, birth and parenthood have been shown to be times when a woman has an enhanced need for support, information and advice from her support network (Lynam 1985). Migration however is usually accompanied by a decrease in the availability of those people who were available in the pre-migrant context.

While there are various types of social network, I am concerned here with those social networks which include immediate family, kin and friends networks as opposed to formal social networks which include community services and health professionals. The term social network is used here to mean "a collection of individuals including kin and friends all of whom are involved in a social relationship with one individual or a couple" (Bott 1971, 59). My main concern is with how the social networks of migrant women function in providing practical and emotional support, as well as information and linkage sources. Social support has been shown to be positively related to health and wellbeing, particularly in buffering stressors as a result of migration (Janes 1990). It has also been shown to be positively related to pregnancy outcome (Oakley et al, 1990).
This does not mean of course that the existence of a social network, automatically means it is always a supportive one. The same members who may be supportive and caring of an individual on one occasion may be unsupportive and judgemental on another occasion (Haringa 1990). This dialectical characteristic it is suggested is likely to be found more in kin rather than friendship networks. As Milardo suggests,

for although kin can be supportive, they also may be more critical. Relatives may feel obligated to interfere as a result of their commitment to an individual. Friends can be supportive and in contrast to kin, are unlikely to be critical (Milardo 1987, 86).

Thus, in times of need an individual may turn to his/her friendship network for support, rather than the kin network. An individual may also look outside the kin/friendship networks to members of formal social networks for support. There is evidence in some studies, that migrant women may prefer in some instances to seek help from 'outsiders' who are neither part of the kin/friendship group nor part of the same ethnic community as the women themselves. This particularly relates to personal experiences or those of their immediate family, which the woman may feel are more likely to be treated in a confidential manner by outsiders (Lynam 1985).

The literature suggests that social networks do provide buffers against 'stress' which migrants may experience as part of adaptation to a new environment. Pregnancy, birth and the care of small infants are shown to be periods of increased vulnerability for a pregnant woman, when she will need an increase in social support from her social network. Migration however, frequently changes the characteristics of an individual's social network.

Other changes may also occur as a result of migration, such as the nature of the conjugal relationship. While there is some information on characteristics of 'traditional' type conjugal relationships in rural Samoa, it is unclear what if any changes occur as a result of migration. One idea that was put forward more than thirty years ago, is that conjugal relationships are
somehow shaped by the broader social context in which they are located (Bott 1971). In this thesis the extent to which a Samoan woman was able to obtain the amount of social support she needed in pregnancy and at birth from within her informal social network is explored. Also explored is the extent to which women drew on assistance from the formal professional sector when informal assistance was not available.

Studies of Samoan Migrant Adaptation in New Zealand

Other studies while implicitly and explicitly drawing on the dimensions of acculturation and socio-demographic factors outlined above, do not seek to develop predictive models but rather to develop descriptive typologies of acculturation. Two such studies which reflect the different disciplinary backgrounds of the researchers, describe different forms of Samoan adaptation in New Zealand. Both studies operate within a framework which considers that acculturation is not necessarily an inevitable and linear process.

The first study, of a group of Wellington secondary school children conducted in the mid 1970's, is framed by an anthropological concern with cultural patterns (Kinloch 1976). Kinloch suggested that the children she observed reflected four forms of cultural competence. Similar concepts have also been constructed by other writers referred to below.

The four cultural forms which Kinloch identifies are:

1. Loss of competence in any culture. She suggests that, a child who rejects his culture of origin thereby loses the ability to act competently in it. If he also fails to acquire competence in the culture of adoption and rejects that too, he is not competent in any culture. Cultural competence is then, replaced by dependence on one's self. Modes of expression and the interpretation of ideas are private and opposed to both the original and the adoptive culture, and have little coherence (Kinloch 1976, 215).
This form resembles the concept of marginalization involving complete alienation and loss of identity (Park 1928; Berry 1980).

2. Loss of competence in culture of origin, acceptance of culture of adoption. Kinloch considered that, loss of competence in the culture of origin occurs when there is wholesale acceptance of a new culture at the expense of tradition. If there is any competence in the adoptive culture it tends to be at the level of expression rather than at the level of conception, the culture of adoption is imitated rather than understood (Kinloch 1976, 217).

This form is similar to the concept of assimilation implying the relinquishing of cultural identity and movement into the larger society (Berry 1980; Wessen 1992).

3. Retention of competence in culture of origin. This implies that competence in the culture of origin is retained where innovations, based on continuing daily experience of the adoptive culture are made within the traditional meaning system. The reiteration of traditional meaning seems to be associated with an awareness that to reject the culture of origin is to lose all, and to accept the culture of adoption would mean rejecting the original culture" (Kinloch 1976, 219).

This form is similar to the concept of separation which involves self-imposed withdrawal from the dominant society but maintenance of cultural identity (Berry 1980).

4. Bicultural competence. Kinloch argues that, bi-cultural competence is the ability to express and interpret the ideas of both the original culture and the adoptive culture appropriately. The receptiveness to the
adoptive culture is based on curiosity and does not necessitate the rejection of the original culture. Instead the ideas of the two cultures are juxtaposed, their similarity and difference noted and more or less understood. The principle of classification underlying the expression and interpretation of ideas which the child who is bi-culturally competent uses is juxtapositioning (Kinloch 1976, 220).

She concluded that the achievement of bicultural competence was a desirable goal for Samoan and other Pacific Island Polynesian children living in New Zealand, which should be facilitated by the educational system. Others have also concluded that the detrimental effects on migrants of adaptation to a new culture can be ameliorated by encouraging biculturalism (Szapocznik and Kurtines 1980).

The second study is framed by a sociological concern to explain differences in acculturation by focusing on social institutions and social organisation. In a re-examination of Samoans in New Zealand, Macpherson identifies differences in the primary socialisation of young, mainly New Zealand born Samoans. From a long period of participant observation of Samoan families, Macpherson suggests that there are three ideal-typical family environments in which Samoan children grow up in New Zealand. In each environment he examines specific aspects of social organisation. These include, characteristics of both parents; the nature of household organisation, including the status of children; home language favoured; the degree of kin and church involvement expected and practised; the degree of parental involvement with their village of origin; and the character and amount of recreational opportunity available for children. While stressing that first generation parents actively choose how they portray Samoan and non-Samoan cultures to their children, Macpherson also emphasises the structural constraints which limit parents options for choice.
The first home environment he suggests is characterised by the "deliberate and systematic promotion of Samoan values and institutions and children raised in it, display a primary orientation to Samoan culture". In this environment Samoan cultural values and institutions are valued above all others.

The second home environment he suggests is one in which, Samoan values and institutions are present, but are neither deliberately and systematically promoted nor criticised. Children raised in them, display an ambivalence to Samoan culture and tend to regard it as one of several available cultures - the relevance of which is determined by situation.

The third home environment he suggests is one in which, "deliberate and systematic attempts are made to limit exposure to and involvement with Samoan values and institutions and to promote in their place, non-Samoan culture" (Macpherson 1984, 113-114).

In presenting these three ideal-typical environments, Macpherson returns to the theme of the migrant as strategic actor.

Samoan migrants reflect on their culture, its utility, and its role in their future plans. They then consciously and unconsciously construct environments in which their particular evaluation is reflected. The children born into and raised in these, come at least initially, to reflect these environments (Macpherson 1984).

The irony Macpherson suggests is that despite the different sort of backgrounds they have come from, most of the children are persuaded to believe that they are Samoans: 'real Samoans', 'Samoans' and the 'right kind of Samoans'. Whether or not the children continue to accept their parents' assessment of the utility of Samoan culture is another issue (Macpherson 1984, 124).

While Macpherson focuses on social institutions and Kinloch on cultural patterns in exploring variation among Samoan migrants they reach similar conclusions about the value of being bicultural in a New Zealand context. Though Macpherson does not
discuss environments which could produce the 'marginalised' child identified in Kinloch's 1976 study, he does imply that children who grow up in environments which could be described as monocultural, either deliberately promoting the fa'a Samoa or deliberately rejecting it, may in turn reject their parents version of Samoanness for one which is quite different (Macpherson 1984).

Summary

Studies of the relationship between migration and health have tended to focus on pathological outcomes of migration. Linkages have been established between migration patterns of adaptation and the development of factors 'stressors' thought to be associated with chronic 'Western' style diseases. Social scientists have developed concepts such as 'acculturation' in attempting to explain the process by which migrants adapt to their new environment. In operationalising this concept, social scientists have used both qualitative and quantitative methodologies. These measures have been used in studies to explain differences in the impact of migration on the health status of individuals. Research studies of migrant adaptation need to avoid overstating either the importance of human choice or the importance of socio-cultural structural constraints which limit choice.

In attempting to identify those factors which best explain variation in migrant adaptation, research studies need to take account of those social factors which have shaped the migrant's life both before and after migration, such as the social position of their family in Samoa, whether they were urban or rural dwellers, the educational and work opportunities they had experienced, their age and marital status at migration and the nature of their marital status, work and kin networks after migration. Explanations of variance must also take account of the fact that migrants help shape their own destiny. They are not passive 'hapless victims' but rather as Macpherson suggests, "thinking, purposeful actors capable of evaluating their
situation and making choices about alternatives”. Macpherson argues that, close observation of minority groups shows that individual members can and do reflect critically on their own culture and its importance to them. Individuals within the same group arrive at quite different assessments of their culture's utility: some decide to cling to it, others to abandon it, and still others to cling to some parts and abandon others. While their decisions are clearly influenced by structural factors, which limit the range of choice, they are also influenced by individuals' analyses of their goals and the relevance of culture to those goals (Macpherson 1984, 112).

CONCLUSION

A theme which occurs time and again in the expert accounts of pregnancy and birth given in this thesis is that of variance or divergence. This variance is demonstrated both within obstetric and Samoan 'expert' understandings of birth. This raises some questions as to how useful or appropriate the concept of paradigm or model is in describing a Samoan socio-cultural system of medical beliefs and practices. Or indeed how useful or appropriate is the understanding that the beliefs and practices related to health and illness in any society, are essentially 'medical' in character. There is considerable evidence that the Samoan indigenous 'medical paradigm' is characterised by variation rather than coherence and agreement. While the concept of paradigm or model may be thought to be more appropriately used in relation to biomedical understandings, even then - as will become evident in the body of this thesis' - a considerable degree of variation exists.

In elaborating the context of migrant women's birth experiences I draw on theories of medical power in reproduction as well as theories which explain beliefs and practices about health and illness as one sort of socio-cultural system. I use such approaches to make explicit the cultural and social forces which influence the choices about reproduction which a Samoan migrant woman makes. These forces include the power of obstetrics to significantly influence the wider environment in which birth
occurs, which affects the woman herself. In addition the idea of
the co-existence of biomedical and Samoan 'paradigms' of health
and illness means different things in New Zealand than in Samoa
and thus significantly alters the context in which Samoan migrant
women give birth. The Macphersons have shown that, in Samoa,
women are able to draw from both imported biomedical and
indigenous Samoan sets of understandings about reproduction. In
New Zealand however a different set of relationships exist
between the biomedical model and Samoan model/s. The thesis
explores whether Samoan women in New Zealand continue to draw
on what would appear to be mutually contradictory sets of
understandings about pregnancy and birth.

This thesis differs from the Macphersons' examination of the
operation of a Samoan medical 'paradigm' in Samoa in a number of
ways. It explores the beliefs and practices of basically healthy
women, rather than accounts of the causes and treatment of
illness. It is thus both narrower in focus than the Macphersons'
scholarly account of historical and contemporary Samoan 'medical'
beliefs and practices, yet broader in that it is more explicitly
focused on the understandings of lay Samoans rather than Samoan
healers. Though it draws from the accounts of others including
the Macphersons in constructing an account of Samoan beliefs and
practices about reproduction in Samoa, the primary emphasis is
on contemporary beliefs and practices of Samoans in a non-Samoan
context. Another point of difference which distinguishes the
approach I have adopted in this thesis from that of others who
have examined the health and illness experiences of Samoans in
the context of a biomedical paradigm is that I analyse the
relationship of Samoan women to the obstetric paradigm from a
feminist perspective.

In focusing on woman as a maker of choices, I also recognise that
the choices made are influenced by certain characteristics of the
woman herself, such as the degree of experience she has in
performing the role of pregnant or birthing woman. In
distinguishing between women in terms of whether it was their
first or subsequent baby, I utilise experience as an explanatory
concept to account for variation in the way in which women
constructed their experiences. In so doing I locate the pregnancy and birth experiences of Samoan women within what could be called the reproductive experiences of the family of women. Thus in setting out to explain how Samoan women do pregnancy and birth in New Zealand, I begin with the assumption that women draw from a range of different sources including their own experience. In doing this, they make choices from the range of options available to them. On the other hand, those choices are not made in a vacuum. Other factors, such as the difference in socio-economic status between women and doctors also limit the range of choices available.

In exploring the implications of being a migrant women I draw in a somewhat eclectic way from the anthropological, sociological and psychological literatures. Migration not only changes the context of birth, but it also likely to bring changes in the way a Samoan woman constructs her experience of pregnancy and birth. Samoan women come to New Zealand with different attitudes to and involvement in Samoan and palagi culture. Once in New Zealand these attitudes and involvements continue to change as women adapt to life in a new environment. Being a Samoan in New Zealand means different things to different women. A migrant woman's choices about reproduction, are likely to be influenced by her attitudes to and involvement in Samoan and palagi cultures. In this thesis these attitudes and involvements are incorporated in the concept of 'cultural orientation'.

This concept was developed by drawing from a range of acculturation theories and empirical studies, to provide an understanding of the process involved in migrant adaptation and ways in which such adaptation could be described and 'measured'. A review of the literature on acculturation revealed the inadequacies of earlier explanations of acculturation as a unilinear and unidimensional process. This thesis contributes to this literature in that it suggests that the forms of adaptation Samoan women exhibit support the idea that acculturation is a multidimensional process.
The other dimension to being a migrant woman which was significant was the changes which are likely to occur in a woman's social network as a result of migration. In particular a decrease in ready access to a woman's close female kin. The literature which discusses the concept of social network relates to Samoan women doing pregnancy and birth in two ways. Firstly a woman has need for increased social support then and secondly migration may affect a woman's relationship with her husband and thus influence the birth process. In other words, the choices made by a pregnant and birthing woman would also be influenced by the nature of her roles as wife, daughter, sister or niece. In terms of women's specific support needs in pregnancy and birth the key factors may be not just the size and density of the core social network, but the gender and role base of the core network. Thus differences in a woman's relationship with her husband may in part be explained by characteristics of her social network.

The approach which I have adopted in this thesis is to attempt to do justice to the idea that a pregnant woman both makes choices about how she will do pregnancy and birth and on the other hand is constrained in the choices she can make by social and cultural factors. Birth is first and foremost the work of an individual woman and as such is a unique experience for the woman involved. However, birth is also a physiological process which occurs in a social and cultural context. The conceptual question in this thesis was the relative weight to give to 'social' as opposed to 'individual' explanations of being pregnant and giving birth. Recognition of this tension is not new. Others have suggested that this tension which exists between 'social reality' and 'individual reality' represents an aspect of sociological and anthropological theory which is still poorly formulated (Kleinman 1980, 37). While Rogers asks, "how can we develop theories that do justice to the singularity of each individual's unique experience, while at the same time recognising the importance of shared culture and common social goals" (Rogers 1991, 6). Kleinman argues that even in supposedly homogeneous social worlds, individuals are found to differ, often greatly.
They differ in their conscious understanding and acceptance of social norms and in the degree to which they follow those norms in actual practice. All of this affects the way individuals think about and react to sickness and choose among and evaluate the effectiveness of the health care practices available to them (Kleinman 1980, 38).

In attempting to explain the variance in how Samoan migrant women do pregnancy and birth in New Zealand I recognise and attempt to address in the work of this thesis the balance between 'social reality' and 'individual reality'.
1. Some writers of obstetric texts are also writers of popular literature on pregnancy and birth. Their role as doctors being seen to lend authority to their popular writing. (Llewellyn-Jones 1986; Llewellyn-Jones 1989).

2. This focus in the anthropological literature on the folk or non-professional specialist health sector in comparison to the popular sector in non-Western health systems is discussed by, (Kleinman 1980).

3. In this I follow the conceptual approach developed by Glaser and Straus (1967).


5. Some examples of these literatures are: Hubert 1974; Hurst and Sumney 1984; Graham 1977.

6. Some examples of these literatures are: Goodman 1971; Heath 1973; Kinloch 1985 th ?a/b.


8. In using the term 'obstetric practitioner' I include all health professionals whose core understanding of pregnancy and birth is primarily informed by a bio-medical model, including general practitioners, obstetricians and nurse/midwives. In doing so I recognise that not all practitioners will subscribe to all of the elements of the obstetric paradigm. I use this term to imply an ideal-typical construct.

9. Approaches which draw on this paradigm include, Salmon 1984; Comaroff 1977; Rothman 1982.

10. Approaches which draw on this paradigm include, McKinlay 1984; Navarro 1978.

11. For discussion on the historical development and contemporary state of obstetrics in New Zealand, see Smith 1986; Donley 1986. For discussion of the conflict between proponents of an obstetric model and a home birth model, see Winter 1988.

12. In 1991, an amendment was made to the Nurses Amendment Act 1988 which gave midwives the opportunity to be independent practitioners. Since the conduct of this research in the mid 1980's, some substantial changes have occurred in the birthing options available to New
Zealand women. I suspect however that for most Samoan women there has been less real change in their options.

13. During the 1980's the main alternative approach to the obstetric paradigm was what has been termed the home birth model. This model reflected a social movement which emphasised that the natural and normal character of birth could only be realised in the safety and comfort of a woman's own home. Though involving sympathetic health professionals usually in the form of domiciliary midwives and a few medical practitioners, this movement was largely lay driven. From the late 1980's onwards in some parts of New Zealand (including Wellington) there has been a refocus on what could be called a midwifery model, which also emphasises the natural and normal character of birth, but considers that realisation of this can also be achieved in a hospital or hospital like environment. Though supported by women's groups advocating greater control by women over the birth process, this resurgence of a midwifery model of birth is largely professional that is, midwife driven.


15. By sexism I mean "the taking for granted of society organized in the interest of males and from a male perspective" (Koutroulis 1990).

16. Another way of explaining the routinisation of obstetric procedures at a conceptual level is to focus on the protective function of rituals to practitioners and patients (Davis-Floyd 1990).

17. Patricia Laing was formerly known as Patricia Kinloch and is referenced under both names in this text, as appropriate.

18. Explanations for the seeming stability of Samoan sociocultural institutions has been put forward by a number of writers. For some examples see Holmes, 1980; Rhoads 1984.

19. This approach reflects WHO thinking since the 1970's to involve traditional healers in the delivery of health care in developing countries. For further discussion of this see Mangay-Maglacas and Pizurki 1981.

20. Traditional birth attendant (TBA), is a somewhat clumsy WHO coined term for an indigenous midwife.

21. Kinloch 1985 also notes that Samoan midwives preferred to operate as sole practitioners, rather than share
clients, even when this meant two women in labour at once.

22. This conclusion is contrary to the fears expressed to me by a senior nurse during my visit to Samoa in 1982. She expressed concern that the training courses may have encouraged TBA's to handle more than they were capable of (personal communication).

23. For a discussion of variability and cultural diversity in other cultural systems see Shore 1977 on social organisation and (Milner 1966) on language.

24. Since the publication of Freeman's book "Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth" 1983 many other words have been written by anthropologists about the debate. For an overview of the debate see Brady ed 1983, and Freeman's rejoinder 1984.

25. In 1981 it was believed that 46% of births were conducted at home by fa'atosaga. 1981 Health Department Annual Report, Apia Western Samoa, p3.

26. Medical domination of birth in New Zealand has been examined in historical and contemporary contexts by Smith 1986; Donley 1986; and Winter 1988.

27. The concept of modernisation was defined in one of these studies as, "the progressively increasing tempo of events, initiated by contact with technologically advanced societies, which inexorably has been transforming 'traditional' societies around the world" (Wessen 1992, 3).

28. Studies of cultural change in Samoa have also shown the endurance of traditional values and institutions (Holmes 1980; Rhoads 1984; Baker et al 1986).
This thesis draws from a variety of different data sources and utilises a range of qualitative and quantitative methods of data collection and analysis. These sources and methods include both formal and informal interviews with differently selected sets of people, as well as analysis of secondary sources such as hospital records, obstetric texts and written material on Samoa.

A basic approach used in this study was to listen to Samoan women both those who were currently having babies as well as mothers of older children. Discussions were also held with health professionals and Samoan healers who provided care to pregnant women. The stories which fifty Samoan women told me about their pregnancy and birth experiences, form the heart of this thesis. Interviews with these fifty women in their own homes were conducted in Wellington during the mid 1980's. These fifty women were drawn from the total population of Samoan women who booked in for delivery at Wellington Women's Hospital and Kenepuru Maternity Hospital during the twelve month period from January to December 1984 and a further six month period during 1985. In the thesis the total population of women who booked in at the two hospitals is called the 'total study population'. The fifty women who were interviewed are called the 'interview group'.

During some of the interviews with Samoan women, Samoan fofo (healers - usually the mother or aunty of the woman) were present. They contributed valuable information about Samoan beliefs and practices related to pregnancy and birth. During visits to Western and American Samoa in 1981, informal discussions were held with health professionals about their attitudes to indigenous health beliefs and practices as well as to the practice of obstetrics. In New Zealand formal and informal discussions were held with midwives, general practitioners and specialist obstetricians about their perceptions of and
experiences in providing care for Samoan women during pregnancy and birth.

Another approach used in this study was to draw on secondary sources to lay out obstetric and Samoan accounts of pregnancy and birth. In constructing a Samoan account, I drew from what others had written about past and contemporary Samoan health beliefs and practices in Samoa and in migrant contexts. In constructing an obstetric account I drew from a range of materials which I considered representative of contemporary obstetric knowledge and practice.

A quantitative approach was adopted in the collection and analysis of data from the records of women in the total study population. Two hundred and forty eight women were included in this aspect of the study which involved examination of their hospital and health related records. In contrast to the women's stories, this data was considered to highlight what health professionals rather than women considered to be important descriptions of pregnancy and birth.

THE WELLINGTON STUDY

This study provided the foundation on which this thesis was developed. The study involves both quantitative and qualitative approaches which will be discussed separately. Before describing the research design used in the study an overview of the research process will be given.

Research Process

Community Consultation

I first discussed the idea of a study to examine the expectations and experiences of pregnancy and birth of Samoan women living in Wellington informally with Samoan and other Pacific Island leaders in Wellington. The Wellington Samoan Advisory Council was consulted and their advice and support was sought. At the time, the Council was going through a period of change and my hope to
meet with the full Council did not eventuate. However, meetings were held with key members of the committee who assured me of their individual support and that of the Committee. Letters were sent to all the branches of PACIFICA in Wellington seeking their advice and support. Supportive replies were received from all the branches and meetings were held with the Newtown and Porirua branches. As most of the women were already mothers, their recall of their experiences both in their Island of origin and in New Zealand was very helpful in developing my own ideas. A study proposal was prepared and approval obtained from the Ethics Committee of the Wellington Hospital Board. Funding for the study was received from the South Pacific Committee of the Medical Research Council in November 1983.

After funding had been granted a further period of community consultation was undertaken to help in identifying specific topics and issues of concern to Samoan women which would be followed up in the interviews. This consultation process included meetings with all the Samoan faife'au (church ministers) and their wives in Wellington, Porirua and the Hutt Valley. It also involved attending meetings of the women's fellowships of the various Samoan churches to discuss the proposed research. A leaflet in Samoan was also produced for distribution to all the churches, informing other Samoan women of the study and inviting in particular older women who had already had children to make contact with us (Appendix B). This exercise proved to be of limited value as although some of the women we visited had seen the pamphlet, older women did not take up our invitation to contact us. This along with the difficulties we had in contacting women to interview, reinforced the significance of establishing personal contact with Samoan women before inviting women to participate in a research project.

The process of consultation and information also included health professionals who were directly involved with providing care to pregnant women. A number of discussions were held with midwives at Wellington Women's Hospital and Kenepuru Maternity Hospital. During these discussions midwives spoke about general topics related to pregnancy and birth as well as issues which they
considered were particularly of relevance to Samoan women. Among the issues identified by the midwives were a wish to make antenatal classes more attractive to Samoan women as only a few Samoan women took part; that Samoan women seemed to have different sorts of labours to other women which some midwives felt might lead to greater medical intervention; that midwives were not always sure they were meeting a woman's needs during labour, because of language difficulties and lack of knowledge of Samoan culture; that Samoan families and nursing staff in the postnatal wards of the hospitals had different attitudes towards what was appropriate care of the mother and newborn e.g., visitor numbers, length of stay and handling of the baby.

Before interviews with Samoan women were commenced a letter was sent to all general practitioners and obstetric specialists who had been identified as having Samoan women among their patients to inform the doctors of the study. Doctors were asked to inform the researchers if they had any reservations about any of their patients being interviewed. Doctors were also asked if they would be prepared to provide information on the number of antenatal visits a woman made.

Samoan Researcher

Because of the cross cultural nature of this research, it was important to involve a biculturally competent Samoan woman researcher from the outset. I am not Samoan and I was not able to speak Samoan although I was learning the language. At the time, Limasene (Sene) Po'i Neich was available and willing to be involved in the study. She herself had already written about Samoan beliefs and practices of pregnancy, based on her own experiences when she was pregnant with her daughter Kay (Neich and Neich 1974). Sene already had experience of interviewing in a cross cultural context. She brought to the doing of the research her own fund of knowledge about Samoan culture and the ability to reflect on and question the bases of Samoan beliefs and practices. Not only was she my teacher and mentor, but as a Samoan woman and mother she herself was a key informant. Together
we developed the semi-structured format we both found comfortable to use during the interview.

During the interviews Sene not only interpreted for me when necessary, but enriched the interview by sharing her own experience of having a baby in New Zealand with the woman being interviewed. This often prompted additional comment and discussion from the woman herself. In those interviews where the woman was more comfortable speaking in Samoan or a mix of Samoan and English, then Sene would lead the discussion. In those where English predominated I would usually take the lead. Subsequently she assisted in the transcribing of interviews and the translation of the small number of interviews conducted primarily in Samoan.

Other Samoan women were also formally and informally involved in the research project. Koleta Konise and Natasha Schuster not only translated the remaining interviews after Sene left for Auckland, but also shared their understandings of Samoan culture with me giving meaning to what women said.

Identifying Pregnant Samoan Women

Based on an analysis of births registered over a six month period during 1983 in Wellington and Porirua, it was estimated that around 320-350 Samoan women would give birth over a year. This proved to be an overestimate, in that only two hundred and sixty seven women booked in over an eighteen month period. Of these the hospital records were available for two hundred and forty eight women. These women comprised the total study population. In order to interview women during pregnancy, it was necessary to make contact as early in their pregnancy as possible. Though women differed in terms of their primary care provider, all women in the mid 1980's attended the hospital antenatal clinic for what was known as 'the booking in visit' with a midwife. The 'booking in visit' thus became the entry point to the study.

Demographic analysis showed that Samoans lived primarily in Wellington City and the Porirua Basin. I decided therefore to
concentrate on the two hospitals in those areas. Only those Samoan women who booked in at the antenatal clinics for Wellington Women's Hospital and Kenepuru Maternity Hospital were included in the study. In selecting Wellington Women's Hospital and Kenepuru Maternity Hospital it also enabled comparisons to be made of women's experiences in two different birth environments - Wellington Women's Hospital, a large high technology obstetric base hospital and Kenepuru Maternity Hospital, a smaller low technology general practitioner and midwife run hospital.

During the mid 1980's hospital record systems grouped Samoans, Tongans and other such ethnic groups as Pacific Islanders, rather than by the particular Island a person came from. In order to identify Samoan women, it was necessary to develop a method to distinguish Samoan women from other Pacific Island women at the booking in visit. Discussions were held with the nursing staff in the antenatal clinics at each hospital, to develop a manageable and acceptable system. It was decided that at the booking in interview, the midwife involved would ask the woman's ethnic identity and if Samoan, record her name on a coding form. We (Sene and I) would then visit the clinic on a regular basis to collect the names of women who had booked in and to do spot checks, to establish that all Samoan women were being included. The spot check system used was as follows. The list we were given was checked against the antenatal appointment register. The hospital records of all women who were not on the list, but who were identified in the register as being a Pacific Islander were checked for place of birth or other identifiers. In addition we checked the hospital records of all women whose first names or surname sounded Samoan, but who were not on the study list. This system worked well at Kenepuru Maternity Hospital. The frequency of checks was reduced because we felt reasonably certain that the names of all Samoan women booking in were being recorded. However it became evident quite quickly that this was not going to be the case at Wellington Women's Hospital.

Our checks showed that some Samoan women were being missed at the booking in visit. This was not the result of unwillingness on the
part of the midwives but rather reflected the demands of a big, busy antenatal clinic. A compromise was reached. Midwives continued to record whether a woman was Samoan during the booking in visit, but a more rigorous checking system was introduced. Every second week all the women who booked in that week were checked to establish a woman's ethnicity and place of birth. Although a time consuming task it was the only viable alternative to being present at every antenatal booking in visit, to establish a woman's ethnic identity. Given that the data collection was to cover a twelve month period, subsequently extended to eighteen months, this was not practicable. However, this checking procedure and possibly the increase in the research profile by the regular presence of the researchers at the antenatal clinic kept the rate of recording error to a minimum. While it was considered that the recording system and built in checks ensured that we included the vast majority of migrant Samoan women who booked in during that period, some groups of women might have been under represented. These were likely to be women who on their hospital record were neither recorded as Pacific Islander nor had a Samoan sounding first name or surname and/or were born in New Zealand. Given that in the 1980's New Zealand born Samoan women were only beginning to have babies and that the primary focus of the study was migrant Samoan women this was not felt to be a major problem.

QUANTITATIVE APPROACH

The Total Study Population

Two hundred and sixty seven Samoan women booked in at Wellington Women's Hospital and Kenepuru Maternity Hospital during the research period. However, the full hospital records were available for only two hundred and forty eight of these women. The reasons for this were, that nineteen women who had booked in gave birth elsewhere, either in New Zealand or Samoa or alternatively their hospital record could not be traced. Loss of the hospital record was a particular problem with women who transferred between Kenepuru Maternity Hospital and Wellington Women's Hospital in labour and/or after birth.
Data Collection Schedule

Deciding what data to collect from the woman's hospital record was based on reading the obstetric and other literature on pregnancy and birth and talking with health professionals to establish which markers they considered to be of obstetric significance. Information which others had collected in similar studies and which was thought the interviews with Samoan women would further elaborate was also included. The main source of pregnancy and birth information was the woman's hospital record, but some information was also obtained from general practitioner records and neonatal and infant death records.

Prior to the commencement of the study proper, the schedule was pre-tested by collecting data on all births to Samoan women during December 1983 at Wellington Women's Hospital. As a result of the pre-test some changes were made to the schedule. A copy of the final coding schedule is provided in Appendix B.

Variables

1. Information on a range of socio-demographic variables was collected, from the woman's hospital record. These included marital status, religion, age, place of birth, current address, length of residence in New Zealand, occupation and education.

2. Information on a number of variables related to a woman's previous obstetric history was collected from the hospital record including where previous births had occurred and any history of pregnancy or birth complications.

3. Information collected on the current pregnancy and subsequent birth included such variables as smoking behaviour, contraceptive use before and after birth, number of antenatal visits made by the woman, as well as details of the labour and birth. Because it was not possible to obtain details on the dates and number of
antenatal visits a woman made from Health Department records, general practitioners were asked to provide the information from their records. While a few doctors declined to do so on ethical grounds or because they felt it would involve too much time, most doctors provided the information in that it related to management rather than confidential clinical information. To establish whether all babies were alive twelve months after birth, all the death records for the period were examined at the Office of the Registrar of Births, Deaths and Marriages.

Data Coding

The woman's address was coded using the residential status classification for Wellington developed by the Department of Health in a 1975 study of the provision of maternal and infant health services in Wellington (Salmond 1975). Social class indicators for those women in paid employment were based on the Elley and Irving scale. This proved to be of limited utility because such a large proportion of the women were not in paid employment. Information was available on level of education. High, medium or low levels of education were used as indicators of a woman's socio-economic status. (There were also problems to be discussed later, with using education as an indicator of socio-economic status in that it was not recorded for all of the women). As the number of antenatal visits a woman made during pregnancy was considered to be a variable which could influence pregnancy outcome, it was necessary to establish what health professionals considered to be a desirable number of visits. On the basis of discussions with some general practitioners and the then Medical Officer of Health for Wellington, the expected number of visits a woman would make to her general practitioner or antenatal clinic during pregnancy was set at twelve. The number of antenatal visits a woman made, was then compared with this benchmark figure.

Confidentiality of information was carefully maintained at all stages of the research. At the point of entry to the study, all
women were assigned a study number. As the principal researcher I was the only person who had access to the hospital records of the women in the study. After the birth of the baby the hospital record of the woman was obtained from the Hospital Records Department and the necessary data extracted. As we had a record of the expected date of birth a regular check was made of the birth registers at both hospitals to establish whether a birth had occurred. The major problem, as has been noted above, was in tracing some of the hospital records particularly those which involved transfer of women between the two hospitals in the study.

Data Entry and Analysis

Pre-coded data was double punched by a private data entry company. A SAS data set was created using the Wellington School of Medicine microvax computer. The data was checked for coding errors and the necessary amendments made. Descriptive statistics, non parametric methods, chi-squared test, Fisher's exact test, Mantel-Haenszel test for trend, Mantel-Haenszel test for stratified analysis (Mantel and Haenszel 1959) and the Breslow-Day test for homogeneity (Breslow and Day 1980, 142) were used in analysing the data.

QUALITATIVE APPROACH

Interview Group

Contacting Samoan Women

Successfully contacting fifty Samoan women to interview proved to be more time consuming than was anticipated. In fact in order to interview fifty women, some eighty six women were contacted. Thirty six women who were invited initially by letter to take part in the study either chose not to be involved or for one reason or another were not able to be contacted. Two women were excluded from the sample, when it was discovered that their babies had died after birth. As there have been no other studies involving Samoan migrant women in New Zealand which have used
a similar sampling frame, it is difficult to assess whether a participation rate of 60% was a high - average - or low participation rate. Other studies involving Samoans in New Zealand have used some form of networking or snowballing technique to seek to interview migrants (Pitt and Macpherson 1974; Society for Research on Women 1979; Larner 1990).

The following method was used initially to contact Samoan women after they had booked in at one or other hospital. A letter was sent in Samoan, explaining the study and inviting the woman to participate. A week or so later we telephoned those women with phone numbers and visited those without, to establish whether a woman was willing to take part in the study. This format of a combination of letter and follow up phone call is regularly used in epidemiological studies.

In this study however this format proved to be problematic. One reason related to the appropriate way of establishing one's credentials in Samoan culture. From the outset Sene was concerned that Samoan women would be wary of agreeing to be interviewed without 'seeing our faces first', even though the letter from us was in Samoan and identified us as researchers from the Wellington Clinical School of Medicine. Her concerns were largely confirmed. Women who were contacted by phone were reluctant to participate. As is shown in Table 2.1 women were more likely to directly decline to participate over the phone than in a face to face meeting. On the other hand women with whom initial contact had been in a face to face meeting, were more likely to indirectly decline to participate, by subsequently failing to keep interview appointments.
Table 2.1
Way of Declining by Mode of Contact

<table>
<thead>
<tr>
<th>Mode of Contact</th>
<th>Directly Declining</th>
<th>Indirectly Declining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Face to face</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>13</td>
</tr>
</tbody>
</table>

There were other practical problems associated with using the telephone as a means of initial contact. One reason was that many Samoan women did not give a telephone number on their hospital record, so the only way to establish contact was by making a home visit. Even when a phone number was given there was no guarantee that this would still be current. Some women would have moved address and phone number, while others would have had the phone disconnected. Many Pacific Island families incur high toll bills. In a house with a phone, toll calls made by the migrant to family in the Islands and in particular collect calls from the Islands to New Zealand, make up a significant item of household expenditure. Half of the ten women in Table 2.1 who were considered to have indirectly declined to participate, were found to have had the phone disconnected. It was therefore not possible to confirm whether their failure to keep appointments was because they had forgotten, or was a way of declining to participate.

The major reason for non participation was that it was not possible to establish contact with the woman at all. Of the fifteen women with whom no contact was made, only three had listed phone numbers. Among the twelve women who did not have a listed phone or who had changed their number, four women left Wellington before the baby was born. Two women left for Samoa voluntarily, while one was deported as an overstayer late in pregnancy. The remaining eleven women who were unable to be contacted at all, were assumed to be staying temporarily with other family or had permanently changed address. Though where
possible, we asked neighbours for, information, this was not always forthcoming, either because they genuinely did not know who their neighbours were or their whereabouts, or they were suspicious of strangers asking questions. There would therefore seem to have been quite a lot of mobility among the Samoan women in the study.

Because we felt that some women were wary of participating because they did not 'know' us, while it was impossible to contact other women by phone, we decided early in the research to follow up the letter of introduction by making a house visit rather than a phone call. This decision added considerably to the cost of the study both in time and travel but there appeared to be no alternative option if the target of interviewing fifty women was to be met.

The original design provided for interviews to commence two to three months after the data collection had commenced. I intended that the interviews would run simultaneously with the data collection from hospital records. Two interviews were planned with each woman, the first approximately 4-6 weeks before the birth and the second 2-4 weeks after the birth. A number of factors intervened so that the final research design differed from the original design in a number of ways.

Most of the women who were subsequently interviewed (41/50) booked in over a six month period between November 1984 and the end of April 1985 while a further nine women booked in between June to August 1985. Thus the interview group was drawn from women who booked in over a nine month instead of a three month period. The data collection was extended from a 12 month period to an 18 month period. Though the data collection of the source population began in January 1984. There were a number of reasons for the extension. As the research process unfolded, a higher priority was placed on talking in group situations with Samoan women who already had children. These were valuable opportunities to sensitise the researchers to issues of importance to migrant Samoan women, but proved to be time consuming to manage and thus delayed the start of the interviewing. This was followed by a
period of personal ill health which further delayed the commencement of the interviews. In addition fewer women booked in each month than had been originally estimated and consequently it took longer to obtain an interview group of fifty women.

Because it was so difficult to contact women, particularly when this required chance visits to Porirua in the hope of finding a woman at home, some women gave birth before the first interview could be conducted. In the finish half of the women were interviewed during pregnancy as well as after the birth, while the remaining twenty five women were interviewed after the birth only. The problems we faced, despite the intensive process of community consultation and information we had undertaken, raises questions about the use of random sampling frames and letter/phone call methods of establishing contact in studies involving Samoans or other Pacific Island ethnic groups. Such approaches assume that a potential participant has an accessible phone number, and a currently connected telephone. As can be seen from Table 2.2 this was not the case in this study, in that the majority of the women were not accessible by telephone. Though a higher proportion of non-participants were without a current phone, the majority of participants also had no phone number listed on their hospital record or the number had changed or been disconnected since the booking in visit. If we had relied on the telephone to establish contact instead of using the face to face approach of a home visit, it would have been even more difficult to achieve the target of fifty participants.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Participants</td>
<td>46%</td>
<td>(23)</td>
</tr>
<tr>
<td>Non-participants</td>
<td>41%</td>
<td>(15)</td>
</tr>
</tbody>
</table>

Table 2.2
Telephone Availability
The Research Interview

Seventy seven interviews were conducted with the fifty women. Twenty seven women were interviewed both before and after the birth of the baby, while the other twenty three women were interviewed only once, after the birth. All interviews took place in the woman's own home. Frequently the interview took place at our first visit to the house, although some involved a return visit. A few interviews were conducted almost exclusively in Samoan, some totally in English, but the majority involved a mixture of English and Samoan. All but two interviews were tape recorded. The two women who did not want the interviews recorded said it made them feel nervous as if they were performing in public, rather than speaking normally. On both occasions we made notes during the interview, but these lacked the rich detail which was possible with a full transcript.

More often than not, interviews took place within the context of normal family life. Consequently they were often noisy affairs. They were very rarely carried out in a calm, quiet environment involving only the interviewers and the woman. Interviews were not events that were separated off from other activities going on in the home. Other adult women often joined in the discussion if they felt inclined and volunteered their own experiences of pregnancy and birth. So what started as an interview with one woman became a conversation involving others. Most of the women had other young children who were inevitably present for some or all of the time. Young children were always fascinated by our tape recorder, which required much inventiveness to provide adequate distractions. I recall one interview in which I tried to maintain the flow of the interview talk, at the same time as distracting the toddler from creating havoc with the tape recorder by having him sit on my knee while I drew pictures of cats for him! As many of our interviews took place late morning or early afternoon, we found we were interrupting the favourite programme on television, which some other member of the family might continue to watch. This sometimes made for a concentrated effort listening to the tape afterwards.
The style of interviewing we used, evolved from a largely unstructured format with some general topic areas, which we used in the first few interviews to a semi-structured format. The main reason for this evolution in format was our felt need as interviewers working with two languages for a more structured approach to the interview talk. The interview schedule which we developed on the basis of the first few interviews can be found in Appendix D. Though we aimed to discuss each of the areas set out in the schedule during each interview some interviews were characterised by a greater emphasis on one theme rather than another.

Data Entry

All the taped interviews were fully transcribed and entered on a word processing package. The majority of the interviews were transcribed by me, with the assistance of the Samoan women noted earlier. Transcriptions were done verbatim to retain the full sense of how women expressed themselves.

Computer Assisted Data Analysis

Because of the large amount of qualitative material generated by seventy five interviews I used a computer software package to assist in carrying out thematic analysis. In the early to mid 1980's there were very few software programmes specifically designed to use in qualitative research in contrast to the sophistication of such programmes as SAS designed to manipulate quantitative data. The only suitable programme available, was the STAIRS programme on the University of Victoria IBM main frame. This programme was capable of manipulating the sizable data base created by the full transcripts of seventy five interviews. It had the capacity to carry out textual retrievals from the transcripts linked to coded information about the woman.

In order to set up the STAIRS data base, each interview was pre-coded to contain standardised information about each woman such as her age, number of previous children, as well as to identify the key themes in the narrative which would form the basis on
which the analysis would be conducted. It therefore became possible to search the data base for particular themes both within an interview and across all seventy five interviews, while linking any or all of the socio-demographic items to the textual retrieval. Thus the data base may have been searched for all references in the text to 'pain in labour' and the search linked to information about the women's age and parity. This computer-assisted search and retrieval system made it easier to collate what women said about a particular topic or theme.

The computer system also facilitated identification of similarities and differences in what women said. It enabled easy identification of which women expressed similar feelings or practices and thus helped in generating the analytical categories which I used to try to explain variation among the women. One such analytic category, that of cultural orientation, was designed to distinguish between the women in terms of level of acculturation.

OPERATIONALISING THE CONCEPT OF ACCULTURATION

In Chapter One different approaches to the study of adaptation among migrants were discussed in some detail. Many of these studies seek to explain the way in which migrants from a largely rural and economically underdeveloped society such as Samoa, adapt to a largely urban and more economically developed society such as New Zealand and the subsequent impact which such adaptation has on various aspects of their lives. One of the ways in which this study seeks to explain differences in the way Samoan women did pregnancy and birth, is by drawing on and adapting approaches and finding of other migrant studies.

Acculturation is a conceptual tool which has been utilised by other researchers. While earlier studies considered that acculturation was a linear process in which assimilation was the inevitable end point, more recent research has suggested that this may neither be an accurate reflection of migrant patterns of adaptation nor necessarily psychologically or socially desirable (Richman et al 1987; Szapocznik and Kurtines 1980).
In this study, the concept of acculturation is interpreted as a multidimensional process in which the direction of change is open (Keefe 1980).

A number of studies have sought to identify what seem to be the key indicators of acculturation and to develop valid and reliable quantitative measures on which to base predictive or explanatory models (Richman 1987; Padilla 1980; Szapoznik and Kurtines 1980; Wessen 1992). Other studies using qualitative methodologies, have developed typologies of acculturation which describe migrant attitudes to and involvement in their culture of origin and culture of adoption. Two such studies have involved Samoan migrants in New Zealand (Kinloch 1976; Macpherson 1984). While both studies implicitly and explicitly draw on similar indicators of acculturation as those used in the quantitative studies noted above, the typologies constructed are not used to explain beliefs and actions of individual Samoan migrants.

In this study a qualitative method was used in developing the typology by which I classified the Samoan women in terms of attributes which I saw them as having. The typology was grounded in the data. This classification system was then drawn on in analysing the qualitatively derived data – Samoan women' voices. The kind of quantitative measures developed by Wessen et al (1992) in the Tokelau Island Migrant Study (TIMS) were neither appropriate nor possible in the context of the study of Wellington Samoan women. The TIMS was a longitudinal study. Sociological interviews included questions about the way migrants were adapting to life in New Zealand; the extent of their involvement with other Tokelauans and indications of their allegiance to core Tokelauan values. Factor Analysis was used to determine the relative placement of individuals along three dimensions. Factor scores were used to distinguish between those migrants who were 'more' assimilated or 'less' assimilated (measured by English fluency, education and ethnic job-mix); 'more' or 'less' involved in Tokelauan institutions (measured by membership of Tokelauan clubs, attendance at functions and residential locality); and 'more' or 'less' identified with Tokelauan language and culture (measured by use of Tokelauan
language and religious affiliation). Factor scores on each of the three dimensions were subsequently compared for congruence with degree of allegiance to core Tokelauan values (Wessen 1992, 224-239). Some of the indicators used in the TIMS methodology indirectly informed the inductive process which I used to place women in one of three classificatory categories, as well as to provide direct cross-checks.

In contrast the Wellington study involved only one or at the most two interviews with Samoan women. The interviews were conducted using a qualitative rather than a quantitative methodology. The primary goal of the interviews was to listen to women's voices about pregnancy and birth, rather than to develop acculturation measures. At the time the research interviews were carried out, it was intended to use length of residence and fluency in English as measures of acculturation. However it was felt that on their own, these two variables would not be sufficient indicators of acculturation. A different approach was therefore chosen.

In using a qualitative approach in developing conceptual categories of acculturation, I was influenced by the work of Glaser and Strauss (1967). In developing indicators of cultural orientation among the Samoan women, I drew primarily from Samoan women's voices. During the interview, Samoan women not only described how they did pregnancy and birth, they also described themselves, their relationship to the dominant palagi culture and to Samoan culture. The cultural orientation typology which I constructed, was empirically derived from interviews with Samoan women.

This approach involved immersing myself in my data. First I listened to the interview tapes and read all the transcripts of the interviews on a number of occasions. I was present for all but one of the interviews with the fifty women and was also very familiar with their voices in having transcribed many of the tapes. I re-read my field notes at the time of the interview, in which I recorded my impressions of the woman and her environment. The field notes included whether she dressed in a Samoan or palagi style, whether she spoke in English or Samoan
to her other children or members of the family as well as the language/s used in the interview. I also recorded such details as the residential status of the area in which she lived, whether she was a tenant or home owner, and whether she lived in a nuclear or extended family household. These variables have been shown in other studies to be associated with particular patterns of acculturation (Wessen 1992). I also recorded some descriptions of the interior decoration in the house such as the presence of family pictures on walls, and Samoan artifacts and decorations.

From listening to women's voices and reviewing my observational material, patterns emerged. It seemed to me that three broad groupings of cultural orientation could be identified among the Samoan women. These I termed:

1. A more Samoan oriented category
2. A less Samoan oriented category
3. A biculturally oriented category

Having identified these groupings, I then placed the Samoan women in one of the three conceptual categories. Using this approach I was able to place all but five women. These women differed from each other and did not seem to represent a fourth category. Later these women were located among the three categories. The cause of the difficulty in initial placement seemed to be that while these five women had similarities with women located in one or other of the three categories, they differed from these women on one or more dimensions.

A cross checking system was devised to establish that the women whom I had grouped together using an inductive technique did have key characteristics in common. A summary of those factors which others have suggested reflect different patterns of acculturation was developed for each woman (Richman 1987; Padilla 1980; Szapoznik and Kurtines 1980; Wessen 1992). A further step was to compare the three groups in terms of these indicators of acculturation. Simple descriptive statistics were used to compare the three groups of women.
Indicators Included in Summary

Language Use

Language use has been shown to be associated with different patterns of acculturation (Padilla 1980; Richman 1987; Deyo 1985; Wessen 1992). A greater competency in the host language is considered to be a reflection of greater acculturation to the host culture, while retention of the language of the culture of origin, reflects less acculturation. Three dimensions of language use among the Samoan women were examined. The primary language reported and/or observed to be used in the home; the language/s used in the interview and whether the name given to the baby and other children was Samoan or English.

Customs

Customs such as food and music preferences have been shown to be associated with different patterns of acculturation (Richman 1987). An attempt was made to establish whether a woman preferred to eat Samoan or non-Samoan food. This was of limited value as for some women it was difficult to distinguish between food they would prefer to eat and that which was available.

Ethnic involvement

The nature of a migrant's social network, including the extent to which migrants mix with members of their own ethnic group or other ethnic groups has been shown to be associated with different patterns of acculturation. Some information was available about the social network of each Samoan woman. This included relevant aspects of her relationship with her partner and for most women, on which female members of their close family network lived in Wellington. Information was obtained in the context of interviews about pregnancy and birth. Consequently the information was neither as systematically collected nor as detailed as would have been the case if the purpose of the interview had been to establish the nature of migrant women's social networks.
Ethnic Loyalty

Ethnic loyalty has been shown to be associated with different patterns of acculturation (Padilla 1980; Richman 1987; Wessen 1992). An attempt was made to establish whether a woman considered her baby was first and foremost a Samoan or a New Zealander. Information on this variable was obtained for some but not all of the women. A further indicator of ethnic loyalty used was whether the woman's partner was or was not Samoan.

Studies have shown that certain socio-demographic factors are associated with different patterns of acculturation. Five of these factors were used in making comparisons within and between the classificatory categories. These included, marital status (Richman 1987); length of residence (Goldlust and Richmond 1974; Szapocznik et al 1978; Pescosolido 1986; Wessen 1992); paid employment (Richman 1987); education (Goldlust and Richmond 1974; Smithers 1982; Wessen 1992).

In Chapter Three, case studies are used to illustrate the patterns found in each of the classificatory categories. The case studies are followed by descriptions of the women in each of the classificatory categories, including socio-demographic details, social network, language used, housing status and organisational structure and attitudes to and involvement in Samoan and palagi cultures. Profiles of all the women interviewed can be found in Appendix E.

In developing such a typology for use as an analytic tool, I am conscious that it is fraught with problems. The typology I constructed, while empirically derived, may be criticised from a number of perspectives. As I acknowledged in Chapter One in constructing this account of how Samoan women do pregnancy and birth in New Zealand, I have, as Rogers expressed it, done violence to the original ideas and understandings as women expressed them (Rogers 1991). Similarly the individual Samoan women who were interviewed, may not agree that they personally fitted into the classificatory category in which I located them. While it would have been helpful and useful to check my
classification with how women would have classified themselves, this was not able to be done in the context of this study. In hindsight, it would have been preferable to have developed the classificatory groups and the placement of women in those groups with Sene Neich, the Samoan researcher who was intimately involved in the conduct and transcribing of the interviews. That she was not involved was a reflection of the fact that by then we were located in different cities and Sene had other commitments on her time.

The classificatory typology which I have constructed, though it draws from and adapts classifications used in other acculturation studies, is also differently constructed. Other researchers who have studied other aspects of Samoan life in New Zealand, have developed different categories using different analytic techniques (Kinloch 1976; Macpherson 1984). Some of these differences reflect the different approaches of anthropology and sociology to explorations of acculturation. My sociological background like that of Macpherson's is reflected in my selection of social patterns such as household structure rather than cultural patterns such as symbolic beliefs and values exemplified in Kinloch's work. During the interviews with Samoan women, information was collected on a number of social variables, but only limited information was obtained on cultural variables.

The categories of cultural orientation developed in this thesis, like other classifications used in other studies, can be but a crude reflection of the complexities involved in the way migrants adapt to their new environment. Locating a woman in relation to one rather than another classificatory category was based on attributes I saw them as having. While I considered that a woman who fitted one, rather than another category would have more in common with other women similarly classified, I did not consider and as will be shown in Chapter Three, neither was this the case, that differences among the women in each category would not exist. Neither do I wish to suggest that Samoan women were fixed within classificatory categories. The process by which women were assigned to a category of cultural orientation in this thesis, can be compared to the analogy of taking one or two
snapshots of a woman in a particular place and at a particular time. The snapshot does not mean that Samoan women could not pass in and out of classificatory categories under different conditions.

This description of the method used in operationalising the concept of acculturation and constructing a typology of cultural orientation accurately depicts where the thesis began, but it does not reflect what happened in the course of the doing of the thesis. In the introduction I said that this thesis was for me a voyage of discovery. Thus understandings held at the outset of the thesis as to what shapes or influences the way in which people think, feel, or act shifted as the thesis unfolded. In beginning the thesis, my extensive reading of the literature on how migrants adapt to a new environment suggested variations in adaption. For example the changes which occur in migrants' attitudes and involvement in their culture of origin and the host culture, may be reflected in migrants' health status or the way in which they will use health services. Certain variables such as length of residence, competency with the host language, or age at migration seemed likely to influence or be associated with the way in which adaptation occurred. A typology of cultural orientation would I considered therefore be a useful analytic tool in helping to explain variation in the way in which Samoan women did pregnancy and birth. Thus a woman who was classified as more Samoan oriented would be hypothesised to draw on Samoan and obstetric knowledge sources in different sorts of ways to a woman who was classified as less Samoan oriented.

However in following womens' voices, what I found was that the way in which women constructed their experience of pregnancy and birth was vastly more complex than allowed for by typologies of cultural orientation or that of social class. In the process of the conduct of the analysis, women kept falling out of and between the classificatory categories constructed. It became evident that women repeatedly behaved in ways that cut across as often as fell within the expectations generated by my classificatory categories. This is not to say that women did not differ in their attitudes to and involvement in Samoan and palagi
cultures, nor that these differences had no impact in shaping the choices a woman made about pregnancy and birth. Rather, my argument is that the assumptions underlying the classifying of these respondents by ethnic orientation, failed to do justice to the active ways women constructed their experiences and hence to the richness and diversity of the ways in which the women made sense of and acted to shape their lives.

Analysis and Writing up of the Interview Material

While the voices of the majority of the women are heard at some point in the thesis, it is obviously not possible to include every woman's voice in presenting this account of Samoan pregnancy and birth in Wellington. While I am familiar with all the women's voices and all of these voices provided the basis of my interpretations of Samoan pregnancy and birth, aspects of the lives of some women will become better known to the reader, than others in the chapters ahead. There are a number of reasons why some womens' voices are drawn on more frequently than others. Some women were more skilled narrators and informants than others. Although some womens' stories were rich and detailed and contributed greatly to my understanding of womens' experiences, the way they told their stories, often needed to be located within the total context of the telling to be readily understood. In making womens' voices heard I wished to retain the power of the idiom, the tone, the very words they used, so as to capture the essence of their style. However, for a reader not familiar with the language style of a person who speaks English as a second language, the way some women told their stories could have been confusing.

SECONDARY SOURCES

Obstetric Texts

The principal sources used in identifying an obstetric perspective of pregnancy and birth were obstetric texts. Such an approach has been used by a number of writers (Scully and Bart 1973; Koutroulis 1990; Martin 1987). It was considered that
obstetric texts, unlike individual articles, represent a collection of obstetric writing which at any one point in time could be reasonably expected to reflect contemporary obstetric knowledge, attitudes, beliefs and practices. Text books remain important in the education of medical students as well as reinforcing and validating the attitudes and practices of medical practitioners. The seven obstetric texts included in this study are listed in Table 2.3. The main criteria for inclusion in the study was that the text was available in the Wellington Medical School Library, either held on closed reserve and for use only in the library or in the general reference section also for use only in the library. By including only texts which were for library use only, it was expected that these texts were considered essential or necessary reading by the medical teachers in the School of Medicine and likely to be thus widely used both by students and obstetric practitioners. A range of texts were selected which included British, American and New Zealand authors and publishers. Texts were also selected on the basis of year of publication. Most texts had been published in the 1980's around the time when the study of Samoan women in Wellington was conducted. The oldest text included was published in 1972 and the most recent text was first published in 1989. The seven texts involved a total of ninety two authors of whom only eleven were female. All eleven female writers were located in the most recent text published. The remainder were written exclusively by male obstetricians.

The contents of the relevant chapters of the seven texts was analysed. Texts were read for evidence of coherence and agreement about obstetric beliefs and practices such as would be characteristic of the features of a paradigm. In undertaking this analysis, other themes which exemplified obstetric views about the nature of reproduction and women as reproducers were also identified.
Table 2.3
Obstetric Texts Reviewed

<table>
<thead>
<tr>
<th>Text</th>
<th>Authors</th>
<th>Date</th>
<th>Authors /gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles and Management of Human Reproduction*</td>
<td>Reid et al</td>
<td>1972</td>
<td>1 male</td>
</tr>
<tr>
<td>Obstetrics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essentials of Clinical Practice **</td>
<td>Niswander</td>
<td>1981</td>
<td>4 males</td>
</tr>
<tr>
<td>Introduction to Obstetrics**</td>
<td>Green (ed)</td>
<td>1983</td>
<td>1+ males</td>
</tr>
<tr>
<td>Williams Obstetrics*</td>
<td>Pritchard et al (eds)</td>
<td>1985</td>
<td>3 males</td>
</tr>
<tr>
<td>Obstetrics and the Newborn**</td>
<td>Beischer et al</td>
<td>1986</td>
<td>2 males</td>
</tr>
<tr>
<td>Fundamentals of Obstetrics and Gynaecology **</td>
<td>Llewellyn-Jones</td>
<td>1986</td>
<td>1 male</td>
</tr>
<tr>
<td>Obstetrics*</td>
<td>Turnbull and Chamberlain</td>
<td>1989</td>
<td>11 females</td>
</tr>
</tbody>
</table>

* Book held in reference section
** Book held on closed reserve

Samoan Sources

A number of sources were drawn from in constructing an account of Samoan pregnancy and birth. The principal sources included
work done by Cluny and La'avasa Macpherson (1990), the work of Patricia Laing (Kinloch) on Samoan health, health care and healing practices in Samoa and New Zealand including the work of Samoan midwives in Samoa (1980; 1985a; 1985b and the study of the position of women in Samoan society by Penelope Schoeffel 1978). Other sources used were official reports of the Governments of Western and American Samoa.
107

ENDNOTES

1. Profiles of three Samoan healers can be found in Appendix A.

2. For a discussion of the process of community consultation which others have used see Kinloch 1983.

3. As is so often the case half way through the data processing a new qualitative programme was written called NUDIST was written about in Richards 1987. By then it was too late to try and make a change.
Chapter Three
THE SAMOAN WOMEN IN THE WELLINGTON STUDY

INTRODUCTION

In this chapter the Samoan women in the Wellington study are introduced. Information drawn from both the quantitative analysis of the hospital records of two hundred and forty eight women as well as from the interviews with fifty randomly selected women is presented. There are two parts to this chapter. The first part describes the women's migration history; socio-demographic characteristics and reproductive history. The representativeness of the interview sample in relation to the total study population is examined. The results of statistical analysis of key socio-demographic indicators, age, marital status, education, occupation, religion and parity in both the interview and non-interview groups is presented. A profile of those women whose stories are told in the thesis, is provided in Appendix E. The extent to which the total study population of two hundred and forty eight women could be said to be representative of Samoan migrants in New Zealand is discussed. The characteristics of the women in the total study population are compared where possible with published information on other Samoan migrants to New Zealand.

In the second part of this chapter, classifications which have been used in acculturation studies are adapted to explore the pattern which includes Samoan women; their culture of origin; their choices during pregnancy and birth; and the host culture, particularly obstetric knowledge and advice. These patterns will be illustrated using case studies.

PART ONE

Migration History

Most of the two hundred and forty eight women, (92%) were born in Western Samoa. This study is thus primarily about migrant women and their experiences. In the mid-1980's New Zealand born

...
Samoan women were only beginning their reproductive years. The New Zealand born women in the study differed from the migrant women in that they tended to be young, unmarried and having their first baby.

Table 3.1
Home Village of Migrant Women

<table>
<thead>
<tr>
<th>Area</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upolu urban</td>
<td>13</td>
<td>36%</td>
</tr>
<tr>
<td>Upolu rural</td>
<td>14</td>
<td>39%</td>
</tr>
<tr>
<td>Savai'i</td>
<td>9</td>
<td>25%</td>
</tr>
</tbody>
</table>

Information was available on the home village of thirty six of the forty eight migrant women in the interview group. As can be seen in Table 3.1, three quarters of the women were from rural villages and the more urban villages around Apia. Other studies have suggested that up till the 1960's most Samoan migrants to New Zealand came in the main from Apia, where they had acquired sufficient skills to satisfy the requirements of the New Zealand immigration system. From the late 1960's migrants were also coming directly from the rural villages of Upolu and Savai'i to live with relatives in New Zealand. This pattern of migration was also found among the women in the interview group. The longest term migrants in the study, those who came in the early to mid 1960's were from urban Upolu. From then on rural migration predominated, with two thirds of the women coming from rural villages on Upolu and Savai'i. This switch from urban derived to rural derived migration is said to be a characteristic of chain migration. The early more urbanised migrants lay the basis for other less acculturated individuals often from the rural areas (Bedford and Gibson 1986). Most women migrated directly to Wellington, with a small number going first to Auckland and later choosing to come to Wellington. In 1981, 91% of Samoans lived in the four main urban centres, with 64% in Auckland and 21% in Wellington. This urbanised migration is characteristic of
Pacific Island migration generally. As Bedford noted this migration has involved, "the transfer of thousands of people raised in small villages, where a semi-subsistent life style is still common, to the core of the New Zealand urban system" (Bedford and Gibson 1986, 40). This pattern of Samoan migration in which early migrants came largely from the more urban environment of Apia, to be followed later by direct migration from the rural villages was also evident among the Wellington Samoan women.

Age at Migration

Most of the women interviewed came to New Zealand as young adults. The mean age at migration of the women interviewed was 20 years, with a range of 1-32 years. As can be seen in Table 3.2 most rural women from villages on Upolu and Savai'i came to New Zealand in their teenage and early adult years, while there was greater variety in the age at migration of women who came from urban villages.

Table 3.2
Area of Origin by Age at Migration

<table>
<thead>
<tr>
<th>Area</th>
<th>Years</th>
<th>&lt;14</th>
<th>14-19</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>NR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>U/urban</td>
<td></td>
<td>15%</td>
<td>31%</td>
<td>38%</td>
<td>8%</td>
<td>8%</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2)</td>
<td>(4)</td>
<td>(5)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U/rural</td>
<td></td>
<td></td>
<td>21%</td>
<td>64%</td>
<td>14%</td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3)</td>
<td>(9)</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savai'i</td>
<td></td>
<td></td>
<td>37%</td>
<td>37%</td>
<td></td>
<td>25%</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3)</td>
<td>(3)</td>
<td></td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2</td>
<td>10</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>35</td>
</tr>
</tbody>
</table>

The majority of the women came as migrant workers to earn money to support family in Samoa. Table 3.3 shows this clearly. Other studies conducted in the 1970's and late 1980's also found that
one of the main reasons Samoans gave for migration was to provide a source of income for the family who remain in Samoa (Macpherson 1975; Larner 1990). As Maureen, one of the women in this study said, "the reason why Samoan people come to New Zealand is to support their parents and younger brothers and sisters who are going to school. And because some of our family are poor, we just want to get them the money". For most of the women, earning enough to send money home meant working in factories. A theme which emerged from the interviews was that, of the women who had acquired some tertiary education in Samoa usually nursing or teaching or those who had worked in an office in Samoa prior to emigrating, very few were in similar occupations in New Zealand. For these women migration resulted in downward rather than upward occupational mobility.

Motivation for Migration

Table 3.3
Primary Reason for Migration

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support family</td>
<td>13</td>
<td>41%</td>
</tr>
<tr>
<td>Education/self development</td>
<td>7</td>
<td>22%</td>
</tr>
<tr>
<td>Accompany spouse</td>
<td>6</td>
<td>19%</td>
</tr>
<tr>
<td>Accompany parents</td>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>Child care</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100%</td>
</tr>
</tbody>
</table>

Providing for the future of their children was also part of the long-term agenda of some women. For these women, migration was seen as a means to ensure their children had the advantages of
a New Zealand education. Migration was an investment in the future of their children (Pitt and Macpherson 1974).

As is seen in Table 3.3, a substantial proportion of the women interviewed came with their parents or their husbands. Those women who had lived in New Zealand most of their lives, came as children with their parents. Some of the married women came when their husbands obtained a job under the quota system, while others married Samoan men who already had permanent residence and an established life in New Zealand.

A few women came originally to obtain higher educational qualifications and remained to bring up a family. Panesa who came to New Zealand when she was seventeen, recalled what happened when her parents heard over the radio that she had passed the scholarship examination which she had sat without telling her parents. "So my father rang up my uncle and said, 'well, you've got to sponsor her now, she's got her exams'. So even when I came here, I didn't even know what I was doing. I didn't even know whether I wanted to come or not. The next thing, I was pregnant to my old boyfriend in Auckland".

For a small number of the women, migration represented the chance for greater personal freedom and growth. Pua was quite clear why she came to New Zealand. "To have a good life and for a good future. Because if you get married in the Island, you have no future there, unless you are loaded. When I came here, I feel free, because I hate being told not to go out at all. Have to be home in time for evening service or have the stick".

Although only a few women came to New Zealand primarily to provide child care services for older members of the family, a number of women did provide such services at some stage before commencing their own family. A feature of the women's talk about child care, was their continued reliance on traditional patterns of child care, for example, as provided by other family members rather than formal child care such as play groups or creches available in New Zealand6. This preference for Samoan institutions as well as the economic role of the extended kin
group in New Zealand was a feature of Samoan migrant life in the 1970's (Macpherson 1975).

Although women tended to emphasise one particular reason for migration to New Zealand over other potential reasons, it is likely a woman's decision to migrate was influenced by more than one factor. As Mareta said when asked why she came to New Zealand, "to earn money to send to the family, for our own good and for the children's sake". Among the reasons which women gave for migration were to reunite with other family members, to seek educational and work opportunities for themselves which were unavailable in Samoa, to improve their personal, immediate and extended family's material situation and to look to the future and hopefully improve the life chances of their unborn children. For as one Samoan woman wrote "children are our oloa, our wealth and our good fortune" (Umaga 1983). Like the findings of other studies (Pitt and Macpherson 1974), the primary motivation for migration of Samoan women in the Wellington study, was to improve the material status of their family both in New Zealand and in Samoa.

Socio-demographic Characteristics of the Samoan Women in the Study
This section presents information about the Samoan women in the study and the representativeness of the interview sample. The 50 women who agreed to be interviewed are labelled as the 'interviewed' group. The 29 women who one way or another declined to be interviewed are labelled the 'declined' group and the 199 women who were not selected 'to be interviewed are labelled the 'not interviewed' group. Certain characteristics of these three groups are compared and the results of the analysis are presented in Tables 3.4 to 3.11.
As can be seen in Table 3.4 there was no significant difference in the age distribution of the women in the interview group when compared with women in the total study population who were not interviewed or who were invited to participate but for one reason or another did not. The majority of the Samoan women in the study were in their twenties and early thirties. There was a similar small proportion of younger and older mothers.

As can be seen in Table 3.5, there was no significant difference in the marital status distribution of the women in the interview group, when compared with women in the total study population who were not interviewed, or who were invited to participate but for one reason or another did not.
Most women in the total study population (85%) were in a married or defacto relationship. Of the women interviewed most met their partners in New Zealand, rather than in Samoa. In the total study population 12% of the women were classified as single. However interview experience suggests that this number is an overstatement and the number of women in defacto relationships is understated. Five of the women who were interviewed were classified as single on their hospital records. However in the interviews three of the women were found to be in a defacto relationship with the baby's father. The two 'single' women were quite different to each other. One was an eighteen year old woman, a recent arrival from Samoa who got pregnant during a short relationship with a man who had returned to Samoa. She had never worked and was living with her mother and sisters. The other woman was in her early thirties had lived and worked in New Zealand for some years, was supporting herself and was one of the few women living on her own. She had lived with the baby's father who was a palagi, but the relationship had broken up before she found out she was pregnant.

In only two cases was the father of the baby not Samoan. In both cases the women were single at the time of pregnancy. The younger of the women commenced a defacto relationship with the baby's father, a Maori, after the baby's birth. This relationship which had been strongly opposed by the girl's parents during the pregnancy, was tolerated after the birth. The couple lived with the woman's parents. This low level of intermarriage differs from that found by Macpherson in the 1970's (1975).
Table 3.6
Educational Status of Samoan Women in Wellington Study
(including unknowns)

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewed</td>
<td>27% (13)</td>
<td>43% (21)</td>
<td>6% (3)</td>
<td>24% (12)</td>
</tr>
<tr>
<td>Not interviewed</td>
<td>15% (30)</td>
<td>38% (76)</td>
<td>5% (9)</td>
<td>42% (84)</td>
</tr>
<tr>
<td>Declined</td>
<td>21% (6)</td>
<td>31% (9)</td>
<td>7% (2)</td>
<td>41% (12)</td>
</tr>
</tbody>
</table>

Interviewed vs not interviewed, chi-squared=6.59 df=3 p=0.086.
Interviewed vs declined interview, p=0.46 Fisher's exact test.

(Low = Primary only or 1-2 years secondary
Medium = 3-4 years secondary
High = tertiary education for example, nursing/primary teaching)

As is seen in Table 3.6, there was no significant difference in the education distribution of women who were interviewed in comparison to women who were not interviewed or, having been invited, for one reason or another, declined to be interviewed.

When the educational status of the women in the study population is compared with reported rates for the general Samoan population in the mid 1970's, migrant women appear to have higher levels of formal education. In 1976, only 20% of the population in Samoa was reported as having secondary education and an even smaller proportion 2% had a tertiary qualification (Haas 1983, 19). In contrast most of the Samoan women in the study had secondary education. All women with primary education only were Samoan born, and tended to be older women over thirty. On the other hand women with tertiary education - nursing and teaching - were also largely Samoan born (10/12) but tended to be younger women. Experience in the interviews suggests that the number of women recorded as having tertiary education may be understated. Four women in the interview group, were found to have trained as nurses and teachers in Samoa but they were not recorded as having a tertiary qualification.
Education rather than occupation was considered to be the main indicator of socio-economic status in the study, as the majority of women were not in paid employment. But there were also problems associated with use of education as an indicator of social class. One problem was that not all women had education recorded in their hospital record. Another problem was, that for most women, educational qualifications were obtained in Samoa. As has been seen, these qualifications were not necessarily reflected in a woman's situation as a migrant in New Zealand. Thus, using education obtained in Samoa as an indicator of current socio-economic status in New Zealand must be treated with some caution.

Table 3.7
Occupation of Samoan Women in Wellington Study

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Unwaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewed</td>
<td>4%  (2)</td>
<td>16%  (8)</td>
<td>20% (10)</td>
<td>63% (31)</td>
</tr>
<tr>
<td>Not interviewed</td>
<td>2%  (3)</td>
<td>18%  (34)</td>
<td>14% (27)</td>
<td>68% (131)</td>
</tr>
<tr>
<td>Declined</td>
<td>4%  (1)</td>
<td>18%  (5)</td>
<td>18% (5)</td>
<td>64% (18)</td>
</tr>
</tbody>
</table>

Interviewed vs not interviewed, p=0.35 Fishers exact test.
Interviewed vs declined interview, p=1.00 Fisher's exact test.
(classification based on Elley Irving scale)

As can be seen in Table 3.7 there was no significant difference in the distribution of occupational status of women in the interview group, when compared with women in the total study population who were not interviewed or who were invited to participate but for one reason or another did not.

Only 33% of women (79/241) in the total study population were in the paid workforce. Of those women who were in paid employment, 94% (74/79) were in low and medium socio-economic groups, with a handful of women 6% (5/79) in the high socio-economic group (classification based on Elley Irving scale). The labour force participation rate among the Samoan women in this study is lower than the national rates for Samoan women in New Zealand. Both
migrants and New Zealand born Samoan women have been shown to have a higher percentage of women involved in the work force than is the case for the female population as a whole. Whereas 41% of married New Zealand born Samoan women and 42% of married Samoan born women were involved in full-time paid work, only 33% of women in general in New Zealand were in the full-time labour force (Larner 1990).

Table 3.8
Religious Affiliation of Wellington Samoan Women

<table>
<thead>
<tr>
<th>Religion</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/Catholic</td>
<td>59</td>
<td>24%</td>
</tr>
<tr>
<td>Samoan Congregation</td>
<td>33</td>
<td>13%</td>
</tr>
<tr>
<td>Samoan Assembly of God</td>
<td>30</td>
<td>12%</td>
</tr>
<tr>
<td>PIPC</td>
<td>23</td>
<td>9%</td>
</tr>
<tr>
<td>Mormons</td>
<td>19</td>
<td>8%</td>
</tr>
<tr>
<td>Methodists</td>
<td>18</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>9%</td>
</tr>
<tr>
<td>Not given</td>
<td>44</td>
<td>18%</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td></td>
</tr>
</tbody>
</table>

Religious affiliation was available for 82% of the women. More women belonged to the Catholic Church than to any other single denomination. That a considerable number of Samoans belonged to the Catholic Church was also noted by Pitt and Macpherson in their study of the Samoan community in the 1970's, though in their samples the Pacific Island Presbyterian Church (PIPC) was the church with the largest number of members (1974). A substantial number of the women belonged to churches which emphasised a Samoan identity. These include the Samoan Congregational, Assembly of God, and the PIPC.

Length of Residence
Table 3.9
Length of Residence of Samoan Women in Wellington Study

<table>
<thead>
<tr>
<th></th>
<th>Short</th>
<th>Medium</th>
<th>Long</th>
<th>Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewed</td>
<td>11% (5)</td>
<td>45% (20)</td>
<td>39% (17)</td>
<td>5% (2)</td>
</tr>
<tr>
<td>Not interviewed</td>
<td>12% (22)</td>
<td>49% (91)</td>
<td>31% (58)</td>
<td>9% (16)</td>
</tr>
<tr>
<td>Declined</td>
<td>4% (1)</td>
<td>35% (9)</td>
<td>50% (13)</td>
<td>12% (3)</td>
</tr>
</tbody>
</table>

Interviewed vs not interviewed, chi-squared=1.45 df=3 p=0.69. Interviewed vs declined interview, p=0.40 Fisher's exact test.

As can be seen in Table 3.9, there was no significant difference in the distribution of length of residence between women who were interviewed, when compared with women who were not interviewed, or for one reason or another declined to be interviewed. The majority of the women as is seen in Table 3.9 were medium to long-term residents. A small proportion of women had been in New Zealand for less than two years.

Table 3.10
Comparison of Length of Residence of Samoan Migrants in New Zealand
(at 1986 Census with Wellington Study Population)

<table>
<thead>
<tr>
<th>Years</th>
<th>Census Population*</th>
<th>Study Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>2</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>or&lt;</td>
<td>(2025)</td>
<td>(2397)</td>
</tr>
<tr>
<td>3-9</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>(3480)</td>
<td>(3801)</td>
</tr>
<tr>
<td>10</td>
<td>60%</td>
<td>57%</td>
</tr>
<tr>
<td>or &gt;</td>
<td>(8190)</td>
<td>(8178)</td>
</tr>
</tbody>
</table>

* SOURCE: Department of Statistics, 1986 census
Though the majority of the total male and female Samoan migrant population in 1986 had lived in New Zealand for more than ten years, (see Table 3.10) the majority of the Wellington migrant women had lived in New Zealand for somewhere between 2-9 years. This is not surprising given that the study population was composed only of women in their reproductive years who are likely to be younger and more recent migrants. In contrast the Census data includes women of all age groups regardless of whether they are born in Samoa or New Zealand.

<table>
<thead>
<tr>
<th>Interviewed</th>
<th>Not interviewed</th>
<th>Declined</th>
</tr>
</thead>
<tbody>
<tr>
<td>22% (11)</td>
<td>29% (58)</td>
<td>28% (8)</td>
</tr>
<tr>
<td>78% (38)</td>
<td>71% (141)</td>
<td>72% (21)</td>
</tr>
</tbody>
</table>

Interviewed vs not interviewed, chi-squared=0.58 df=1 p=0.45. Interviewed vs declined interview, p=0.79 Fisher's exact test.

As can be seen from Table 3.11 there was no significant difference in the parity distribution of women who were interviewed in comparison to women who were interviewed or, having been invited, for one reason or another declined to be interviewed.

The majority of the women in the total study population (72%) were having their second or subsequent baby. Age was closely associated with parity. More younger women were having their first child, while fewer younger women had more than three children. The fact that most of the New Zealand born women were young, explains why 68% of these women (13/19) were first-time mothers. Length of residence was also associated with parity. A higher proportion of new migrants (less than two years - 48%) were first-time mothers. Single women were also more likely to be having their first baby (77%). Single women comprised a third of all first-time mothers.
Of the women who already had children 74% had their first baby in New Zealand. This proportion increased with subsequent pregnancies so that 83% of the women had their second child in New Zealand. Thus the majority of women who were having another baby already had experience of being pregnant and giving birth in a New Zealand context. Most of this experience occurred in Wellington. Of the number of women who gave birth to their first baby in New Zealand, only eleven women did so in Auckland. All the rest were born in Wellington.

In 1981, the crude Samoan birth rate (number of births per 1000 mean population) in New Zealand (36.0) was only slightly lower than that in Western Samoa at 37.4 and in American Samoa at 38.1\(^2\). These figures are substantially higher than the rate for the total New Zealand population of 16.0, and 23.6 for the Maori population for a similar period. Changes in reproductive behaviour occur slowly. Khawaja concluded that the new settlers from the Pacific came from high fertility societies and presumably carried with them the large family norms which are reflected in their reproductive behaviour. Such influences generally extend into the next generations. Also, compared with the ethnic European population, the minorities are in a disadvantaged position socio-economically. Any major narrowing of these fertility differentials would probably follow the reduction in this economic inequality (Khawaja 1985, 164-171).

However significant changes have been occurring in the reproductive practices of Samoans in New Zealand as can be seen in Table 3.12. The crude birth rate and the general fertility rate halved over the decade from 1976-1986.
Table 3.12
Samoan Crude Birth Rate (CBR) and General Fertility Rate (GFR) in New Zealand

<table>
<thead>
<tr>
<th>Year</th>
<th>CBR*</th>
<th>CBR**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>59.7</td>
<td>234.4</td>
</tr>
<tr>
<td>1981</td>
<td>36.0</td>
<td>143.0</td>
</tr>
<tr>
<td>1986</td>
<td>29.0</td>
<td>109.0</td>
</tr>
</tbody>
</table>

**SOURCE:** Department of Statistics, unpublished and published data

* Number of births per 1000 mean population
** Number of births per 1000 mean female population aged 15-44

Place of Residence

The Samoan women in the total study population lived in all areas of Wellington although a higher proportion lived in those areas classified as low status residential areas. The majority of the women lived in the satellite area of Porirua, and the city core of Newtown and adjoining areas. Similarly in 1986, 40% of the total Samoan population lived in Porirua, 32% in Wellington and 27% in the Hutt Valley (New Zealand Department of Statistics 1986). Over the decade from 1976-1986 the Samoan population of Wellington doubled.

Table 3.13
Residential Distribution of Samoan Women in Wellington Study

<table>
<thead>
<tr>
<th>Area</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low/satellite</td>
<td>140</td>
<td>56.4</td>
</tr>
<tr>
<td>Low/city core</td>
<td>61</td>
<td>24.5</td>
</tr>
<tr>
<td>Middle/suburban</td>
<td>23</td>
<td>9.2</td>
</tr>
<tr>
<td>Middle/satellite</td>
<td>17</td>
<td>6.8</td>
</tr>
<tr>
<td>High/suburban</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Although an earlier study had suggested that a higher proportion of new migrants would be found in the city core, this was not found in this study (Kinloch 1980). As can be seen in Table 3.14, a similar proportion of new migrants lived in the city core area as in the satellite area of Porirua. The largest proportion of women in the city core had been in New Zealand for two to ten years. On the other hand, among the New Zealand born women, fewer lived in the city core area.

Table 3.14
Place of Residence by Length of Residence in New Zealand

<table>
<thead>
<tr>
<th></th>
<th>&lt;2 years</th>
<th>2-10 years</th>
<th>10 years+</th>
<th>Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low/satellite</td>
<td>12%</td>
<td>43%</td>
<td>35%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>(15)</td>
<td>(54)</td>
<td>(44)</td>
<td>(13)</td>
</tr>
<tr>
<td>Low/city core</td>
<td>11%</td>
<td>64%</td>
<td>21%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>(7)</td>
<td>(39)</td>
<td>(13)</td>
<td>(2)</td>
</tr>
<tr>
<td>Middle/suburban</td>
<td>17%</td>
<td>39%</td>
<td>43%</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
<td>(9)</td>
<td>(10)</td>
<td>–</td>
</tr>
<tr>
<td>Middle/satellite</td>
<td>7%</td>
<td>50%</td>
<td>28%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(7)</td>
<td>(4)</td>
<td>(2)</td>
</tr>
<tr>
<td>High/suburban</td>
<td>–</td>
<td>28%</td>
<td>57%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>–</td>
<td>(2)</td>
<td>(4)</td>
<td>(1)</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>111</td>
<td>75</td>
<td>18</td>
</tr>
</tbody>
</table>

Social Network

Collection of information about a woman's social network was only possible for those women who were interviewed. Some information about each woman's social network was obtained during the course of each interview, though the information recorded was less detailed than would be desirable for purposes of analysis. The reason for this information gap is that the focus of the
The interview was the woman's pregnancy and birth experiences. To have obtained a systematic and detailed social history from each woman would have required additional interview time. It was also felt that collection of this information lay outside the parameters of the interview which had been negotiated with the woman ie that the purpose of the interview was to learn of her expectations and experiences of birth in Wellington. In retrospect this information gap was unfortunate as more knowledge of social networks may have helped explain differences in the way Samoan women did pregnancy and birth. Little research has been conducted in New Zealand on the way social relationships shape a woman's construction of pregnancy and birth. While some studies have explored the social networks of Samoan migrants in New Zealand and their impact on lifestyle, these have not included the impact on health (Macpherson 1975). Though more detailed information would have been desirable, the following information was collated.

1. The majority of women had some close family such as parents, siblings, cousins, aunts or uncles, living in Wellington

2. Most women reported that their families were supportive of them

3. Most of the women's parents were still living in Samoa

4. Women spoke in more detail about their relationships with their family of origin than they did about their partner's family

All women who were single at migration came to live with members of the family in New Zealand. Most women first stayed with an older female, usually an aunty or a sister, although some women came to live with the family of an uncle.

Conclusions
In order to establish the representativeness of the interview group commonly used sociological indicators of age, marital status, education, and occupation were used, including length of residence and parity. The indicators chosen were those on which information was available for all the 248 women. On the evidence available, the interview group of 50 women would seem to be representative in socio-demographic terms of the total study population of 248 women. No significant difference was shown to exist on a number of key indicators, between the interview group and women who were invited to participate but who for one reason or another did not and those who were not invited to participate in the interviews.

The Samoan women in the Wellington study can not be said to be representative of all Samoan migrants to New Zealand. The nature of the study, which focuses on pregnant women aged 16-40 years of age precludes that. Neither can it be asserted that pregnant Samoan women in Wellington are representative of all pregnant Samoan women in New Zealand. The data which would need to be drawn on to establish such a degree of representativeness is not publicly available.

However the evidence which is available from other studies and published information sources, suggests that similarities do exist between the migrant Samoan women in Wellington and other Samoan migrants. The migration histories of the Samoan women in the study resemble those of other Samoan migrants reported elsewhere. Many of the women came to New Zealand as young, single migrant workers. Migration was seen as an investment not only in their future and that of unborn children, but in the short to medium-term a way to improve the economic status of the family in Samoa. The residential patterns of Samoan women in the study reflect that found in other studies of the Samoan population in Wellington, with clustering of Samoans in the older inner city suburbs of Wellington and in the satellite area of Porirua. Such residential patterns have also been shown in studies in other cities such as Auckland (Trlin 1977; Bedford and Gibson 1986).
Most of the Samoan women were in stable marital relationships, with very few women being solo mothers. Most had some secondary education. Migrant women with a tertiary qualification were not necessarily working in an equivalent high status occupation. Very often their tertiary qualification such as teaching or nursing, was not recognised by the relevant New Zealand authority. This finding suggests that educated migrants may have more difficulty obtaining work which reflects their educational ability, than migrants with less education. Two thirds of the women were not in the paid workforce during pregnancy. Those women who were in the paid labour force were largely in manual occupations.

The majority of the Samoan women had some experience of life in New Zealand with only a small group of women being new migrants. Having a baby in Wellington was not a new experience for most second time or more around mothers. Most previous births occurred in Wellington. Changes are occurring in the family size of Samoans in New Zealand, though Samoans still have larger families than other New Zealanders.

By and large Samoan women were not isolated migrants. A few women interviewed chose to come to Wellington to get away from the demands of Samoan family life in Auckland. But they were in the minority. Most women had members of either their own or their husband's family in Wellington from whom they received regular social support.
PART TWO

Classification of Categories of Cultural Orientation

The fifty Samoan women I interviewed expressed certain attitudes to and level of involvement in Samoan and palagi cultures. Using the method described in Chapter Two, a classificatory typology of cultural orientation was constructed based on the patterns which I considered emerged on reviewing women's voices. Three classificatory categories were constructed.

1. A more Samoan oriented category

2. A less Samoan oriented category

3. A biculturally oriented category

Two procedures were undertaken to cross check the assignment of women to these inductively derived classifications. First, a summary was developed for each woman which included those indicators of acculturation reported in the literature, such as language use, customs, social network characteristics, ethnic loyalty and socio-demographic factors such as age at migration, marital status, occupation, education, length of residence, housing status, household composition. These summaries were used to cross check my subjective categorisation of the women.

The second procedure used, was to compare women in the three groups to see if patterns emerged which differentiated one group from another. The three groups were examined for differences in patterns of distribution in terms of the variables listed above. Not all variables were readily or appropriately quantifiable. Thus this procedure also involved basing comparisons on a feeling for the 'total woman' as well as comparing particular characteristics of the group. Different distribution patterns were found to exist between the groups in terms of most variables, suggesting some face validity to the classification system. These differences were more marked between women
classified as more Samoan oriented and all other women. While differences also existed between women classified as less Samoan oriented and biculturally oriented, these differences were less marked.

Table 3.15
Cultural Orientation by Timing of Interview

<table>
<thead>
<tr>
<th></th>
<th>During Pregnancy</th>
<th>After Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Samoan oriented</td>
<td>50% (8)</td>
<td>50% (8)</td>
</tr>
<tr>
<td>&lt; Samoan oriented</td>
<td>60% (12)</td>
<td>40% (8)</td>
</tr>
<tr>
<td>Biculturally oriented</td>
<td>50% (7)</td>
<td>50% (7)</td>
</tr>
</tbody>
</table>

As is seen in Table 3.15 half of the women classified as more Samoan oriented and biculturally oriented were interviewed during pregnancy and half after the birth of their baby. In contrast, a higher proportion of the women classified as less Samoan oriented women were interviewed during pregnancy and a smaller proportion after the birth of the baby. As was discussed in Chapter Two, there were a number of reasons for our failure to interview the woman during pregnancy. These included problems in contacting the woman because she had no phone, was not at home when a call was made and/or her first visit to the antenatal clinic (entry point for the study) was made later in pregnancy.

In the sections which follow, case studies are used to illustrate the patterns found in each of the classificatory categories. The case studies are followed by descriptions of the socio-demographic and other characteristics of the women in each of the classificatory groups.
Case Studies of Women Classified as Less Samoan Oriented

Melaia

Melaia was one of two New Zealand born Samoan women. She recalled that her upbringing differed from that of other members of her family. "My father was the one that spoilt me. My mother and the others used to say to him, 'oh, don't spoil her, don't bring her up the life here. Bring her up the same as you've brought us up". At eighteen, Melaia was the youngest woman interviewed. Having her first baby, she was unmarried when she became pregnant. Throughout her pregnancy she was unwilling to marry the father, although both he and their families were keen for them to marry. When she told her sister with whom she was living, that she thought she was pregnant, her sister was very upset, telling Melaia, "to stay home, not to show myself on the streets". This reaction Melaia attributed to "thinking in the Samoan way".

Melaia attended the local secondary school in Wellington for three years. Since leaving school she had been on various work training schemes and had been placed in an office doing clerical work at the time she became pregnant. Because of her family's shame at her pregnancy she left work and stayed at home to look after her sister's child. The primary language used in the house was Samoan and Melaia used this when speaking to her sister's child, though she was fluent in both English and Samoan. When her baby was born however, she gave her an English name. Until she became pregnant Melaia's lifestyle was characterised by 'going out' and having a 'good time'. When she went out with her friends they used to go to nightclubs where they could drink, smoke and dance. This lifestyle ended when she became pregnant, although she continued to smoke. Melaia missed this aspect of her life very much and saw becoming a mother as the end of that form of social life. "I'm quite an outgoing person, but now... going to be staying home... locked away from my friends".
However since becoming pregnant, Melaia felt she had changed quite a lot saying,

I've sort of learned to live the Samoan way, 'cause my sister and her husband, they're real Sa's (Samoans). I've learnt to live the Samoan way now. I mean when my friends come, we live the palagi way, we do our own thing eh, but when they've all gone, just me and my family, we live the Samoan way.

Melaia lived with her sister and husband, who were both working, in their own home in Porirua. The house was well appointed, comfortably furnished and had a stereo system and television. Their home environment reflected a relatively high socio-economic status.

Although Melaia considers she lives more like a Samoan than she did a few years earlier, she also recognised that her lifestyle and values differed from that of some of her Samoan born friends who already have children.

They weren't the outgoing ones, they were always the quiet ones, who stay home. It's good for them, because they aren't really interested in the outgoing life. They weren't really interested in the things we were interested in... they always liked staying home... I don't think it really made such a change.

Some of the tensions which existed between Melaia and the father of her baby were likely to be because he was ten years older than her and he and his family were culturally more Samoan oriented. When she was going out with him, she resented the way in which his family treated her. "They were demanding, they were sort of running me in the Samoan way. I didn't like that". She felt that his family did not think she lived up to their expectations of feminine behaviour for example, in cooking and housework. On the other hand she resented the fact her boyfriend had to contribute large sums of money to family fa'alavelave (term for all life-crisis events and other occasions involving reciprocal exchange of property).
At the time of the interviews Melaia seemed to be coming to terms with the conflicts and tensions which existed between the palagi values and lifestyle which up till then she had valued and the Samoan values and lifestyle which she was absorbing from others around her. Although in many ways she felt more comfortable with the fa'a palagi (European way), she did not reject the fa'a Samoa (Samoan way). It may be that with increasing maturity she may have become more biculturally oriented.

Leafa

Leafa came to New Zealand from a rural village on Upolu eleven years previously. Aged thirty two she was having her third child. Leafa was one of the less well educated women having attended secondary school in Samoa for only two years. Up till she was pregnant with her first baby, she worked full-time at a large motor assembly plant in Porirua. Since becoming a mother, Leafa worked part-time as a night cleaner in Wellington working for the then Department of Internal Affairs.

Leafa appeared comfortable with spoken English. She spoke a mixture of English and Samoan to her children. She did this she said, because when her first child was born, she spoke only Samoan to him. But when he started kindergarten, he did not understand what the teacher was saying. This concerned Leafa and despite her husband's wishes that she speak only Samoan to the children, when the second child was born, she favoured English over Samoan. Her children understand spoken Samoan, but mainly use English. Leafa is glad her eldest' son is becoming more competent at English, "so that by the time he gets to high school, he'll understand and speak better English and that will make things easier for him".

There seemed to be a division of domestic labour in which Leafa normally does all the housework, cooking and looking after the children, while her husband goes out to work. However while she was pregnant her husband was helping her with the heavy work in the house. Decisions related to family size would seem to have been primarily left to Leafa. During the current pregnancy she
and her husband discussed the option of a tubal ligation after
the birth.

By the time we talked about it, because he
was the one who told me if I have this one,
we will have enough. So I was the one that
thought 'no', if this one is another boy,
then I thought they need a sister. But he
feel sorry for me, because every time I have
a baby, after the operation (caesarean) I
usually got very sore. He told me that it is
up to me, but as for himself, he think we
have enough children.

In the end Leafa opted for a compromise and decided to have a
tubal ligation six months after the birth.

Leafa has three sisters in Wellington, but she does not see them
very often. When she first came to Wellington, she stayed with
an aunty in Newtown. Like Melaia she had difficulties accepting
a traditional hierarchy of Samoan authority in her relationship
with her aunty.

She forced me to do things her way, instead
of my own way. It was hard for me, because
back in the Island, you were taught to
listen to parents and old people, they are
always right, whether it's true or not. You
can't do anything by yourself, they always
give you command of what you have to do.
Because if you are going to do it your way,
you end up having a good hiding or whatever
from them. So when I came to New Zealand, I
decided I'll do better doing my own thing,
instead of someone else coming and saying do
this or do that.

Leafa, her husband and children husband live in a nuclear family
household in a State house unit in Porirua. They owned a
telephone set and an elderly and not very reliable car, which
Leafa drives.

Leafa seemed to place greater value on the more individualistic
values and lifestyle characteristic of palagi culture. However
the extent of her interaction with that culture was somewhat
limited and her social network in terms of family and friends
remained predominantly Samoan. As with Melaia, she seemed to be
married to a man who at the time seemed culturally more Samoan oriented than Leafa.

Pua

Pua came to New Zealand ten years ago from an urban village near Apia. When she left school she wanted to train as a nurse, but her father did not approve and she was forced to leave after six weeks. Instead, Pua worked as a typist in a Government Department and then went home at her father's request to help in the house. After his death, she wrote to her brother and told him she wanted to come to New Zealand. He immediately sent her fare. Pua was clear that she wished to migrate to achieve greater personal freedom. "When I came here, I feel free, because I hate being told not to go out at all. Have to be home for evening service, or have the stick". Life in New Zealand was also seen to offer better personal prospects for her. "To have a good life and a good future, because if you get married in the Island, you have no future there, unless you are loaded".

At twenty nine years of age this is her fourth baby. Pua met her husband in Samoa, but got married in Auckland and they went to live with his aunty and her family. At the time of the interview, she and her husband seemed to share much of the child care and domestic chores though Pua considered these remained primarily her responsibility. She considered their relationship was different to many other Samoan couples. "My husband is very good. When we first met in the Island, I told him that I'm very afraid of being punched and all that. He is very quiet himself". Conflict in their relationship was resolved she said without recourse to physical force. One example of difference of opinion was the naming of this baby. Pua has called the baby by an English name after a palagi girl friend whom she used to work with in Auckland. "But my husband doesn't like the name, so we sort of have an argument over it. He wants her to be called after his mother's name I said, your mother's dead. I don't want dead people's name to name my daughter. So when she comes home, he calls her his name and I call her my name".
Pua was fluent in both Samoan and English. Though she and her husband always speak to the children in Samoan, the children usually speak to each other in English, when their parents are not in the room. Her husband tries to stop them speaking English at home, but Pua's attitude like Leafa's, is that it the children need to speak English at school. Thus she takes a more permissive approach.

Pua worked as a filing clerk until their first baby was born and then she stopped work. Like Leafa, she had a part-time job doing the 2-6 am night shift cleaning Government offices in Wellington. She returned to work three months after the birth. She would prefer to do typing work at home but finds it difficult to work at home with the children and they have no family in Wellington to assist with child care.

A major reason motivating their move to Wellington was that neither partner had relations here. "We were running away from all those people from Auckland, because they get us involved in too many fa'alavelave up in Auckland. It is just like in the Island, they have a lot of fa'alavelave".

Like Melaia, Pua found life with her husband's family difficult. Though her husband tried to protect her as much as possible, he was scared of his aunty and would not stand up to her. Pua described her life.

She was treating me like they do back in Samoa. You do the cooking, washing and more or less in charge of the kitchen. The woman that comes into the family, do all the hard work and you are the last one to eat. Even when I was pregnant, there was no difference, whereas the girls of the family hardly do anything at all.
Though neither of them could confront the aunty directly, each rebelled in their own way. Pua told of one incident in which she expressed her anger.

One day it was raining and I boil the kettle and pour it over her bed. I was so mad, I had to do something. And when she came in and asked me, I said, 'it must leak in your bedroom!' I told my husband about it and it made me feel better. I sit in our bedroom that night and laugh about it. It was so funny and made me feel good afterwards.

Sometimes however she would find the aunty's demands too much and go to her room crying. When her husband found her, he would tell her to go to sleep and then tell his aunty that Pua was resting because she was sick.

Things changed dramatically however, when one of Pua's brothers intervened on her behalf. (She had eight brothers and sisters in Auckland).

The reason we came here (Wellington), was that one of my brothers heard from other Samoans, that I was virtually a prisoner in my husband's home. So he got drunk one night and came and told us to leave them. He just came in and ordered me to pack up and we leave. I just followed him, thinking that my husband wasn't coming, but he came with us and from then on we never looked back. My mother was very surprised when she heard all about what happened.

This story reveals a number of interesting themes. Though Pua had a number of siblings in Auckland it was not until other Samoans, that is, not members of her family, brought her situation to the attention of her family that her own brother acted. To act however, he needed to get drunk to do so.

Pua and her husband now own their own home in Porirua which was comfortably furnished. However they do not have a car and sold the television to help with mortgage payments. They live as a nuclear family household with their four children. It is probable that her husband is more Samoan oriented than her.
Characteristics Of Women In The Less Samoan Oriented Category

The Women

Twenty women were classified in this group. Most of the women (43%) came from the urban villages around Apia, the remainder migrated from rural villages on Upolu and Savai'i. Most came to New Zealand as single women in their early twenties, or as children with their parents. The mean age at migration was eighteen years. With one exception, these women were either medium to long-term migrants or had been born in New Zealand. The two New Zealand born women in the interview group were also classified in this group. The mean length of residence was ten years, with a range of from one month to nineteen years. The average age of the women at interview was twenty six years.

About two thirds of the women had medium to high levels of education, a similar proportion to biculturally oriented women. The majority of the women (75%) were in paid employment, when they became pregnant with this baby. Of these, 40% were working in 'white blouse' occupations (Larner 1990). Most women intended to combine paid work with motherhood, even if a return to work was only on a part-time basis. Less than 20% of the women said they did not intend to return to work in the foreseeable future. An early return to work however depended on the availability of satisfactory child care arrangements in the family.

Social Network

The majority of the women were married, but a substantial proportion (35%) reported being in a defacto rather than a legal marital relationship. This was considerably greater than that reported by the women in other groups. In all but two cases (the only two in the study), the father of the baby was Samoan. With the exception of one of the fathers who went to school in New Zealand, all the fathers were brought up in Samoa and came to New Zealand as migrant workers. At times some of these men seen through the reports of their wives seemed to be more Samoan oriented than were the women.
The majority of the women (75%) reported having some close family in Wellington with five of the women having one or both parents in Wellington. All but one of the women had a supportive relationship with their parents. In her case her parents did not approve of her partner. Another four women also reported having difficulties with either members of their own or their partner's family. Many women had friends who were not relations. About half the women spoke of spending time with friends who were not kin. Women's friendship networks were reasonably wide and included friends made at work, through children's schools, neighbours and through sport. While in hospital after the birth, women reported interactions with both Samoan and non Samoan mothers.

Language

While all women said that Samoan was the primary language of the home, a considerable proportion (25%) reported using a mix of English and Samoan when communicating to their children or others in the household. English was the principal language used during the interviews, though most interviews had Samoan interspersed. Women tended to be competent English speakers. This favouring of the use of English was also seen in that a majority of the women (77%) gave their baby an English rather than a Samoan name.

Housing Status and Household Organisation

About half of the women were living in State or Council subsidised accommodation. Almost three quarters of the women (73%) and their partners were the principal tenant in the house. A quarter of the women were in private rented accommodation. This tended to be of a significantly lower quality than women in subsidised accommodation. The majority of the women (70%) lived with their partner in a nuclear family household.

Attitudes To and Involvement in Samoan and Palagi Cultures

Samoan women in the less Samoan oriented category reflected varying degrees of distancing from Samoan culture and movements towards palagi culture. However although the women appeared to
be moving away from Samoan culture, none of the women, not even the New Zealand born young women appeared to have totally rejected Samoan culture in favour of a wholesale acceptance of palagi culture. In this sense the women are both similar and different to the children whom Kinloch considered demonstrated loss of competence in their culture of origin with wholesale acceptance of the adopted culture (Kinloch 1976). Although there was a sense in which most of the women were creating an environment similar to that described by Macpherson in which some Samoan values and institutions were deliberately suppressed while non-Samoan culture was promoted in its place, this was only partially found. A distancing rather than rejection seemed the predominant characteristic (Macpherson 1984).

Case Studies of Women Classified as More Samoan Oriented

Puni

Puni was one of the newest migrants in the study having been in New Zealand for only twelve months. Puni was having her third baby. Her two older children were being brought up by her parents in Samoa. We first met her in the late stages of her pregnancy. She looked radiantly healthy, was dressed in Samoan style clothing, with her long hair in a plait. Puni was among the group of women with limited formal schooling and had never been in paid employment.

The primary language used in the home was Samoan. Puni had limited competence in English and lacked confidence in speaking the language. Thus both interviews were conducted primarily in Samoan. During the first interview, her husband's aunty was present and Puni appeared to be very shy and was reluctant to respond to questions in any real depth. During the second interview, the aunty was not present and Puni spoke more readily about her feelings, suggesting that it was social constraints rather than personal shyness which contributed to her earlier reticence.
Puni met her partner when she arrived in New Zealand and shortly after became pregnant. At the time of the interview she was in a defacto relationship. She was among the small group of women who did not have close family members in Wellington. Her partner however was part of a well established Samoan Wellington family. He was at the time however estranged from his family, as his parents were vehemently opposed to their relationship and had tried to break it up. During her pregnancy and after the birth they were living with one of his aunties.

Puni had one of the more limited social networks, having no close relations in Wellington. All of her social contacts were with her husband's kin network but that also was limited because of the estrangement. Her social highlight of the week was to go to housie with the husband's aunty. Puni and her partner were not attending church because of the row with his family.

The aunty and her husband were the principal tenants of a Housing Corporation house which was simply furnished but had a television and a stereo. Puni and her partner were living in an extended family household.

By her physical dress and demeanour, her reluctance to converse in English, and particularly her reticence to speak openly before her partner's aunty, Puni demonstrated her orientation to Samoan culture.

Fisaga

Fisaga came to New Zealand when she was twenty one, following the deaths of both her parents. Brought up in a rural village on Upolu, Fisaga was the youngest child in her family. She was only planning to stay one year and then go to join another sister in America. However her sisters in New Zealand persuaded her to stay and help them with their children. Now aged twenty six, she has been in New Zealand for five years. This was Fisaga's third pregnancy. Her first baby was born two years before she left Samoa and was adopted by her cousin.
Like Puni, she had a limited education in Samoa. Unlike Puni however, she had been in paid employment doing factory work both before and after the birth of her last child. She left her job when she found out she was pregnant again.

Samoan was the primary language of the household and was used at all times by Fisaga to speak to her children. This was a conscious action on her part as she was keen that her children be fluent Samoan speakers. "We try to teach them our language, but they growing up and catching up the English. Maybe sometimes they grow up and forget our language".

Her son and daughter have Samoan names and the latest baby was given both a Samoan and an English name. Although Fisaga spoke somewhat broken English, she was able to sustain a dialogue in English with reasonable comprehension and confidence. Both interviews were conducted in English as Sene was not able to be present.

Fisaga met her husband in New Zealand. He had been here almost twice as long as Fisaga and had worked in a large motor assembly plant for much of that period. Fisaga had her first baby in Samoa seven years previously, which was adopted by her cousin. Fisaga and her husband also have an adopted child. They adopted her sister's baby when he was nine months old as she had not conceived after three years of marriage. Shortly after the adoption, she became pregnant with their first child. With the birth of this baby she had three children under three.

Fisaga had sisters in Wellington and a brother in Auckland who kept in regular contact. She had a supportive social network composed of kin and friends from church. Fisaga was a regular church goer and said she had lots of friends at church. "All the members are very friendly, like one family". Fisaga and her husband did not have a car and walked to church if the weather was fine.

They were the principal tenants in a Housing Corporation unit in Porirua. The unit was simply furnished with a television but no
stereo as she said they could not afford to buy one. The couple were living in a nuclear family household. Fisaga described her husband as playing a substantial part in domestic and parental care duties. "Just like a woman... cook, clean the house, washing, wash the kids. Oh, I'm lucky". Fisaga's comments seem to suggest that she does not perceive her husband's support as 'normal' Samoan husband behaviour, that is, 'like a woman' and considers herself 'lucky'.

Fisaga was positively oriented towards Samoan culture. This was evident in much of her story. She continued to identify strongly as a Samoan. When asked if her children would be Kiwis or Samoans, Fisaga replied promptly, "They just born here, but blood Samoans".

Kuini

Born in Samoa, Kuini grew up in an urban village on Upolu. At nineteen she was one of the youngest as well as one of the newest migrants, having been in New Zealand only five months at the first interview. She was three months pregnant with her third child on arrival in Wellington. Kuini had never been in paid employment and did not consider she would want to work until the children were older, as she believed her role should be a full-time mother.

Kuini was married and she and her husband had come to New Zealand to join her parents and other siblings. Kuini and her family lived with her parents and other siblings as part of an extended family. Her parents were the principal tenants in a Housing Corporation house in Porirua. Kuini and her husband would like eventually to rent their own place, but her parents would like them to continue to live together. Kuini's world was tightly confined to her family network at the time of the interviews. During her pregnancy she had felt very sick and spent a lot of time sleeping. Going out, comprised walking to the shopping centre or visits to her aunty's house.
Kuini contrasted the way she was being treated while pregnant living with her own family to her first pregnancy when she lived with her husband's family. "My first baby I was at my in-laws. There was no special treatment, only the very first-time when I was very sick, but after that I went on doing the usual things, like cooking food, washing dishes and so on. No special treatment". But with this baby. "I hardly do anything here. I spent most of my time sleeping, because Mum and Dad are spoiling me rotten". Although Kuini said that her husband helped her with any heavy lifting or loads when she was pregnant in Samoa, it was her parents who seemed to be providing the majority of care during this pregnancy.

Samoan was the sole language used in the household. Kuini had very limited competency in English and when she went to see the doctor she took her sister as an interpreter. The interview was conducted in Samoan and the children all had Samoan names.

Kuini's more Samoan orientation was strengthened by her limited contact with the wider non-Samoan world she had come to live in. A situation which was likely to continue because of her lack of English, her intention to remain a full-time mother and the fact that her material and affective needs were fulfilled within a tight knit Samoan oriented kin network.

Characteristics of Women in the More Samoan Oriented Category

The Women

Sixteen women were classified in the more Samoan oriented group. The majority of women (94%) came from villages on Upolu and were evenly drawn from rural and urban villages. Unlike women in the other groups, very few women (6%) came from Savai'i. Women tended to have been in their early twenties when they came to New Zealand. The average age at migration was twenty one years old. Most women were medium to short-term residents having been in New Zealand less than ten years. With one exception, all of the women who were short-term residents also appeared to be more Samoan oriented. The average length of residence of the women was 4.8
years. Women were similar in age to women in the less Samoan category, the mean age at the time of the interview being twenty-five years. The majority of the women (75%) were having their second or subsequent baby.

A higher proportion of women had less formal education and conversely very few women were in the highly educated group. The majority of women (60%) were not in paid employment. Of those in paid employment all were in manual occupations. Women were less inclined to combine paid work with motherhood, with a third of the women not intending to return to paid employment after the birth of the baby.

Social Network

The majority of women (75%) reported being legally married, the remainder being either in a de facto relationship or single women. In contrast to other women a substantial number (40%) were already married before they came to New Zealand. All the fathers were Samoan. Two thirds of the women had close family members in Wellington, while three of the women also had one or both parents. All the women said their families were supportive of them. Unlike women in the other groups, friends did not seem to play a significant role in their lives. Only three women mentioned having friends and two of these women were in nuclear family households. The friendship network was also narrower and confined to church or educational environments. When these women were in hospital only a few had any real interaction with non-Samoan mothers. Even interaction with Samoan women was constrained unless the other mother was already known to the woman.

Language

All the women said that Samoan was the primary or sole language used in the home. Interviews tended to be a mix of Samoan and English or for a few women all in Samoan. Women were less confident about using English but were not necessarily less competent than some of the other women. Confidence more than
competence was the differentiator. When it came to naming their baby, women were evenly divided between those who gave the baby a Samoan name and those who chose an English name.

Housing Status and Household Organisation

With the exception of one woman who lived with her sister in a private house, all of the women lived in State subsidised accommodation. Two thirds of the women and their partners in State housing were the principal tenant while the remainder lived with other family members who were the main tenants. A higher proportion of women (56%) lived in an extended family household in contrast to other women, the majority of whom lived in nuclear family households.

Attitudes to and Involvement in Samoan and Palagi Cultures

The women who seemed to be more Samoan oriented expressed positive attitudes to and were closely involved in Samoan culture. While none of the women expressed attitudes which were hostile to palagi culture, the lifestyle they reported suggested that their level of interaction with non-Samoans was superficial and limited.

Case Studies of Women Classified as Biculturally Oriented

Ropeka

Ropeka was born in Samoa and came to New Zealand from a village in rural Upolu, when she was fifteen years old to attend school. She went back for a visit shortly after finishing her secondary education, but has not been back since then. She and her husband plan to take their children on a visit to Samoa 'next year'. Now twenty eight years old, Ropeka was one of the group of long-term residents. She was having her third baby.

Ropeka had four years at secondary school, part of that spent in New Zealand. Before she had her first child she worked in the Post Office. Though she misses going out to work, she is enjoying...
being a full-time mother. Ropeka saw a return to work as a long-term option and did not plan to return to paid employment until the children were all at school. "Probably I'll have my time after they grow up or something eh".

Samoan is the primary language spoken in the home. Speaking Samoan to her children was an active choice by Ropeka who stressed, "I don't speak English to them, because I don't want them to lose my language, that's for sure". Ropeka herself speaks English fluently and had a comprehensive vocabulary reflecting her New Zealand education. The interview was conducted easily in English. Her children have both Samoan and English names. Her first daughter is known by her English name, her son by his Samoan name and the third child by its Samoan name.

Ropeka and her husband knew each other in Samoa and they married the year after he came to New Zealand. Their relationship seemed to be characterised by a greater sharing of domestic and parenting roles than many of the other women. Her husband helps with the house and child care particularly after the birth.

He really understands I tell you. Even if he comes home tired and he sees the house is a mess, or the kids or the tea's not cooking and he comes in and asks if the tea's cooking. If I say 'no', he goes straight and cook the tea. He ask about baby's washing, anything need doing and all this because he knows I get really tired. We went to see the doctor one day and the doctor told him you have to understand when a woman has kids she lost a lot of blood and make her really tired. And he was really listening to the doctor and he understands. So he doesn't expect too much out of me, like doing lots of work.

Although there was greater domestic and parental role sharing, recreational pursuits tended to be segregated.

Ropeka has a wide social network which includes family, as well as friends from her work days, sports club, and her involvement in political and community activities. Ropeka was one of two women in the group who was politically aware and involved. Family
relationships were important to Ropeka. However, the tensions between the reality of the migrant world and the expectations of the culture of origin was evident in Ropeka's expressions of resentment, that following a recent visit by her husband's mother a number of their appliances and furniture were taken back to Samoa. Ropeka felt they had worked hard to purchase these items, but that the family in Samoa did not really understand this or were not prepared to acknowledge the fact. She did not however feel that either she or her husband could have expressed this feeling to his parents.

Ropeka lived with her husband and children in a nuclear family household in a State housing unit in Porirua. The unit was simply but comfortably furnished and had a television. They were one of the few couples who were renting, who said they were saving to buy a house and had saved a substantial sum. But Ropeka felt that the mortgage payments would be more than they could afford. They did not have a car of their own.

It was evident during the interview that Ropeka was comfortable in both Samoan and palagi cultures and that she was presenting these worlds as alternatives to her children in order that they too would move easily between two worlds. During the interview, the seven year old daughter served tea. Her mother commented that she was bringing her children up to observe Samoan norms of courtesy to guests and older people.

Lila

Lila was brought up in a rural village on Upolu. At twenty years of age she migrated to New Zealand and was thus one of the group of long-term migrants having been here for twelve years. Now aged thirty two she was expecting her third child. Lila had only limited formal education. As she so disliked attending boarding school in Samoa, she begged her parents not to make her go back for a third year at secondary school. From the time she left school until she came to New Zealand, Lila stayed at home to help her parents. When her aunty offered to sponsor her to come to Wellington, Lila decided to come and try to find work to help her
family back in Samoa. Lila was keen to take advantage of occupational opportunities in New Zealand and went to night school to learn English. She got a job at the factory where her cousin was working and remained there till she had her first child. Lila is committed to full-time motherhood saying, "I don't want to leave my kids with someone else. I prefer to stay home with my kids".

Unlike the other women, Lila was married to a New Zealand born Samoan. Her husband was one of the few men with a white collar job. Although Lila sees herself as primarily responsible for running the household and caring for the children, her husband helps with chores and child care. Their relationship was also characterised by more joint recreational activities, such as going out to dinner at a restaurant. In contrast, most of the joint recreational activity reported by other Samoan women involved visits to family or going to church.

Lila was well supported by a small number of close family in Wellington including a sister and cousins. She had lived with her aunty and family from the time she arrived until she got married. Her aunty died two years previously and she misses her very much. Lila was also well supported by her husband's family for whom she had nothing but praise. The husband's parents, four sisters and two brothers also lived in Wellington.

He comes from the family, the parents you know are real Samoans. You know, they're really good though, they talk to them (children). They're really good family. I think I'm really lucky with my in-laws, 'cause I know some other friends of mine, they've got in-laws, they're really!! You know when you visit the family they'll tell you, 'you are married woman, you should be in the kitchen.' But not my in-laws they're very good. We're getting on really well. They don't treat me like a woman, they treat me like a sister.

Because Lila's husband grew up speaking English rather than Samoan, a mix of languages are used in the house. Lila said she tries to speak Samoan to the children and encourage them to speak in Samoan. However on the two occasions we visited, the children
frequently spoke to her in English and she replied in English. This may have been out of politeness to me because English was the language being spoken. Lila is however teaching her husband Samoan and encouraging him to speak to the children at home in Samoan. The first two children had English names but this last baby was given a Samoan name.

During the interview Lila demonstrated that she drew from both Samoan and palagi worlds in the way she lived her life as a migrant woman in Wellington. She actively encouraged her husband and children to learn and use Samoan at home, on the other hand as her own behaviour showed she valued developing English language skills in order to function in the wider non-Samoan context.

Olana

Olana migrated to New Zealand as a twenty year old single woman from a rural village on Upolu. Shortly after she left her mother died. It was ten years before she was to return with her first child for a visit and the sadness and guilt still remained. She found it very hard to return as she said, "how can I go and face my mother's grave'. At thirty two, Olana was having her second child after a gap of ten years. Olana was educated in Samoa and like a number of the more biculturally oriented women had a limited formal education, of one to two years secondary school. Olana had taken maternity leave from her job as a supervisor at a local factory. She planned to return to work as soon as the baby could be weaned to a bottle during the day. Her sister would look after the baby for her.

Olana has a supportive social network including close members of her family, with whom they share regular Sunday to'onai. She also had a large number of Samoan and non-Samoan friends mostly from her work world. She was unusual even among more biculturally oriented women in the extent of her non-Samoan friendship network, which included palagi neighbours, Maori, other Pacific Islanders and Cambodian refugees. They were members of a Samoan church and were regular church goers.
They had lived in this house which they rented from the Housing Corporation for the last six years. The house was comfortably furnished and gaily decorated with family photos, pot plants, and ornaments. On our second visit Olana had a fire going to keep the lounge warm for the baby. Although most of our interviews were carried out in the winter and often on very cold days, very few women used any form of heating in the house. Despite the fact that a number of houses had open fireplaces, in only two homes was the fireplace used. Olana and her husband were saving for their own house and were interested in buying one of the new houses being built in a nearby housing estate in a higher status residential area than Porirua. Olana and her husband were also somewhat different in that they had a very productive vegetable garden, which supplied most of their requirements.

Olana was strongly committed to promoting Samoan as the language of the household. She insists on her daughter speaking Samoan at home, unless she has non-Samoan speaking friends with her. Olana herself spoke English freely and comfortably. The interview was mostly in English except for the odd occasion when she asked for clarification in Samoan.

Although Olana had adopted a number of the values of the dominant palagi culture such as home ownership, and home improvements and was actively involved in the wider non-Samoan world around her, she still expressed a commitment to Samoan values and behaviour patterns. She was a strong believer in Samoan methods of disciplining children. "Samoan way you can give them a hiding, if they don't listen to you. You can belt them up, especially the girls. Control my kids the Samoan way, not the palagi way".

Characteristics Of Women In The Bicultural Category

The Women

Fourteen women were classified in the bicultural group. All the women were born in Samoa, with the majority (80%) coming from rural villages on Upolu and Savai'i. Almost all of the women were single on arrival in New Zealand. The average age of women at
migration was twenty years. Two thirds of the women were long-term residents with the mean age of residence being 11 years. Biculturally oriented women tended to be older than women in other groups, with the average age at interview being thirty two years of age. All of the women had at least two other children.

About two thirds of the women, a similar proportion to less Samoan oriented women, had medium to high levels of education. Almost all the women (86%) were combining paid employment with motherhood. One third of the women in paid employment were in 'white blouse' occupations. Half of the women intended to return to work within the year and all intended to find work by the time the youngest child was at school.

Language

All but one of the women said Samoan was the primary or sole language used in the household. All of the women were competent to fluent speakers of English. Though most interviews were conducted primarily in English, in a quarter of the interviews a mixture of Samoan and English was used. About half the women in the group, a similar proportion to more Samoan oriented women, gave their baby a Samoan name while half chose an English name.

Social Network

All the women were married, with only two women reporting being in a de facto relationship. All the husbands were Samoan. The majority of women reported having some close family members in Wellington, all of whom were reported as being supportive. About half of the women also spoke of having friends who gave them support. The friendship network was wider than for the other two groups and included, community groups, work, neighbours, sport and education. Women in this group also reported talking and socialising with both Samoan and non Samoan women during their stay in the maternity hospital.
Housing Status and Household Organisation

One third of the women, a significantly higher proportion than women in other groups, were home owners. The remaining two thirds were the principal tenants in state subsidised housing. The majority of women (71%) lived in nuclear family households, which was a similar proportion to less Samoan oriented women.

Attitudes To and Involvement in Samoan and Palagi Cultures

Women in this group seemed to be more comfortable with and move relatively easily between Samoan and palagi worlds. Kinloch suggests that,

bicultural competence is the ability to express and interpret the ideas of both the original culture and the adoptive culture appropriately... the ideas of the two cultures are juxtaposed, their similarity and difference noted and more or less understood (Kinloch 1976 220).

Macpherson suggests that children adopt a principle of situational relevance who are brought up in homes in which Samoan and palagi cultures are presented as more or less appropriate in different situations (Macpherson 1984).

The main differences identified between women in the three classificatory categories were:

1. Marital Status: a higher proportion of women classified as less Samoan oriented were in defacto relationships compared to women in the other two categories.

2. Age: women located in the biculturally oriented category tended to be older than other women.

3. Length of residence: the mean length of residence of women located in the more Samoan oriented category was five years. This was half that of women classified in the other two categories.
4. Paid employment: women classified as more Samoan oriented category in contrast to other women, were more likely to have never worked outside the home or to have given up paid employment when they became pregnant.

5. Private home ownership: a third of women classified as biculturally oriented owned their own home, in comparison to 15% of women located in the less Samoan oriented category and none of the women in the more Samoan oriented category.

6. Interview language: interviews with women located in the more Samoan oriented category were more likely to be in Samoan than interviews with other women.

7. Baby's name: women classified as less Samoan oriented were more likely than other women to give their baby an English rather than a Samoan name.

8. Family relations: the only women to report having problems with members of their own family, were women classified as less Samoan oriented.

9. Friendship network: very few women classified as more Samoan oriented reported having friends outside of their own kin group in comparison to other women.

CONCLUSION

Both the case studies and the summary descriptions of women in the classificatory categories of cultural orientation demonstrate that the Samoan women in the Wellington study were not a homogeneous group. While all the women considered themselves to be Samoan, women's attitudes to and level of involvement in Samoan culture varied. While women varied in their attitude to and involvement in palagi culture none of the women appeared to totally reject Samoan culture in favour of palagi culture. The largest group of women were classified as less Samoan oriented. While women in this classificatory category shared a number of
characteristics such as length of residence in New Zealand, being a working mother, and being fluent in English with women who were classified as bi-cultural a key differentiating factor was that women classified as less Samoan oriented expressed attitudes of distancing themselves from Samoan culture. In contrast bi-cultural women appeared comfortable with and drew from both Samoan and palagi cultures according to the situation.

Broad patterns of cultural orientation were identified. When I attempted to classify women according to the typology constructed, as is shown in the case studies and the summary descriptions, even within classificatory categories there was a considerable amount of variation. Women who appeared to share similar attitudes to and/or involvement in either Samoan or palagi culture at one level, differed on another level.
ENDNOTES

1. Urban Upolu Villages: Togafuafua, Moto'otua, Aleisa, Vaigaga, Savalolo, Vailele, Alamagoto, Moamoa, Fugalei, Levili, Faleata
Rural Upolu Villages: Samatau, Toamua, Aleipata, Leauva'a, Falealii'i, Leauva'a, Fausaga, Lotofaga, Sa'anapu, Fasito'o-uta
Savai'i: Tafua, Salelologa, Papasataua, Palauli, Vailoa, Pua'pu'a, Samalaeulu, Falelima

2. The 12 non-respondent migrant women were compared with respondents to ascertain whether there were any differences between the groups. The non-respondent group was under represented among 14-19 year olds and over represented among 20-24 year olds. However, it does not seem that the non-inclusion of these 12 women would have substantially altered the conclusions drawn based on home village reported.

3. David Pitt and Cluny Macpherson 1974


5. For an interesting comparison between the labour market position of Samoan and New Zealand born Samoan women see Wendy Larner 1990.

6. Having family members act as child care minders, even if this involves the cost of airfares from the Islands, rather than use formal child care facilities is a common practice among Tongan migrants in New Zealand (personal observation).

7. Education has been used in a number of studies of socio-economic status involving women who are not in paid employment rather than classify the women if married on the basis of her husband's occupation and/or income. In relation to differentiating health outcomes education is said to be a reliable indicator.

8. This difference is likely to be a factor of different sampling methods. In the 1974 study, one of the methods used to include Samoans was networking through the PIPC church with which the authors had strong relationships.


10. The residential classification was developed by the Management Services and Research Unit of the Department of Health and first used in a 1975 study of Maternal and Infant care in Wellington. The classification incorporated demographic variables drawn from the
census. In this study, residence was classified in the following way.
Low status/city core: Newtown, Mt Victoria, Strathmore, Mornington
Low status/satellite: Cannons Creek, Waitangirua, Elsdon, Porirua East, Porirua, Titahi Bay
Middle status/suburban: Seatoun, Lyall Bay, Brooklyn, Matagimar, Island Bay, Kilbirnie
Middle status/satellite: Whitby, Ascot Park, Tawa, Plimmerton, Linden, Johnsonville
High status/suburban: Karori, Ngaio, Kelburn, Northland, Makara, Khandallah

11. While Pakeha families in New Zealand are less likely to be obligated to provide the level of financial and labour support expected in Samoan extended families, obligations of mutual interdependence do exist. For discussion of the economic role of the Samoan family in New Zealand see Macpherson, 1975; and of the Pakeha family in New Zealand see Cameron 1990.
INTRODUCTION

To conceive or to get pregnant is a biological process which is given human meaning through socio-cultural processes. The universal nature of this biological process contrasts to the variety of ways in which human beings in different cultures and in different time periods explain the creation of life. The anthropological literature describes a variety of beliefs and practices related to conception which draw on culturally specific understandings of the body's form and function, the role of sexual organs in reproduction, the relationship of sexual intercourse to conception and the development of the human fetus to a point where human status is recognised (for example Mead and Newton 1967; Kay 1982; MacCormack 1982)

Conception is a confirmation of fertility. In different societies, at different times, human beings have also given different social meanings to fertility. High levels of fertility have been and continue to be valued in some societies as evidence of the virility of the man or the fecundity of the women. In other societies, high fertility levels, particularly among those whose economic ability to support many children is limited, are considered socially and morally irresponsible and evidence of lack of sexual control.

In all societies, even contemporary Western ones, infertility is considered not just a matter of personal interest for the individuals concerned, but a question of an individual's human right to be fertile and to access societal resources to achieve fertility. Societies differ however in the way in which infertility is socially constructed.

In all societies, bodies of knowledge about reproduction exist. These bodies of knowledge are socially created and sustained by members of that society within a cultural context. The extent to which these bodies of knowledge are overlapping or mutually exclusive, is as Kleinman and others have suggested, likely to
reflect the scale and nature of the particular society (Kleinman 1981, 36). In all societies certain individuals - experts - are recognised as having rights to specialised knowledge about reproduction. Kleinman suggests that experts are drawn in some societies from both a professional sector, comprised of the organised healing professions and a folk sector which contains non-professional, non-bureaucratic specialists in sacred and secular healing. Others, lay persons, who are located in what Kleinman calls the popular sector, have access to that knowledge through the medium of those recognised persons. Lay persons in the popular sector draw from the knowledge bases of the professional and folk sectors and interact with both these sectors which are usually separate from each other. Women draw from these expert bodies of knowledge which they simultaneously recreate in constructing their own biological and social understandings of conception in the light of their own pregnancy and birth experiences. The implications of this for the thesis are that all forms of knowledge about reproduction are considered to be socially constructed. The expert understandings of Samoan healers and Western obstetric practitioners, while culturally differentiated are considered to be functionally equal within their own domain. Similarly the understandings of Samoan women while both similar to and different from expert understandings are considered epistemologically equal.

Hence this chapter gives equal weight to the accounts of experts constructed in different cultural contexts and to the accounts of women. The format which is used in this and subsequent chapters in the thesis is to juxtapose Samoan expert, obstetric expert and women's accounts of reproduction and to draw out the similarities and differences both within and between accounts. This chapter first examines the way in which the Samoan 'paradigm' draws on general understandings of body form and function in explaining conception, and applies those understandings to the management of infertility and the control of fertility. The argument that the indigenous Samoan 'paradigm' increased its body of knowledge as a result of culture contact and subsequently incorporated that knowledge into one understood as indigenously Samoan is examined in relation to reproductive
knowledge. A feminist framework is used to analyse the obstetric paradigm in terms of the way in which obstetric knowledge and practice related to conception, infertility and fertility control both shapes and is shaped by the wider social and cultural context in which it operates. The different meanings which women and experts, both Samoan fofo and obstetric practitioner, bring to conception are explored. Also examined through the medium of women's voices are the similarities and differences among women themselves and the different meaning women give to 'getting pregnant', 'trying to get pregnant' and 'avoiding getting pregnant'.

SAMOA PARADIGM

Samoan indigenous understanding of conception was largely based on externalised evidence. While a number of different names for male and female external genitalia were recorded by Pratt last century, he gives few words for male or female internal reproductive organs (Pratt 1984). Not much may have changed. The Macphersons note that while their informants were able to give quite explicit details of the external genitalia of males and females this was less true of internal reproductive organs (Macpherson and Macpherson 1990, 255).

It would seem however that Samoans did have some anatomical knowledge of internal reproductive organs, in that reports exist of the practice of removing a fetus from the body of a woman who has died. Writing of such practices in the 1950's in American Samoa, Holmes reported,

whenever a woman dies with her child still unborn, the fetus is removed and put in a separate grave. A doctor or Samoan medical practitioner, if available, or in isolated places, the woman's husband, incises the abdomen and removes the fetus. It is believed that the mother and her child must be separated or their spirits will not rest and will cause the family trouble (Holmes 1987, 85-86).
There is no evidence however that such operations were done with the aim of documenting knowledge about internal body organs.

The Macphersons (1990) make the argument that unlike some other Polynesian societies, the outcome of contact with Western medicine in Samoa, resulted in expansion rather than contraction of the indigenous paradigm. This would seem to be reflected in changes which have occurred in usage of Samoan words and terms for sexual organs. The names known to the Samoan healers interviewed by the Macphersons, are also said to have been in use when Pratt was compiling his dictionary. However changes in usage have occurred over time. Pratt gives a considerable number of names for the external genitalia of women. The vaginal orifice is glossed as 'maisi', 'magamaga' or 'mafasi', the opening of the vaginal orifice as the 'mafa' and the labia pudendi as the 'laufu'. Though the same words are in use, the Macphersons record that the 'mafasi', the 'mafa' and the 'laufu' are all glossed as the labia. Pratt also records a number of words for the vagina. 'Lefelefe' is glossed as the interior vaginal os, and 'mavae' as vaginal os. 'Pu' was glossed as vagina as well as anus. Pratt glossed the male reproductive organs, the testes, as the 'fuamanava or fuamiti'. The word for semen is glossed as 'si'. Pratt did not give an equivalent word for ovary or ovum (Pratt 1911). In contrast the Macphersons report the contemporary meaning of 'si' to be ova and 'suasi' as semen (Macpherson and Macpherson 1990, 182).

Pratt also does not give a unique word for womb or uterus but gives the word 'manava' which also means 'the belly' or in modern language 'the abdomen'. Kinloch considers that 'fa'aautagata' and 'to'ala fanau'. are correctly glossed as womb or uterus (Kinloch 1985b). This would seem to suggest some incorporation over time into Samoan ethnoanatomy of Western derived anatomical knowledge. However differences over time may also reflect the different social and historical contexts in which the information was obtained. Medical understanding of reproductive processes in the 19th century and treatment of infertility was considerably more limited than contemporary medical knowledge and practice. As has been noted by the Macphersons, a good deal of Western medical
knowledge to which Samoans were exposed in the 19th century was transmitted by missionaries and others who were not themselves qualified medical practitioners. Thus to some extent the lack of terminology may reflect medical understandings of the day as they existed in Samoa. Another reason however has to do with differences in the context in which the information was obtained. That the Macphersons were able to obtain more specific information on names of sexual organs may reflect the more informal and intimate relationship which the authors were able to have with their informants. The Macphersons themselves reported difficulties in discussing the names of the reproductive organs because of the extreme delicacy of the topic for Samoan people. How much greater the difficulty for Pratt, a male European pastor, to have obtained such delicate information. Similarly English social mores of the 19th century did not lead to easy discussion of matters related to sexual matters. The limited information obtained on reproduction in early ethnographies is said to reflect not only a lack of theoretical interest among male anthropologists, but also the fact that many were likely to have been denied access to women's domains in the societies in which they worked (McClain 1982, 38).

Neither does Pratt record any word or term for menstruation, though contemporary Samoans use, 'ma'i masina' (monthly sickness). Given the routine, observable nature of menstruation, it is more likely that the word commonly used at the time, was not recorded by Pratt, rather than that it was unnamed. The Macphersons note that in referring to menstrual blood the polite form of the word blood, 'palapala' is used rather than the common form, 'toto', so in this sense, a special meaning is ascribed to menstruation (Macpherson and Macpherson 1990, 185). There is little recorded evidence that Samoan fofo used or use today a specialised language related to fetal development. For example, there does not appear to be a special word used to describe an unborn as opposed to a born baby.

Central to Samoan understandings of body form and function is the concept of the to'ala. There would seem to be general agreement among Samoan fofo and Samoan adults that the to'ala is considered
essential for the maintenance of human life and that correct location of the to'ala is necessary to maintenance of general health and wellbeing (Kinloch 1985a; Macpherson and Macpherson 1990). Men and women are said to have a to'ala. The correct position for the to'ala is said to be "between the navel, (pute), and the top of the abdomen, (moa), and towards the front of the body. In its correct position it resembles a closed fist and is made up of unspecified number of tentacle-like fingers, ('ave), fixed at their base to a palm-like part which can attach itself to internal parts of the body by suction" (Macpherson and Macpherson 1990, 169). Pregnancy it is believed because of the growth of the fetus can displace the to'ala.

Though there is no equivalent to the to'ala in Western scientific medicine, among the Maya people of the Yucatan, Mexico it is reported to be the central organ in Maya ethnoanatomy (no other references were found to such an organ in the ethnographic literature). This organ the 'tipte' is like the to'ala considered to be a central regulatory organ of the body. It is said to be normally located, "directly beneath the navel but it may be displaced by eating improper foods or by heavy exertion" (Fuller and Jordan 1981, 37). Symptoms of displacement include those related to the reproductive and digestive organs. Labour and birth are also considered likely to dislodge the 'tipte'. Similarly Samoans believe that pregnancy can displace the to'ala (Kinloch 1985a; Macpherson and Macpherson 1990;). Special attention is paid in both cultures during postpartum massage to ensure that the 'tipte' and the 'to'ala' are correctly located.

Variation has been shown to exist in Samoan expert accounts as to whether the concept of the 'to'ala' incorporates more than one construct. Kinloch reports that Samoans use the term to'ala in two different ways. The 'to'ala ola', which is described 'as the life of the abdomen' or a "nebulous kind of life essence". It is this which is referred to above. The other meaning given is the 'to'ala fanau' (womb or female reproductive organs) (Kinloch 1985b, 210). This distinction was also made by an elderly fofo who was one of the Macphersons informants, though other fofo interviewed referred only to a single to'ala to which they
attributed aspects of both a life source and reproductive functions (Macpherson and Macpherson 1990, 169). The two fofo interviewed in the Wellington study while they described the 'to'ala' as being closely associated with the fanua (placenta), were careful to distinguish that these were two separate organs.

Although there is agreement that displacement of the 'to'ala' from its correct position will result in a number of systemic complaints, the Macphersons found variation among expert accounts as to the mechanism by which the to'ala shifts. "Some (fofo) attribute a degree of purpose to the to'ala, likening it to an octopus and suggesting that it searches (su'e), apparently deliberately, for something to which to attach itself. Others liken its movements to the apparently aimless motion of the tentacles of a jellyfish and believe its point of connection is fortuitous" (Macpherson and Macpherson 1990, 169).

Some of the fofo in Macpherson's study reported instances of where a to'ala which was displaced had been expelled at birth and subsequently returned to its proper place (Macpherson and Macpherson 1990, 168). Similar accounts were given by two fofo who were interviewed during the course of the Wellington study. Both emphasised the potentially life threatening situation for the woman until the to'ala could be returned to its proper place. Both link the 'to'ala' with the 'fanua' while differentiating the two organs.
One fofo said that the to'ala was like a large jelly fish.

One day I went with the fa'atosaga to a very sick woman. The baby had come out and the fanua also, but the girl was looking very poorly. The fa'atosaga then attend to the baby and the fanua. It was there that she found the problem. The to'ala was clinging to the fanua. She then slowly and tenderly put it on top of her hand and gently slipped it back into to the mother, through her vagina. She massaged her stomach gently then straight away firmly bandaged the stomach. She ordered warm vaisalo, then made the failele sleep. By then you could see the change in the mother's colour, from a white palish colour to her normal.

The other fofo said,

it is located in the woman's womb and it can come out when the baby is born. It is usually clinging on the baby when it comes out. When it does fall out, you just have to push it back into the woman with your hand. It looks like a jellyfish and it has the colour of blood 'mumu toto' and has tentacles 'ave'. It is different from the fanua. The fanua is bigger. The to'ala sometimes sticks to the fanua when it comes out. They usually come out because the midwife had tried to make the woman push harder 'fa'ao'ogo' which can make the fanua tangled up inside 'lavea', thus become stuck and the to'ala will come out. Either that or the fanua will come out first with the to'ala stuck on it. So you'll have to carefully extract the to'ala from this and place it back in the woman's womb, because apparently a person will die if the to'ala is absent. That's why some Samoan women die, because the midwives didn't know that the to'ala had come out.

Samoan Understanding and Management of Infertility

Reports of Samoan indigenous treatment of infertility reveal Samoan understandings of the process of conception. A woman who despite having a normal sex life fails to conceive would traditionally in Samoa have sought help from a fofo. Kinloch reported observing treatment for complaints of infertility and was told that this technique was also used by other fofo in order to assist conception (Kinloch 1985a, 206)\textsuperscript{4}. The treatment
commenced as soon as the menstrual period ended. Twice daily the fallopian tubes were massaged into a position considered to be optimum for receiving the ovum. The fa'atosaga instructed the couple to refrain from intercourse until a particular time in the month, as intercourse was considered to displace the tubes to their old position. Though this technique was not claimed to be always successful, women and fofo did feel that it did help some women become pregnant who had been unsuccessful up till then.

This description reflects an understanding of bodily systems in which the proper location of reproductive organs are given priority. Thus successful conception is considered to depend on the correct physical location of the tubes and the treatment is designed to ensure this occurs. This specific understanding of the cause of infertility would seem to reflect the general Samoan understandings that illness or disease arise when there is failure to ensure proper physical or social order (Kinloch 1985a). Samoan fofo do not however consider physiological factors alone are necessary to achieve successful conception. Samoan fofo have been shown to have knowledge about the concept of fertility. Kinloch reports that as part of the treatment of infertility, fofo proscribed sexual intercourse until a particular time in the month. The Macphersons suggest that the relationship of fertility peaks to the menstrual cycle was well understood by Samoan fofo currently practising in Samoa. That infertility is understood to be related to imbalances in other body systems can also be seen in reports of the prescribing of internal medicine to improve fertility, either in combination with or separate from the massage treatment (Macpherson and Macpherson 1990, 184).

Though there is no information recorded on the prevalence of infertility among the Samoan population now or in the past, it seems that infertility is a problem for some Samoan couples. However, a childless couple is a rare phenomenon in Samoan society. Although biological parenthood might be denied a couple, it would be unusual for them to be denied social parenthood. The traditional solution if treatment failed would have been to adopt a child or more likely children from the siblings of either partner. The practice of adoption is not however confined to
childless couples, but may also be practised by couples with a number of children.

Samoan Fertility Control

Although many women in Samoa practice some form of fertility control at some point in their reproductively active years, Samoans continue to have high fertility rates both in Samoa and New Zealand. Children are highly valued in Samoan society and parents are rewarded for having children by being accorded prestige by others. It is suggested that this value was reinforced by the teachings of early Christian missionaries that children were 'gifts from God' (Clark 1978 160). Children were also valued for the social, economic and political strength they would eventually contribute to their aiga. As has been shown in other studies, the family continues to be the pivotal social, political and economic unit in Samoan society (Baker 1986; Macpherson 1975; Janes 1990).

When a number of American Samoan women were asked in 1978, why they had had children, their answers reflected generally-held Samoan values related to the family, the matai system and the church.

1. Children will be helpful to the parents when getting old.

2. To be heirs to titles and lands.

3. To have plenty of people to help out with fa'alavelave.

4. To carry on the blood of the family from generation to generation.

5. I think this is one of God's gifts to us in the world (Clark 1978, 164).

Indigenous forms of contraception are known to and practised by Samoan women. These include a practice known in many societies
through the ages as 'being careful' that is, removal of the penis from the vagina before ejaculation occurs. Breast feeding is also considered to be a way to prevent the too hasty conception of another child. The Macphersons record that while fofo in Samoa recommended this practice they were unable to explain its protective mechanism (Macpherson 1990, 183). That Samoan women have in the past used this method as a means of spacing their family, was confirmed from stories from the women interviewed. Some women said their mothers had fed siblings for five to seven years. Olana said that her mother told her that, "this was how Samoan mothers stop pregnancy".

Social mechanisms and cultural beliefs are also used in encouraging the spacing of children. One social mechanism which operates in traditional family structures in Western Samoa, relates to the custom of the woman's mother sleeping near her after the birth of the baby. This results in a period of forced sexual abstinence. This custom was also recalled by Olana, "In Samoa, the man never sleeps with the failele. Her mother makes sure of that". Another factor which would seem to encourage the practice of spacing pregnancies, is a belief which was spoken of by some of the Wellington women, that if a woman conceives when she is breast feeding, her milk will become poisoned and she will have to wean the baby otherwise it will get sick.

Two women spoke about this belief. It was unclear whether the risk related to coitus as well as pregnancy while breast feeding. Uila said somewhat ambivalently, "the man should not go to the woman if she breastfeeds the baby. Otherwise the baby would get poisoned. But that's just Samoan beliefs. It may be untrue". When Rosa was asked how long she felt a couple should wait after the birth before recommencing sexual relations, she related this to her own situation, saying slowly, "well to me, I'm a little bit scared of the baby being poisoned, I'm breast feeding him".

Contraceptive techniques are also used by Samoan fofo to assist a woman control her fertility. These are the reverse of the procedure discussed earlier which fofo use to help women conceive. This involves a massage technique which is said to
result "in the fallopian tubes being placed so that the ova never find their way to the uterus" (Kinloch 1985a, 206)

Though limited information exists on Samoan attitudes to, knowledge and practice of abortion, it would seem that Samoan women, like women in all societies have at times had recourse to abortion as a means of fertility control. In their study of contemporary Samoan practices, the Macphersons record that, "abortion may be procured either by vigorous massage and/or exercise or by drinking an abortifacient, vai fa'apa'u" (Macpherson and Macpherson 1990, 185). Kinloch also reports being informed by several women in Samoa, of herbal remedies known to precipitate an abortion (Kinloch, 1985c, 15).

Samoan women also draw on the knowledge and practices of the Western scientific paradigm in controlling their fertility. The official policy of the Department of Health in Western Samoa since the early 1970's, has been to promote wider spacing of children rather than the limitation of births. However at least one study in the 1970's suggested that official goals were impeded by social attitudes. Young women were not willing to use contraception until they had produced the number of children which either they or their husbands desired (Kinloch 1985c 16-17). Family Planning clinics in Western Samoa offer the full range of modern contraceptive methods. However, in 1981, only 17% (5332/30,835) of the fifteen to forty nine year old female population were reported as being current users of Western forms of contraception. Two forms of contraception predominated as can be seen in Table 4.1. More than half of the women used an IUD, while a quarter received Depo Provera.
Table 4.1
Contraceptive Use by Type in Western Samoa 1981

<table>
<thead>
<tr>
<th></th>
<th>IUD</th>
<th>Pills</th>
<th>Depo Provera</th>
<th>Tubal Ligation</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,972</td>
<td>318</td>
<td>1,278</td>
<td>681</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>56%</td>
<td>6%</td>
<td>24%</td>
<td>13%</td>
<td>1%</td>
</tr>
</tbody>
</table>


OBSTETRIC PARADIGM

Contemporary obstetric understandings of conception are based on the findings of scientific research undertaken by other specialists such as physiologists and endocrinologists. These understandings are evident in the current texts used in teaching students at the Wellington School of Medicine. The language used is specialised and technical. In the obstetric texts reviewed, conception is portrayed as a complex process with a number of definable stages. These include ovulation; sperm transport; fertilization; formation of the zygote; cleavage and transport of the egg; implantation of the blastocyst and development of the embryo (Llewellyn-Jones 1986, 13-17).

Descriptions of the process of conception in the texts reviewed did not refer to ongoing scientific, ethical and legal debate as to when an embryo, which has been defined as genetically new human life organised as a distinct entity oriented towards further development, can be said to exist (Caton 1987). One scientific view is that a new life begins at the moment of female and male fertilization. The alternative scientific view is that the embryonic state begins on the fourteenth day following fertilization. Neither view was explicitly addressed in the texts reviewed. However the former view seems to be implicit in this extract.
"Chromosomes appear in the condensed DNA, and those from each pronucleus move together to unite and form the zygote of maternal and paternal genetic material. The new individual has begun its march through life to death" (Llewellyn-Jones 1986, 15).

The scientific story of conception is framed in the language and imagery of scientific rationality, order, precision and certainty. The story however, as the editors of the latest text reviewed acknowledged, remains incomplete.... "this fascinating story, which we ourselves are still struggling to comprehend (Turnbull and Chamberlain 1989, 49). While there has been an expansion of obstetric knowledge about conception, reflected in the growth of the New Reproductive Technologies, mysteries still remain. One of the texts in describing the environment necessary for fertilization to occur stated, "the spermatozoon is only able to penetrate the zona pellucida after its structure has been altered. This ability (capacitation) is thought to have two parts" (Llewellyn-Jones 1986, 14). Later in the same chapter on the anatomy and physiology of conception the author wrote, "the adhesions to the maternal endometrial epithelium is followed rapidly by invasion.....How invasion by trophoblast occurs remains speculative, but some facts are known" (Llewellyn-Jones 1986, 16).

Differences in what was considered to be the distribution of medically defined causes of infertility also seem to exist. One text considered that "ovulation disorders are the most common female disorder" (McIntosh 1991, 17). However another text considered that the 'ovarian factor' contributed only somewhere between 3-10% of the factors influencing fertility. Tubal problems were considered to be the major contributing factor (Llewellyn-Jones 1990, 97).

Infertility has been increasingly defined as a medical problem, amenable to medical treatment. Medical diagnosis of infertility is given as, "when the couple have not achieved a pregnancy after a year of normal coitus" (Llewellyn-Jones 1990, 96). By this is meant intercourse without use of contraceptives. While the woman is said usually to be the one who first seeks medical help, all the texts stressed that infertility is the problem of a couple,
or a family, rather than an individual. Infertility is also no longer seen as solely the 'fault' of the woman. The current obstetric view is that causes of infertility derive equally between men and women. However, most texts reviewed gave greater emphasis to discussion of female causes of and treatment of infertility. In part this reflects the fact that "although major advances have been made in the management of female infertility, particularly for ovulation induction and tubal problems, the useful treatments available for male factor infertility remain limited" (Turnbull and Chamberlain 1989, 1079).

Infertility it has been suggested by some medical writers may have a psychological cause. This is particularly the case when there is no identifiable physical cause. Others however conclude that there is no conclusive evidence that such a relationship exists.

In some of the texts reviewed in this study, psychological 'causes' were explicitly or implicitly linked to the female partner. One text suggested that investigations of infertility should include whether "the patient is psychologically 'prepared' for pregnancy" (Llewellyn-Jones 1990, 97). Another text included separate infertility check list for females and males. Among the factors to be identified in taking a history of the female partner was "degree of motivation". Psychological elements were not however part of the male check list (Mackay et al 1985, 156-157).

That obstetricians and gynaecologists consider the psyche as well as the physiology of women to be within their legitimate field of expertise has also been shown in other studies (Scully and Bart 1973; Koutroulis 1990). In examining texts in use in teaching medical students in Australian universities, Koutroulis demonstrated that obstetric understandings of causes of and outcomes of infertility were informed by stereotypical images of women. In one text examined, failure to conceive was considered by the authors to be associated with an 'uncertain feminine identity', while in a second text inability to conceive was considered to result in some form of neurosis in the woman
because, "inability to conceive is a denial of a woman's dominating instinct" (Koutroulis 1990, 78).

Obstetric Fertility Control

In many societies including New Zealand, women fought and continue to fight for the right of a woman to control her own fertility. This battle did not always have the support of the medical profession in New Zealand (Facer 1974, 3; Smith 1986). Even until quite recent times New Zealand was seen as a young colony whose economic existence depended on a growing population. A viewpoint with which the medical establishment of the day agreed. Programmes designed to limit family size were therefore considered to conflict with the economic interest of New Zealand society.

Times have changed. The medical profession is no longer, with the exception of individuals who have religious or other moral objections, opposed to the practice of contraception. These days, planned parenthood is considered to be responsible parenthood. There is a greater willingness to provide contraception to the young, sexually active woman than in earlier years, as is exemplified in this extract from one of the texts. "Young women who do not want to be pregnant are best advised to use contraception whenever they become sexually active, no matter how young" (Pritchard et al 1985, 811). Health professionals promote the understanding that responsible individuals engage in 'safe sex', whether they are married or not. 'Safe' in the 1990's not only means avoidance of pregnancy, but also of sexually transmitted diseases such as AIDS. However, strongly held differences of opinion continue to exist in New Zealand and other Western societies, about such issues as the availability of legal abortion and who decides, what constitutes acceptable forms of contraception, and who has access to them.

A consistent theme expressed in the obstetric texts, was the right of the sexually active individual (usually female) to the contraceptive method of her choice. Control of unwanted fertility is considered to be a "basic human freedom" (Turnbull
and Chamberlain 1989, 1135). An associated theme was that doctors have a responsibility to provide that individual, (usually female) with the necessary information to make a reasoned choice (Llewellyn-Jones 1990, 109). That obstetricians consider that discussion of changes in social norms and values related to sexual activity as well as the physiology of sex are withing their legitimate field of expertise is demonstrated in this extract.

"The relative ease of modern methods of contraception has introduced the fear that fornication will be encouraged, particularly among unmarried teenagers. It cannot be denied that in many countries a more permissive attitude to fornication has arisen in recent years, but there is no evidence that this is due to the more ready availability of contraceptives" (Llewellyn-Jones 1990 Vol 2, 107).

All the texts reviewed discussed the use of both traditional and modern methods of contraception. Traditional methods included coitus interruptus (withdrawal) "the oldest contraceptive method still in common use" (Niswander 1981, 340). The advantages of the method it is said are that "it requires no devices or chemicals and is thus available under all circumstances and at no cost" (Niswander 1981, 341). Its disadvantages are said to be a relatively high failure rate ie pregnancy occurs and reduction in the sexual satisfaction of the woman. The role of breast feeding in suppressing ovulation in the early puerperium, 'nature's contraceptive' was also acknowledged (Beischer and Mackay 1986, 524). Most texts considered that if a mother was fully breast feeding this would give contraceptive protection until around ten weeks after birth, although considerable variability in the onset of ovulation exists. Once ovulation commences breast feeding was not considered a reliable method of contraception on its own. Other traditional methods discussed in the texts, included periodic abstinence methods (calendar rhythm, temperature rhythm, cervical mucous rhythm), as well as local barrier methods such as the condom, diaphragm and spermicides.
Oral and injectable hormonal contraceptives and the intrauterine device (IUD) are classified as modern forms of contraception. These were the methods most fully discussed in the texts reviewed. Different patterns of contraceptive use have been shown to exist between societies at similar levels of economic development, reflecting the influence of socio-cultural and legal forces and medical prescribing patterns. A 1982 national survey in the United States of the contraceptive status and methods used by American women showed that the most popular methods of conception control were oral hormonal contraceptives, sterilisation and the IUD (Pritchard et al 1985, 812). There have been no similar national surveys undertaken in New Zealand. Data drawn from a range of sources suggest that in the early 1980's, a similar pattern existed in New Zealand in that the pill dominated as the first choice of contraception. The fertility behaviour of New Zealand couples has been shown to differ from that of their counterparts in other industrialized countries. In New Zealand the use of hormonal contraceptives, both oral and injectables and rates of sterilization were shown to be comparatively high (ESCAP 1985, 180-192). On the other hand induced abortion rates in New Zealand were very low by the standards of comparable countries. The ratio of abortions per 100 live births in 1983, was 13.7 in New Zealand, 37.7 in Japan and 42.8 in the United States (New Zealand Population Monitoring Group 1985, 50). Variation also exists between countries in the availability of particular forms of contraception. In the United States, the hormonal injection Depo Provera continues to be banned by the Food and Drug Administration. However Depo Provera is widely used in many developing countries, including Western Samoa. Its use in New Zealand, in particular the high levels of use for a developed country have been the source of controversy. Different patterns also exist in other countries. In Japan, oral contraceptives are not available and in contrast to other developed countries there is a high use of condoms. It is estimated 50 percent of married couples of reproductive age use this form of contraception (Pritchard et al 1985, 825). Since the Second World War however abortion has been easily available to Japanese women.
Effectiveness, safety and acceptability were the dominant obstetric criteria used in evaluating the various methods of contraception. Prime importance was given to evaluating the effectiveness or reliability of the method in preventing pregnancy. Traditional methods such as withdrawal and prolonged lactation rated poorly, while modern methods such as hormonal contraceptives and the IUD were considered to be more reliable. The motivation and capacity of the woman herself were also considered factors to be taken into account. While the pill was considered to be the most reliable, reversible contraceptive, some obstetricians consider that there is a problem for some women to have to take a pill each day (Llewellyn-Jones 1990, Vol2 148). In these cases, other methods such as an IUD or injectables are considered to be more appropriate. This view is exemplified in the following extract from one of the New Zealand texts reviewed.

"It is not much use prescribing oral contraceptives for a woman who is the 'happy-go-lucky' and forgetful type, or with whom the doctor has a poor communication as regards explanations; the three-monthly injection or an IUD are likely to be more reliable" (Green 1983, 110).

While modern contraceptive methods in contrast to traditional methods rate high on effectiveness, unlike traditional methods they are not free of side effects. Two texts specifically discussed the benefits and risks of contraceptive use (Niswander 1981, 352; Llewellyn-Jones 1990, vol 2, 123). Each drew on the findings of a study published in 1977, which estimated that, with the exception of women over the age of 40 who smoke and are oral contraceptive users, women are at greater risk of death from pregnancy than from using contraception. Mortality rate is however only one measure of safety. All modern contraceptive methods also carry some degree of risk of morbidity. While the IUD is associated with a lower mortality rate than the oral contraceptive, its morbidity rate is higher (Beischer and Mackay 1986, 527). Morbidity associated with contraceptives include serious conditions such as pelvic infection from insertion of an
IUD, and an increase in the risk of vascular complications in the woman taking an oral contraceptive.

Most texts recognised that contraceptive methods must also be acceptable to the woman and her partner. Cultural and religious factors and personal preferences often determine choice of method. Traditional methods such as the condom were often depicted as unacceptable to many couples as the procedure involved an interruption to the sexual rhythm (Beischer and Mackay 1986, 531)

Conception control is primarily concerned with controlling the fertility of the woman. "A safe practical, consistently reliable, and reversible contraceptive for men that does not impair sexual function has not yet been developed (Pritchard 1985, 832). Currently only two male specific irreversible contraceptive techniques exist, withdrawal and use of a condom. A number of texts note the unwillingness of some men to co-operate in the use of contraception. Coitus interruptus is described as "a feat not willingly learned or practiced by many men" (Niswander 1981, 341). While the unwillingness of many sexually active young men to use a condom is considered a matter of regret by another author (Llewellyn-Jones 1990 vol 2, 110). While sterilisation of the male is a simpler operation with less complications than in the female, more women than men are sterilised in New Zealand and many other Western societies. While many women actively seek sterilisation as the answer to conception control, some men it seems need to be induced to accept a vasectomy. Men are more likely to fear that their sexual powers will be reduced following sterilisation (Llewellyn-Jones 1990 vol 2, 123).

Obstetricians also use gender differentiated criteria in issues to do with fertility control. Counselling of couples where one partner was planning to be sterilised was noted as important in most of the texts. However, obtaining the written consent of the other partner, was only raised when the partner being sterilised was the woman (Beischer and Mackay 1986, 534). There has been a decline in the practice of sterilising a woman immediately or in
the early days after birth. Instead sterilisation is done as an interval procedure some three months later. One text drew attention to the more conservative approach reported to be adopted by many vasectomy services. Most prefer not to do the procedure until the child is 6-12 months old. The authors comment, "it is not clear why such caution is less commonly observed by obstetricians in regard to female sterilization" (Turnbull and Chamberlain 1989, 1149). A feminist interpretation would be that the preservation of male fertility in the event of an early death of the child was accorded greater value by the male surgeons involved.

The ideal contraceptive has been defined as one which is 100% effective, 100% safe, has no side effects and doesn't interfere with sexual enjoyment (McIntosh 1991, 26). At present such a contraceptive does not exist.

Despite the widespread use of contraception, most New Zealanders still choose at some stage in their live to be parents. From the results of a recent survey of New Zealand parents, the author concluded that

To most Pakeha New Zealanders, having children is important to their sense of biological and social completeness. Children create families not just in time, but they also perpetuate families through time. Children confer social identity on adults; children create adults. If having children is the rite de passage to biological completeness and social maturity, then to reject parenthood voluntarily is to question social order (Cameron, 990).

Other studies in other societies have also noted the expectation that most adults will have children one day. Given that link, a distinct societal norm exists against voluntary childlessness and that considerable social pressure is placed on married couples to have children. Despite the increase in babies born to parents who are not legally married, there also remains a closely defined link between marriage and reproduction. "On the one hand it is expected and regarded as desirable that those who marry will have
children; and on the other it is expected that those who want to have children will marry" (Busfield 1974, 14).

COMPARISON OF THE SAMOAN AND WESTERN MEDICAL PARADIGMS

It is probable that the understandings of conception held by early European settlers did not vary greatly from that of the Samoan paradigm. As Macpherson notes early contact with Western medical beliefs and practices was largely through missionaries who had limited medical knowledge. In addition, 19th century medical knowledge of the physiology of conception was limited as were treatments of infertility. Subsequent contact with scientific medicine through the mediation of health professionals such as district nurses, is likely to have resulted in the expansion of Samoan 'indigenous' understandings of and practices related to infertility (Macpherson and Macpherson 1990, 60).

Although it has been argued, that in the pre-contact Samoan paradigm supernatural forces were seen as the major causes of illness, Samoans like other Polynesians would seem to have understood pregnancy to be an outcome of sexual encounters. As Kleinman (1980) and others have argued all medical care systems whether Western scientific medicine or traditional indigenous medicine have characteristics in common. Both Samoan indigenous medicine and scientific obstetrics recognise failure to conceive to be an issue of fertility. Both place greater emphasis on diagnosing and treating female infertility rather than male infertility. Both seek to establish a cause and to implement a treatment programme. Both the Samoan and obstetric paradigms offer hope to the couple faced with the prospect of infertility, but neither promise success.

In both Samoan and obstetric paradigms, certain persons are considered to be experts in view of the specialised knowledge and understandings they hold. Both sorts of specialist construct knowledge about the invisible process of conception. Thus the Samoan fofo has detailed knowledge about the to'ala, its structure, function, correct position and the implications and proper treatment if it is displaced. This knowledge is not
written down but is passed by oral tradition in an apprentice like relationship as a fofo learns the art of healing. The concepts and the language are however also accessible to the lay person. The obstetric specialist draws on detailed knowledge about conception which others have constructed. Such knowledge is displayed in a technical language which is not readily accessible to lay persons. For the knowledge of the obstetric specialist to be made accessible to the lay person a translation of language needs to occur. Greater overlap occurs between the understandings of the folk and popular sectors in relation to the Samoan paradigm, than between the understandings of the professional and popular sectors in relation to the obstetric paradigm.

**WOMEN'S CONSTRUCTIONS OF CONCEPTION**

Women construct different accounts of conception than do Samoan fofo and obstetric practitioners. Conceiving is something that women do. The meaning which women give to conception varies. Others with whom the woman has social relationships influence the meaning a woman gives to conception.

Developing models of the social and psychological factors that impinge on fertility decisions has been the focus of numerous demographic studies as Hass showed in a detailed critique of the literature (Hass 1974). Such studies devote considerable energy to the analysis of motivation to get pregnant, whether the conception was wanted or unwanted, intended or unintended. Implicit in such approaches is the assumption that the process of becoming pregnant can be explained as a rational decision making process. Hass herself considers that, "fertility decision-making like all decision-making must be understood as a process, a situational variable, subject to various influences at different times" (Hass 1974, 137). As part of this process she considered that fertility decision-making occurred at the stages of pre-conception that is to conceive or not; pregnancy that is to continue the pregnancy or not; and postnatally to commence the cycle again.
Others have suggested that women's motivations are not so readily dichotomised and explained within a rationalist decision-making framework. In a study of women's attitudes to conception, Hilary Graham suggested that though the fifty women in her study were generally prepared to classify their pregnancy as 'planned' or 'unplanned', with 54% of the women indicating they had planned this pregnancy, this distinction tended to be subsequently eroded. Women made qualifications to their rating as to whether their pregnancy was planned or unplanned by responses they made to other questions on the salience of motherhood. Graham considered there were three themes which emerged and overshadowed the dichotomy between the 'planners' and the 'non-planners'. These themes related to:

1. The personal significance of 'having a family'.
2. Perceptions of the process of impregnation.
3. Ambivalence regarding pregnancy and motherhood.

In this study, information on intentionality of the pregnancy and use of contraception was obtained from twenty five of the Samoan women interviewed. Very few of the Samoan women considered that this or previous pregnancies had been 'planned' in the sense of a mutually agreed timetable. For most of the women, pregnancies were events 'that just happened'. This finding was similar to that found by Graham who concluded that for most women getting pregnant was "an unproblematic, straightforward physiological event" (Graham 1977a, 87).

Even where it seemed that women had planned to have another baby other cross-cutting themes can be identified. Leafa, who was pregnant with her third child described how she and her husband made a decision to have another baby. At first Leafa attributes the decision to have another baby to their two boys asking her and her husband when they were going to have a sister. "Even my husband too, they always keep on asking him. And then one night when I come home from work, after we had our prayer, my husband told me all about it and so I told him they usually ask me too".
Leafa goes on to indicate that her husband also wants another baby. "And me and my husband were having a talk and my husband was telling me that he really wanted another baby. And we sort out those things, and I take it off, my IUD. I was having an IUD, just to protect me from that (pregnancy)". Leafa locates the motivation for getting pregnant outside of herself, first with her sons and then with her husband.

Some women, such as Nana, a recently married woman, who conceived within the first months of her marriage, expressed an equivocal attitude in which conception was portrayed as simultaneously 'unplanned' and 'planned'. Nana initially expressed the attitude that she considered getting pregnant was a natural follow on from marriage. However, when asked whether they planned to have this baby, she replied. "No, we just went along hoping to have a baby anytime".

The ambiguity of the concept of planning was also illustrated by Fisaga. When asked whether they had planned to have this baby, given that they had a seventeen month old daughter, Fisaga said they had not planned to have this baby. She then qualified this by saying they were thinking of having another baby, 'but not this soon'.

For some women the opposite of planning was 'accident'. Accidents are events that just happen. You do not plan for accidents.

Panesa said that this pregnancy was her first planned pregnancy. She described how she got pregnant. "Um, we planned it (laughs). That's another really exciting thing, 'cause my other three, I never planned any of them, all accidents. It's probably because all my other friends were pregnant and I was over baby sitting at another friend's of mine's place. And that was putting ideas into my head (laughs). And then, um, we just talked about how neat it would be having a baby of our own and stopped taking the pill and got pregnant."
For Rosa getting pregnant again was not a welcome discovery at first. "This one is an accident... We both thought three is enough".

Some women gave pragmatic responses when asked if the pregnancy had been planned. The main reason that Sose gave for having a second child, was that this would help them get a State house.

... we had trouble applying for our own house. We were staying in my husband's relative's house and I didn't like it eh... So I got mad and try very hard to get a house and the Housing Corporation told us, that only the two bedroom ones available at that moment. But then I went and saw the higher person in the Housing Corporation and he told me the only reason is to have more kids. Then, (burst of laughter) we plan to have another one". Sose also got her house.

Getting pregnant however, was something women could do even if their partner had not been keen to have another child, as in almost all instances contraception was woman controlled. In this sense getting pregnant was something that women did. Two Samoan women who were unhappy with the contraception they were using, decided to stop without discussing this with their partners. In both cases the partner’s reaction was acceptance of the pregnancy he had not anticipated.

Tasi had been using an oral contraceptive, but when she and her husband were in Auckland on holiday, she stopped taking the pill as she said it made her sick. She did not tell her husband, who was not keen to have another child. "My husband, he didn't want another baby, but I told him I wanted four children instead of three. So when I got pregnant, I was glad". Tasi said her husband was happy she was pregnant.

Clare had been using Depo Provera, a contraceptive which she found unsatisfactory and unilaterally decided to stop. She and her husband had talked about contraception but he did not know she was not continuing with the injections. When she became pregnant he was surprised, but she said he was not really upset that she had not been using contraception.
In a sense, getting pregnant required less negotiation than avoiding pregnancy. A number of Samoan women spoke of negotiating with their partners about using contraception and/or the type of contraception used. Not all of the husbands were willing for their wives to use contraception. Women perceived avoiding pregnancy as something they as women had to work at. They did this either by taking precautions with or without their husband's knowledge or agreement or attempted to control their sexual relationship with their partner to avoid conceiving.

Conception can and frequently does occur without the woman herself having more than a rudimentary knowledge of her own reproductive system. The way in which Samoan women understood the relationship of the to'ala to reproduction was explored with seventeen of the women interviewed. There was general agreement that for a normal state of health to exist, the to'ala must be in it's correct place, in the lower abdomen. Women also believed that there was a direct relationship between the location of the to'ala and successful conception. Understanding of the to'ala did not appear to be related to my classification of the general cultural orientation of the woman in that a similar proportion of women in each classificatory category spoke about some aspect of the to'ala. Women drew their understandings of the to'ala from treatment of sickness events by fofo during current or past pregnancies. The difference between Samoan lay and expert knowledge bases is seen in the richer and more detailed descriptions given by fofo.

Doing Contraception - Contraceptive Users Among the Wellington Women

Information from hospital records on contraceptive use was primarily collected as to whether a woman had or had not been using an oral contraceptive. Only 26% of women reported having used an oral contraceptive prior to their current pregnancy. Another twenty one women were reported as having used other contraceptives. Of these the majority 12/21 received Depo Provera while the remainder 9/21 had used an Intra Uterine Device (IUD)\(^1\).
These figures may however under report actual contraceptive use by the Samoan women. Though only 35% or 84/242 of Samoan women were recorded on their hospital records as having used any form of contraception prior to the current pregnancy, during the interviews 44% or 22/50 of the women said they had used contraception prior to this pregnancy. Medical prescribing practices also influence the pattern of contraceptive use observed among the Samoan women. In a study of the contraceptive practices of abortion patients in Wellington, a higher proportion of Maori and Pacific Island women were found to have used an oral contraceptive, in comparison to other New Zealand women (North, 1989). However, in comparison to Samoan women who had never migrated, a considerably larger proportion of Samoan women would appear to be contraceptive users.

As was discussed earlier in this chapter, family planning practices, at least those based on Western style contraceptives, are not widely practised in Samoa. Therefore, it would be expected that differences in contraceptive usage would be found among the women interviewed in terms of my classification of their cultural orientation. However my classification of cultural orientation did not in fact seem to be strongly associated with contraceptive use. A similar proportion of women who were classified as 'more Samoan oriented' 62% and women classified as 'less Samoan oriented' 60% were users of contraception. On the other hand, contraceptive use was highest (86%) among women who fitted my category of bicultural orientation.

Differences did exist however between users and non-users of contraception. Among the women interviewed, non-use of contraception seemed to be linked with the age of the mother, marital status and whether this was a first pregnancy. Non-users were substantially over represented among younger women. None of the young women in the <19 age group used contraception before the current pregnancy while only 12% of those in the twenty to twenty four year old age group were users.

First-time mothers were also over-represented in that though they comprised 43% of the non users, they made up just a quarter (24%)
of the interview group. Age and parity were closely related in that over half of the women (4/7) in the twenty to twenty four year old group were first-time mothers. None of the pregnancies were planned, with three of the four women being unmarried at the time of conception.

During the interviews women revealed that when it came to a decision to use contraception, in the main, it was women who took the initiative and the method used was woman specific. Men, though they may have participated in and supported the decision to use contraception, did not take responsibility for the method used.

A few of the Samoan women interviewed spoke of their awareness of Samoan abortion techniques. When Tasia was asked if she knew whether a particular fofo specialised in helping women get pregnant, she interpreted this to mean help women with an unwanted pregnancy and replied that she knew of one woman who went to a fofo 'to break it down'. This was taken to be an indirect reference to an abortion.

Lagi told a story of how her mother-in-law, an experienced fofo, had nearly been tricked into using massage to induce an abortion.

One of the ladies she came over to her and she explain what's happened to her. She had not been having any period, but she wanted to be fofo. And my mother-in-law asked her, 'are you pregnant?' and she said 'no, I'm not pregnant, I had a tablet'. And my mother-in-law feel her tummy and she's scared to do it. She told her, 'oh, you better go and see the doctor'. And she said, 'I already seen the doctor and the doctor said I'm not pregnant'. And my mother-in-law said, 'I can't do that to you, must be something in your stomach'. Because she feel it hard, like a baby. And you know what happening, she expecting this month'. Lagi went on to say that her mother-in-law was suspicious that the woman was 'trying to drop that one'.

Fifteen of the women in the study population (6%), were recorded on their hospital record, as having had a termination. Terminations were more common in their first pregnancy (40%) with
another third occurring in a second pregnancy. Two women had more than one termination. Pacific Island women have been shown to have high rates of abortion. In 1989 study of Wellington abortion patients, Pacific Island women had the highest abortion rate in all age groups (North 1989). This finding was consistent with earlier studies (Sceats 1985; ). The high rate found in 1989 was largely attributed to the high rate of Pacific Island women compared with other ethnic groups who had never used contraception. The number of Pacific Island women attending the Parkview Clinic was shown to have doubled during the 1980's and paralleled the growth of the Pacific Island population in Wellington. In contrast, over the comparable period, the number of European women attending the clinic declined (North, 1989).

Womens' Constructions Of Infertility

When conception did not occur as expected, getting pregnant took on a new meaning for the Samoan women interviewed. It became an event that had to be worked at and expert advice sought. In the process conception was no longer part of the private domain of the couple but moved to the more public domain of the Samoan or Western medical care systems. Six women spoke about the conception problems they had either with this or a previous pregnancy. All the women were married at the time and in their early to late twenties. As has been discussed earlier, both the Samoan and obstetric paradigms provide an aetiology of infertility and offer recommended forms of treatment. While all of the six women said they sought help from a Samoan fofo, only two of the women attended a medical practitioner. The six women were evenly divided between my three classifications of cultural orientation. Neither of the women who attended a medical practitioner was in the more Samoan oriented category, suggesting a greater willingness of women in this category to draw on the healing resources of the Samoan paradigm.

The six Samoan women all actively drew on Samoan and Western medical knowledge in order to achieve the goal of conception. The way in which they did this is best illustrated by three women who are drawn from each of my classificatory categories.
For Malia a thirty five year old woman classified as 'bicultural', this baby was her second child. Prior to having her children she had a 'white blouse' job in a government department. Malia appeared to operate comfortably in palagi culture as well as demonstrating a strong commitment to the fa'a Samoa. She insisted that her five year old son speak Samoan at home. "Samoan for home and English for school". She was also knowledgeable about Samoan medicine. She had been given this information on Samoan medicine after the birth of her first child by her mother when on a visit from Samoa. Her mother told her that now she had her own child she should know these things. In other words parenthood is a mark of adulthood. Malia revealed her willingness to draw from the knowledge base of both Samoan and Western medical paradigms in diagnosing and treating suspected sickness events. "If my kids are really sick, I took them to the doctor just to make sure they are alright, give them the medicine. But I use my own fofo, because I know how to do it".

This acceptance of the role of alternative medical paradigms is also evident in the way Malia sought help with difficulties in conceiving. Following admission to hospital with a second miscarriage she was diagnosed by the obstetric specialist as having large fibroids. It was recommended that she have surgery to remove them. Being unsure about the advisability of this proposed treatment she went to see a Samoan fofo who was married to a Tokelauan. Having examined her, the fofo confirmed the medical diagnosis, telling Malia that she could 'feel a tumour'. The fofo considered that she needed to have the 'tumour' removed by a doctor. Because Malia was afraid to return to the hospital staff the fofo suggested that Malia come with her to seek the advice of a doctor known to the Tokelauan people, as 'the Tokelauan doctor'. This doctor discussed her case with the specialists concerned and reassured Malia that the operation was likely to improve her chance of having a baby. Malia then decided to have the surgery.

She still needed to persuade her husband. He did not want her to have the operation because he was worried for her safety and was also, she said, unhappy about her being examined by male doctors.
For a year, Malia pleaded with him to give his consent. Finally, her desire for a child overcame her reluctance to act against her husband's wishes. She justified her action saying, "My husband doesn't agree, doesn't want me to do the operation. So I just sign all the forms and it's my own fault if anything goes wrong. 'cause I need a family too. I need a baby too". So Malia had the operation, and soon after became pregnant with her son.

This story illustrates the thesis that Samoans view the Samoan and Western medical paradigms as complementary rather than competitive systems (Kleinman 1980; Macpherson and Macpherson 1990). The fofo's willingness to refer Malia to a medical practitioner was undoubtedly framed by an understanding of her condition to be a 'ma'ipalagi' and thus best treated by a practitioner of that paradigm. This validation of diagnosis and treatment option by the fofo shaped the way in which Malia subsequently made her decision. Interestingly the fofo did not simply recommend that Malia return to the doctors at the hospital. Rather she turned to a 'trusted' medical practitioner, who was well known to the Tokelauan community of which she was a member by marriage. This was not however a case of open consultation between two practitioners the 'Tokelauan doctor' and the 'fofo'. The fofo did not reveal her role as an expert in requesting a consultation with the 'Tokelauan doctor' but rather framed her request as a member of the Tokelauan community seeking advice for her 'relation'. Although seeking the doctor's professional advice this was negotiated within the fofo's social network and embodied a set of existing social expectations and obligations understood and accepted by both parties.

From an initial unwillingness to accept the diagnosis and treatment proposed by the obstetric specialists, Malia shifted to a position where she accepted it to be her only hope of conception. This change illustrates the way in which social context impacts on the building of trust and confidence in social relationships. In facilitating this trust the fofo and the Tokelauan doctor assisted the woman in constructing a system of knowledge acceptable to her.
Fisaga whose migration story and my classification of her cultural orientation was described in Chapter Three, was a twenty-six year old more Samoan oriented woman having her third child. Like Malia, she was familiar with Samoan beliefs and practices related to health and sickness. Her mother had been a fa'atosaga and she was strongly oriented to the fa'a Samoa.

The way in which Fisaga responded to problems of conception illustrates Samoan attitudes to biological and social parenthood and the concept of family. These attitudes differ from those commonly held by palagi in New Zealand. Fisaga's concerns also reflect the expectation of most Samoans that marriage, whether legal or defacto, is followed shortly after by conception. Fisaga had already had a baby before she left Samoa. She was not married at that time, and her baby was adopted by a cousin. When the baby was two Fisaga came to New Zealand and a few years later married. When she did not conceive in the first year of marriage she and her husband were very concerned. In fact it took her three years to conceive. It did not take that long however for her and her husband to construct a family. They commenced parenting by 'adopting' her sister's son when he was nine months old. At the same time, Fisaga was treated by a fofo, a member of her church. Her belief that 'infertility' was caused by displacement of the to'ala after her first pregnancy and birth, was confirmed by the fofo. Fisaga described the treatment as, "she massaged my stomach and she tried to put it (to'ala) in the right way. She felt it lying down my leg... but she said to'ala should be lying on here (lower abdomen)". Unlike the deliberate attempts she made to get pregnant with her second child, getting pregnant with her current baby was straight forward.

Fisaga's self diagnosis, which was confirmed by the fofo was framed within a Samoan understanding of the cause of the infertility and a recognition that Samoan treatment was the appropriate and the best. The treatment was confirmed when she became pregnant. Both the fofo and Fisaga gave the same meaning to her failure to conceive. In addition, the fofo was known to Fisaga through her social network. It is not possible to say whether if the treatment had not been successful, Fisaga would
have drawn on Western sources of understanding. It is probable that given that she had already had a child in Samoa the focus of treatment would have shifted to the husband. Beginning a family did not however depend on a future conception. In the Samoan way adoption of the children of close family members is an acceptable way to overcome infertility or add to the size of one's family. Adoption occurs within the extended family and therefore involves both biological and social dimensions. In contrast, most adoptions by palagi parents are of offspring born into somebody else's family and adoption is therefore social rather than biological in character (Cameron 1990).

Tasia's story was different again. She was a thirty year old woman who was living with her husband and seven year old son. They had recently moved from Wellington to live in Porirua because they were able to get a Housing Corporation house. Though Tasia had a substantive family network in Wellington, her sisters, aunties and cousins lived in Newtown and surrounding suburbs. Between the birth of her first child and this baby she has worked full-time first as a machinist in a shoe factory and later as a cleaner. Tasia's attitudes and lifestyle suggested she fitted in my classification of 'less Samoan oriented'.

Like Fisaga, Tasia's problems with conception started after she had already had a child. Her first baby was stillborn at thirty two weeks and her second child, a son, was seven years old. When her son was a year old, he went to live with his paternal grandparents in Samoa. Tasia and her husband saw him once in those six years, during a visit to Samoa. Recently he has returned to live with his parents and attend school in New Zealand. Tasia however said that being separated from her son for that length of time was a painful experience.

Shortly after her son's return from Samoa Tasia and her husband decided to have another child. She had been taking the pill for six years. Her problems began she said after she ceased taking the pill in that she did not menstruate. This caused her confusion and concern. For the next nine months, she visited her doctor each month to check if she was pregnant. Not having a
period and not being pregnant are contradictory states for a woman. At the end of the nine month period, Tasia and her husband were so worried, that they went to a fofo for infertility treatment. Time would seem to take on a different meaning for women with perceived fertility problems who are 'trying' to get pregnant than for women who do not perceive they have such a problem and for whom pregnancy is just something that happens naturally. When Tasia went to the fofo she was told she was already pregnant! Two weeks later, she felt 'pregnancy symptoms' and went to a doctor for a pregnancy test, "to make sure".

Tasia's story differed from the other two women in a number of ways. The Samoan paradigm was not her primary reference point in diagnosing the cause of her infertility. However as her anxiety increased over the months and the obstetric paradigm failed to provide her with satisfactory explanations of her failure to menstruate and failure to conceive, she turned to the Samoan paradigm to provide meaning. Her ambivalence about the Samoan paradigm is seen in that she still sought medical confirmation of her fofo diagnosed pregnancy.

My own personal experience of Samoan treatment for infertility occurred following a discussion with a Samoan fofo who was the mother of one of the woman in the study. When she learnt of my own problems with conception she offered to examine me. The examination consisted of palpation of the lower abdomen. The examination revealed the cause of the problem to be displacement of the to'ala. A course of treatment was prescribed which included massage and a medicine to be taken twice daily. The fofo did not appear to consider her diagnosis and treatment would be any less correct because her client was not Samoan. She was aware that I had previously undergone medical treatment for infertility which had not been successful. Her main concern was that I not undergo any other treatments while being treated by her. Though she hoped she would be able to assist me to get pregnant, she warned me that this would not be easy at my age (at that time I was over forty). This willingness by Samoan fofo to provide their healing skills to non Samoan persons, was not restricted to this
fofo. A similar offer of assistance was made by another fofo during a similar conversation.

Graham in her study noted that when women consciously planned to get pregnant, the meaning of becoming pregnant was transformed if pregnancy did not occur within an expected time-frame. Then getting pregnant became "trying for a family", as opposed to "catching on" (Graham 1977, 87). A similar transformation is evident in the stories told by Malia, Fisaga and Tasia.

CONCLUSION

As the Macphersons have suggested, it is probable that some of the knowledge which Samoan fofo and other adults hold about conception has been borrowed from other bodies of knowledge including the Western medical paradigm. These borrowings however have subsequently become incorporated into the Samoan paradigm and validated as Samoan by grafting onto established diagnostic techniques and treatments. At the time of first contact with the introduced Western paradigm, Western understanding of the physiology of conception was also limited, while social mores of the time may have precluded detailed research on the topic.

While details of Samoan beliefs about conception are very sketchy it would seem that the Samoan paradigm recognises the relationship of sexual intercourse to pregnancy, that the menstrual cycle is marked by fertile peaks, that semen has a contributory role and that conception is dependent on the normality of both male and female sexual organs. Samoan women draw on this knowledge base both for controlling their own fertility and to facilitate conception.

The Samoan paradigm attributes the primary cause of infertility to the displacement of important organs related to reproduction and emphasises the importance of massage to ensure the proper location of these organs. It also recognises the existence of fertile and infertile periods during a woman's menstrual cycle. Fofo advise women to time sexual intercourse to match the fertile period.
In contrast to the obstetric paradigm, the frame of reference for most Samoan women was that getting pregnant was a normal and inevitable part of their sexual relationship. Pregnancy was 'just something that happened', whether the happening occurred in the context of an established conjugal relationship or not.

The attitudes of Samoan women to conception were similar to those reported of other women in that unless a woman had problems with conceiving, getting pregnant was seen as 'something which just happens' (Graham 1977). This emphasis on the essential normality of conception is in contrast to the orientation of the obstetric paradigm which is primarily interested in the abnormal and the pathological.

Unlike getting pregnant, control of fertility is not a socially natural and straightforward event. Successful fertility control requires a basic understanding by women of the process of conception and thus the function of contraception. It also involves a value system which accepts the right of women to control their reproduction, the existence of accessible methods of birth control, knowledge of those methods and for the use of some methods, the co-operation of her partner.

Though contraceptive use was not high amongst the Samoan women, it was higher then that reported in Samoa. The findings that contraceptive use was associated with age are however suggestive of a similar pattern of contraceptive use. Namely that contraception was primarily used to control the total number of children a woman had, once the desired family target size had been reached. To establish whether differences exist in the contraceptive behaviour of Samoan migrant women and women in Samoa, further research would be needed.

Gendered differences exist in attitudes to contraception among Samoans. Avoiding pregnancy was something that women had to work at, either by convincing their partner of the desirability of contraception or using it without his knowledge. Husbands were not always willing for their wives to use contraception and very few were prepared to use male contraceptives. The high rate of
terminations associated with lack of contraceptive use suggests that this is partly the outcome of those gendered differences.

Where a woman fitted in my typology of cultural orientation did not seem to explain how Samoan women constructed their understanding of their problems of infertility. Rather, women drew strategically on the different kinds of cultural resources available to them in seeking a solution to their infertility. These included Samoan understandings of infertility and treatment and social parenthood by adoption. In only a few cases was Western medical treatment also sought.

While most causes of infertility were considered to be more appropriately treated by Samoan medicine this was not the case with all the women. Some causes were considered to be better treated by Western trained doctors using operative techniques. Samoan fofo demonstrated by their willingness to treat me, that their diagnosis and treatment of infertility was not culture bound.
1. There is a suggestion of procreative symbolism in the combining of the prefix 'fua' meaning egg or fruit, with 'manava' which Pratt also gave as womb.

2. There is no record that Samoans had a precontact practice of treating the woman's menstrual blood as a pollutant, resulting in the woman being kept socially isolated or restricted in her movements during menstruation.

3. There seems some evidence of changes in naming practice, when Pratt is compared with Allerdice's modern Samoan dictionary. Pratt gives as the word for baby, either tama meamea, or teine meamea depending on sex. Modern usage gives tamameamea or pepe, which would seem to be an adaptation of baby).

4. The use of massage in diagnosis and treatment of infertility is also reported by the Macphersons.

5. This belief is also reported to be held by the Yoruba of Nigeria, in that coitus was prohibited during lactation on the grounds that coitus poisons the mother's milk (Mead and Newton 1967, 179).

6. These statements are unchanged in Llewellyn-Jones, 5th edition published in 1990.

7. While there are many terms in English to describe infertility in the women such as 'a barren woman', there are fewer terms to describe infertility in the male.

8. This orientation was still evident in the post Second World War period, when Parliament appointed 'the Dominion Population Committee to "Consider ways and means of increasing the population of the Dominion" (Facer 1973, 6).


11. This may be an under reporting of other contraceptive use among the study population as there was a lack of standardisation in the recording of information.

12. Similarly a 1973 study of contraceptive practices among Samoan women living in Hawaii, found that a higher proportion (53%) of women used contraception (Clark 1978).
13. The term 'infertility' as used in this context refers to a temporary inability to conceive rather than a more permanent state of affairs. All the women who spoke about their 'infertility', had subsequently by their participation in the study, conceived and given birth to a live infant.

14. Malia told a story which demonstrated the conflict which can arise, when symptoms defined by one paradigm as 'sickness', are not so defined by another paradigm. When her new baby was less than a month old, she sought medical help because she was concerned that her baby was sick, only to be told that there was nothing wrong with her baby. Malia was concerned that the baby was in danger of choking, as she was very mucousy, particularly after being fed. She attributed the cause to inadequate removal of mucous at birth. Other women also spoke of this symptom as a problem which should be treated. Her sister suggested that the baby might have a ma'i Samoa, but Malia was convinced the condition was, in her view, amenable to treatment by palagi medicine. She persisted in her attempts to get medical treatment for her baby and finally the baby was given antibiotics for a 'cold'. The disappearance of the symptoms reassured Malia that her diagnosis and the treatment had been appropriate.

15. This difference in attitude as to what constitutes a 'proper family' in Palagi culture is one which I have personal experience. Our 'adoption' of our Tongan daughter which occurred when she was in her early twenties, is accepted without question by Tongan and Samoan friends, but caused great confusion to some of our natural family and friends.

16. A person who has already had children is considered by Samoan fofo to be fertile and attention is focused on the other partner, in this case the husband (Macpherson and Macpherson 1990, 184).

17. This story illustrates another difference between concepts of parenting and child care between Samoan and palagi cultures. The temporary or permanent adoption of a child, often the first child by grandparents would seem to be a relatively common practice among Samoans.

18. The two would seem mutually exclusive, given that for most women the absence of menstruation is strong evidence of pregnancy.

19. Until relatively recent times, the capacity of the obstetric paradigm to diagnose the cause of and treat infertility was limited to general lifestyle advice, advice to increase sexual activity around ovulation and some surgical procedures of a largely mechanical nature performed on women to clear blockages of the reproductive passages.
20. Macpherson notes that most Samoan treatment for infertility focuses on women and suggests that this may be because men may have fathered a child before marriage and use this to demonstrate their fertility. Such a claim is not as socially acceptable for women. In the obstetric paradigm the nature of most fertility treatment is female centred, despite reported estimates that in 50% of infertile couples it is the male who is infertile.
Chapter Five
FROM CONCEPTION TO PREGNANCY

INTRODUCTION

There is an uncertain linkage between the physiological event of conception and its social recognition as pregnancy. The physiological signs and symptoms of pregnancy such as cessation of menstruation, breast changes, enlargement of the abdomen and digestive disturbances are universally recognised as indications of pregnancy. However, the relative emphasis given to any or all of these indicators varies both between cultures and between experts and women within cultures. Pregnancy is not only a physiological process but also as will be shown in this chapter a socially constructed phenomenon. This is reflected in the different ways in which the Samoan and obstetric paradigms and Samoan women diagnose and measure pregnancy and define whose is the expert or authoritative voice.

In this chapter, the ways in which Samoan fofo, obstetric practitioners and Samoan women make the link between the physiological event of conception and its social recognition as pregnancy, are juxtaposed and similarities and differences identified. The chapter begins by drawing on both Samoan informants and written sources in describing the techniques used by Samoan fofo in diagnosing pregnancy. The obstetric view and that of women as to what constitutes reliable indicators of pregnancy and the different and similar approaches women and doctors use are discussed in separate sections. Features of the medical construction of pregnancy explored include the impact of new obstetric technology on both doctors and women. The chapter also explores and illustrates areas of tension between women and doctors in terms of who-is-the-expert?

SAMOAN PARADIGM

In establishing whether a woman is pregnant or not, a fofo interprets the symptoms reported by the woman and the signs which her own clinical examination reveals. The most reliable symptom
is said to be cessation of menstruation. Fofo are also recorded as recognizing other symptoms such as morning sickness, ma'iafuafua; giddiness, 'ulu niniva; vomiting, 'puai; and loss of interest in food, which seems to lose its flavour, 'e le toe manogi ni mea'ai' as indicators of pregnancy (Macpherson and Macpherson 1990, 185).

In addition to listening to what women say, a Samoan fa'atosaga (midwife) will look for certain signs which will confirm the pregnancy. The techniques she uses involve observation of the woman, and external examination of the abdomen. Many fofo are reported to be skilled at noting early changes in size and density of the pregnant uterus by external palpation (Macpherson and Macpherson 1990, 185). Kinloch reports that, "using massage an experienced fa'atosaga can feel the slightest change in the mass of the uterus, the increased mass she identifies as the placenta". The clinical skills of many fa'atosaga are said to be such that they are able not only to locate the non pregnant uterus during palpation but to recognize the presence of a foreign body such as an IUD (Kinloch 1985c, 12-15).

Fofo are also reported to be able to distinguish between the symptoms of 'true' and 'false' pregnancy. Olana, one of the Samoan women interviewed, who was herself knowledgeable about and interested in Samoan healing, recalled some of the experiences she had been told about by her fofo. One story was about a woman who thought she was pregnant, because she had a swollen stomach. However when the fofo examined her she found that the woman was not pregnant but that her stomach was full of air. The problem the fofo concluded was that the 'to'ala' was displaced. The fofo treated the woman with massage and the swelling disappeared. The fofo told of another woman who also thought she was pregnant, because she still had not had a period five months after birth. The lack of menstruation was attributed to a failure to get rid of the 'bad blood' associated with postnatal bleeding, thus preventing the 'good blood' that is normal menstruation from occurring. This condition was also successfully treated by massage. Though Samoans use the polite form of the word for blood 'palapala' when referring to menstrual blood instead of the more...
common term 'toto', this as the Macphersons note is a social rather than physiological distinction (Macpherson and Macpherson 1990, 185).

It is probable that in the past the majority of women in Samoa would have relied on self diagnosis of pregnancy and/or confirmation from members of in (Kleinman's typology) 'the popular health sector'. Discussing one's suspicions of pregnancy with other experienced women continues to be a method women use in confirming a diagnosis of pregnancy. Going to the fofo for diagnosis or confirmation of pregnancy or an early visit to the doctor, is more likely to occur when there is anxiety about conception. This anxiety may be the desire to have a long awaited conception confirmed by the experts as soon as possible as was shown in the previous chapter. On the other hand it may also reflect a wish to be reassured that a woman is not pregnant. Some women are likely to go to the fofo with symptoms which for one reason or another, they have not associated as those of pregnancy. In these cases a diagnosis of pregnancy is likely to come as a surprise.

**OBSTETRIC PARADIGM**

Early diagnosis is an important feature of the medical construction of pregnancy. All the obstetric text books reviewed had a chapter devoted to the signs and symptoms of pregnancy. One of the things most of the texts reviewed had in common, was that pregnancy indicators were ranked from the least to the most reliable. All the texts distinguished between women reported indicators, doctor observed indicators and laboratory and other tests. Woman reported indicators are defined as symptoms, subjective observations or presumptive evidence of pregnancy. Doctor observed indicators and laboratory tests, are called signs, objective observations or probable or positive evidence of pregnancy.

In order to establish the relative weight which doctors give to symptoms, signs and tests, in order to a diagnose pregnancy, the relevant chapter of the obstetric texts listed in Table 5.1 was
analysed. The following method was used. The content of the chapter on 'Diagnosis of Pregnancy' was analysed by use of a coding frame, in which the number of lines devoted to discussion of women's symptoms, the signs a doctor uncovered or the tests described were counted. The number of symptoms, signs and tests referred to in the chapter were also counted.

As can be seen from Table 5.1, all texts with the exception of Turnbull and Chamberlain (1989), gave greater space to elaborating signs and tests than to discussion of the symptoms described by women. This suggests that writers of obstetric texts considered that doctor observed indicators and laboratory tests were more reliable than woman reported indicators.

Even though the Turnbull and Chamberlain text was differently oriented and gave greater emphasis to describing women's symptoms than other texts, the ratio of symptoms to test lines, changed much less than the ratio of symptoms to signs. The greater role accorded to women's symptoms in this text reflected an explicit approach by the authors to present "the views of mothers themselves on their care in labour" (Turnbull and Chamberlain 1989).
Table 5.1
Obstetric Texts Reviewed

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Symptoms Lines No.</th>
<th>Signs Lines No.</th>
<th>Tests Lines No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reid, Ryan &amp; Benirschke</td>
<td>1972</td>
<td>19 6</td>
<td>27 5</td>
<td>22 2</td>
</tr>
<tr>
<td>Niswander</td>
<td>1981</td>
<td>68 7</td>
<td>96 9</td>
<td>93 3</td>
</tr>
<tr>
<td>Green</td>
<td>1983</td>
<td>24 7</td>
<td>48 6</td>
<td>43 3</td>
</tr>
<tr>
<td>Llewellyn-Jones</td>
<td>1986</td>
<td>29 4</td>
<td>66 6</td>
<td>65 5</td>
</tr>
<tr>
<td>Beischer &amp; Mackay</td>
<td>1986</td>
<td>9 6</td>
<td>40 4</td>
<td>125 7</td>
</tr>
<tr>
<td>Turnbull &amp; Chamberlain</td>
<td>1989</td>
<td>80 8</td>
<td>53 4</td>
<td>217 3</td>
</tr>
</tbody>
</table>

Evaluating Symptoms of Pregnancy

A large number of symptoms were identified in the texts as being potentially indicative of pregnancy. The most common symptoms considered to be suggestive of early pregnancy were amenorrhoea (absence of menstruation), breast changes, nausea and vomiting. Authors differed not only in the relative emphasis they gave to particular symptoms, but also as to whether a particular symptom was common or not to pregnancy. An example of this was the symptom of fatigue. While Niswander (1981, 46) described this as a 'universal symptom' and a well kept medical secret "not ordinarily part of the folklore of pregnancy", Turnbull and Chamberlain (1989, 220) considered it is experienced by only 'a few women'.
None of the symptoms identified were considered on their own to provide sufficient evidence of pregnancy, in that all could be indicative of a pathological state. The absence of a menstrual period is an example of this. On the one hand amenorrhoea is normal in that it is understood to be an obvious and expected symptom of pregnancy. On the other hand, amenorrhoea is abnormal and indicative of an underlying physical or psychological pathology. Amenorrhoea in a sexually active woman of reproductive age, is considered to be evidence of pregnancy until it is proved otherwise. It is suggestive of but not confirmation of pregnancy.

Amenorrhoea in the absence of pregnancy is understood within the obstetric paradigm to have both physical and psychological causes. In most of the texts, 'false pregnancies' were considered to be more commonly psychological in derivation. The absence of the menstrual period in the non pregnant woman where there is no identifiable physical disease, is medically labelled as psycho-genic amenorrhea' or 'pseudocyesis'. That obstetricians and gynaecologists consider the psyche as well as the physiology of women to be within their legitimate field of experience, is exemplified in the following extracts. 'False pregnancy' is understood in this context to result from an overwhelming desire on the part of a particular woman either to conceive or to avoid conception.

The most common cause for a lack of menses in the absence of pregnancy is psychogenic amenorrhea, a symptom seen frequently in the patient who either wants very badly to become pregnant or who is afraid of becoming pregnant (Niswander 1981, 45).

Emotional disturbances, such as the intense desire for pregnancy, fear of losing a husband or lover, or desire to achieve parity with other women, can cause stimulation of the hypothalamus and the release of gonadotrophic hormones... Indeed, on physical examination, the patient appears to be pregnant, with the exception that the uterus is not enlarged. (Llewellyn-Jones 1986, 58).
Usually the patient is a woman whose marriage has been infertile for many years, or rarely a single woman with a 'troublesome conscience'. A classical example of this condition was seen in Mary Tudor following her marriage in 1552 to Phillip II of Spain; it is an interesting speculation that reaction to the disappointment of her ardent desire for a child may have helped to earn her the nick-name 'Bloody Mary' (Green 1983, 55).

Doctor observed indications of pregnancy

Changes observed in the uterus, cervix and vagina are considered to be the most useful evidence of early pregnancy, though again the evidence is considered presumptive not positive. These include changes in the size of the uterus, and the feel and colour of the cervix and vagina. Such changes are not readily viewed by the woman herself. A wide range of clinical examinations which doctors use or have commonly used in making a diagnosis of pregnancy, are described in the texts. Most texts considered doctor observed indications to be more reliable than woman reported symptoms.

Not all clinical examinations used in the past to diagnose pregnancy were still in vogue. Some have been discarded because they are now considered to be harmful to the fetus and/or mother. An example of this is 'Hegar's sign', (a softening of the lower part of the uterus), which was described in earlier texts as 'the most useful' physical sign of pregnancy (Reid 1972). Twenty years later this practice is actively discouraged.

"There is no merit in attempting to assess uterine softness by Hegar's sign. Reference to this may be found in old textbooks". In order to detect this sign, firm pressure must be used by the examining fingers on the abdomen and in the vagina; if a miscarriage occurs after this, the vaginal examination would be considered to be responsible. Those who used to use this examination claimed Hegar's sign was present in about 60% of pregnant women by 8 weeks of gestation; the method is not recommended (Turnbull and Chamberlain 1989, 220).
Neither those advocating the use of this examination as a means of confirming pregnancy nor those criticising it refer to research based evidence for their conclusions. Obstetricians themselves acknowledge that much obstetric practice is clinically rather than scientifically based. (Llewellyn-Jones 1986) As in many other branches of medicine there have been few randomly controlled trials to evaluate the effectiveness, safety and acceptability of different diagnostic methods.

Obstetric knowledge is cumulative, based on clinical experience and able to be transferred from one generation of practitioner to the next. Much obstetric practice is characterised by continuity rather than change. This is reflected in the finding that all four texts published in the 1980's, while they did not advocate examining the woman for evidence of Hegar's sign (largely displaced by the availability of pregnancy tests) continued to list it as a probable sign of pregnancy. None of the texts indicated there were any dangers in its use. Rather the sign continued to be described as the earliest physical indication of pregnancy.

Pregnancy Tests

Pregnancy tests have played an increasingly important role in the medical diagnosis of pregnancy. The diagnostic tools available to the obstetric practitioner in the 1990's are significantly different to those available in the 1970's. As can be seen in Table 1, the amount of space devoted to discussion of laboratory and other tests has increased in comparison to what woman say and to what doctors observe. Confirmation of pregnancy is no longer reliant on the clinical skills of the doctor, but on the skills of the technician in the laboratory.

Obstetricians recognise that clinically based diagnoses of pregnancy empowers the clinician over and above both the patient and the laboratory. The case for retention of clinical control of pregnancy diagnosis is made on the basis of the superiority of clinical over technological capacities. These are exemplified in the following extracts.
Further the biologic test for pregnancy has diagnostic limitations and pitfalls. The test can be both falsely negative and falsely positive and altogether too much reliance is placed on it in the diagnosis of pregnancy. Rather than rely on a laboratory test to exclude or diagnose pregnancy, as already suggested the physician should examine the patient at frequent intervals until he is convinced the patient is pregnant and that the pregnancy is normal, or that the situation demands further investigation (Reid 1972, 407).

.. in the West, it is becoming an increasingly commonly held belief that every normal woman should have a pregnancy test as soon as she thinks she is pregnant. This is usually unnecessary and is grossly expensive on resources. Pressure to test should be resisted if there is any limitation of funding for other more essential services (Turnbull and Chamberlain 1989, 223).

**OBSTETRIC TIMETABLES**

Timetables, it has been argued, are basic to the medical management of birth (Rothman 1982, 255). The obstetric paradigm places a great deal of emphasis on accurate identification of the commencement of pregnancy in order to monitor the end point of pregnancy - birth. Calculation of the estimated date of delivery has been traditionally calculated from the date of a woman's last menstrual period. Despite the introduction of modern technologies such as scanning, establishing the date of the last menstrual period remains the initial basis for a medical estimation of the date of birth. Two clinical rules or measures are described in the obstetric texts.

In the first known as Haase's rule, the doctor adds seven or ten days to the first day of the last period and then counts forward nine months (Green 1983, 55). This assumes an average duration of pregnancy of forty weeks from the last period, or thirty eight weeks from conception.
The second measure known as Naegele's rule also assumes a mean length of pregnancy of about two hundred and eighty days, or forty weeks, counting from the first day of the last menstrual period. Using this measure, the doctor first adds seven days to the date of the last menstrual period and then subtracts three months.

The obstetric paradigm recognises that the predictive capacity of these measures has limitations in that only 5% of women will give birth on the due date. However about two thirds of women are said to give birth ten days of either side of this date. There is some evidence that the socio-economic status of the women may affect the gestational interval. Black American women have been shown to have a shorter mean gestational age than other American women. This it is suggested is more likely to be a factor of socio-economic differences in the populations rather than a racial difference (Niswander 1981, 43-44).

Ultrasound has largely replaced radiology in the medical imaging of the fetus. For many obstetricians ultrasound has become an integral part of pregnancy diagnosis in that it can be used to detect pregnancy at a very early stage; decide the duration of pregnancy with a fair degree of accuracy (ie about 10% error); diagnose multiple pregnancy and some fetal abnormalities. Prior to the introduction of ultrasound, doctors were reliant on their own clinical assessment and a woman's recall of the date of her last menstrual period.

Ultrasound is becoming routinely used by some obstetricians to examine all pregnant women between the 12th and 20th week of pregnancy (Llewellyn-Jones 1986, 57). This would also seem to be the case in contemporary New Zealand. A recent study conducted in Dunedin found that 74% of all pregnant women registered at two hospitals during one calendar year had one or more scans (Buckenham, Spears et al 1991, 117).

One of the arguments which obstetricians who favour routine early scans make is that "information obtained by calculating dates based upon the patient's recollection of her last menstrual period is highly inaccurate as are estimates made by
obstetricians on the basis of their examinations" (Scott 1980, 277). Others however hold the opposite view considering that the date of the last menstrual period is "in general more reliable than clinical or ancillary methods in estimating maturity" (Green 1983, 55).

Unlike pregnancy testing which is done by others, ultrasound is able to be done by the obstetrician, if he/she has special training. It thus further empowers those obstetricians who practice it over and above the woman. It has been described as "an extension of the obstetrician's clinical skills - somewhat like the role of the stethoscope for the cardiologist" (Scott 1980, 277).

Ultrasound has also been portrayed as a medium for facilitating the 'bonding' of mother and baby. It is suggested that a woman who is exposed to early images, will have more positive feelings about her baby at birth. Women do not wait until birth to feel an attachment to their baby. This attachment begins during pregnancy. Holding the baby at birth is not the first tactile sensation women have in relation to their baby. Women 'feel' the baby inside their body (Rothman 1988).

Not all obstetricians are happy that ultrasonic diagnosis has become so incorporated into the diagnostic armoury of obstetrics, as is exemplified in this extract.

The wide use of sophisticated ultrasonic equipment, all-too-often preceded by a biological pregnancy test, seems to have relieved the obstetrician of the effort of making a clinical diagnosis of pregnancy and its duration. Despite its convenience and undoubted overall accuracy, it is a very expensive method of diagnosis (Green 1983, 52).

While Scott (1980, 277) warns that "very expensively acquired clinical acumen may be allowed to atrophy by reliance on even more expensive ultrasound scanning". Although more accurate dating of pregnancy is said to be obtained from a scan than that based on reported dates or clinical observations, there is less
consensus as to whether this knowledge changes fetal outcome. (Bakketeig et al 1984, 207)

Others argue that there is insufficient evidence that ultrasound does not have long-term iatrogenic effects and point to the use of other technologies in obstetrics such as x-ray which have subsequently been shown to have detrimental effects on the developing fetus (Meire et al 1978).

The meaning of pregnancy time for women has been shown to differ from that of the obstetric paradigm. Women structure pregnancy on the basis of menstrual time that is in groupings of months. In contrast, the obstetric paradigm conceptualises pregnancy in terms of weeks. That the demands of modern obstetric technology can force women to re-conceptualise pregnancy time was demonstrated by Rothman (1988) by comparing women who had an amniocentesis with those who did not. Women who had an amniocentesis restructured their understanding of pregnancy time into weeks to fit in with obstetric understandings, while those women who refused amniocentesis continued to structure pregnancy time in terms of months.

Studies which have examined the interaction of woman and their doctors during antenatal encounters have documented the potential for conflict between women and their doctors over the question of dates (Oakley 1980; Comaroff 1977). In these studies, doctors frequently questioned the accuracy of the date of a woman's last menstrual period. This was an area of potential conflict, as some women would attempt to negotiate with their doctor in order to get their view accepted. Doctors frequently did not see this as a negotiable subject (Graham and Oakley 1981, 61).

That doctors question women's reliability in recalling the date of their last menstrual period is illustrated by these comments made by obstetricians about three of the Samoan women in the Wellington study.
Ola was having her second child after a gap of ten years. In a letter to her general practitioner the specialist notes, "on this occasion, her dates are surprisingly certain".

A young Samoan woman was referred to the Wellington Women's clinic at Kenepuru Maternity Hospital as her doctor did not do maternity work. In a letter to the referring general practitioner the specialist wrote, "how nice it is to get a pleasant Samoan girl, pleased to be pregnant and actually knowing her last menstrual period".

Panesa's recall of the date of her last menstrual period would have meant the birth would have been expected on the 28th May. As the general practitioner was concerned that the baby might be small, he referred her to a specialist who questioned the accuracy of Panesa's dates. The specialist considered that in his clinical view, "the uterus is more consistent with being at the end of June rather than end of May and I think this smallness is a dates problem". In fact the baby was born one week later than the original estimate and weighed a healthy 4kg.

**COMPARISON OF SAMOAN AND WESTERN MEDICAL PARADIGMS**

Greater reliability is accorded doctor observed signs and laboratory and technological tests. Women are not usually seen as equal diagnosticians. The medical 'expert' rather than the 'lay' pregnant woman is the principal diagnostician.

The Samoan fofo relies on her clinical judgement and skills to confirm a pregnancy. Unlike many Western medical practitioners, because her hands and her eyes are her only tools she retains control over the diagnostic process. As has been shown, many doctors place greater reliance on the findings of laboratory or ultrasound examinations than their own clinical judgement. However like the doctor the fofo is in control vis a vis the woman.

Both the Samoan and obstetric paradigms recognise that symptoms and signs of pregnancy can occur without a woman being pregnant.
In explaining such a phenomenon practitioners of each paradigm draw on what is central to their understandings of a woman's body form and function. The Samoan paradigm frames its explanation within an ethnoanatomy in which the to'ala occupies the central role. The obstetric paradigm on the other hand explains those pregnancies which do not appear to have a physical pathology in terms of woman's psychological need to reproduce.

**WOMEN'S CONSTRUCTIONS OF PREGNANCY**

As is seen in Table 5.2, three themes were identified from the interviews. When asked what made them first suspect they were pregnant, the largest group of women gave the absence of a period, the second group gave sickness symptoms and other changes only, while the smallest group gave a combination of lack of a period and sickness symptoms.

<table>
<thead>
<tr>
<th>Lack of period only</th>
<th>Sickness symptoms only</th>
<th>Combination</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>43%</td>
<td>32%</td>
<td>24%</td>
<td>37</td>
</tr>
<tr>
<td>16</td>
<td>12</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

**Missing a Period**

Missing a period was the commonest single symptom which women said they were aware of and constituted part of the diagnosis of the majority of the women. The ordering of symptoms differed. Some women gave the absence of a period first, others as an addition to other symptoms while some others gave lack of a period only after prompting by the interviewer. That some women did not give or appear to consider lack of a period as the prime symptom may have been because women assumed this was a 'taken for granted' symptom between interviewer and respondent. On the other hand it could suggest that for some monitoring the monthly cycle did not rate as highly in their consciousness.
Women who gave missing a period as the first thing that made them suspect they were pregnant did seem to be very aware of their menstrual cycle. When Isalei who was having her first baby was asked what made her first suspect she was pregnant she said, "oh, I didn't get my period for two months and I started getting suspicious". Being suspicious, was part of the diagnostic process which women engaged in to decide whether they were or were not pregnant.

Leuma who had already had a child in Samoa in another relationship suspected she was pregnant when she missed a period because, "I never missed a period".

Breaking the rhythm of the month was also a marked feature of how the women in Oakley's study who were having first babies suspected they were pregnant. As one of the woman said in describing how she knew she was pregnant, "I'm so regular, it's ridiculous. I know that it's going to be about six o'clock in the evening. It's so funny, because at seven o'clock my husband said: oh, you're pregnant, then?" (Oakley 1981a, 27).

**Sickness Symptoms and Other Changes**

Feelings of nausea and vomiting were amongst the next most common symptom which women associated with pregnancy. For some women this, rather than an awareness of a missed period, seemed to be the trigger that made them suspect they were pregnant. Some women such as Saua who was having her first baby, labelled their sickness symptoms as 'morning sickness'.

But most women such as Uila who was having her second child, did not give her symptoms a particular label saying she knew she was pregnant, "when I found that I didn't want to eat anything. I vomited a lot and my head throbbed".

Other women such as Telesia who was having her second child had a craving for food that they normally disliked. The first thing that made Telesia suspect she was pregnant was, "I craved for onions - fried onions".
For the remaining 24% of the women, suspecting or knowing they were pregnant came from the association of a number of symptoms.

Rosa, who already had three children, had no problems diagnosing her own pregnancy. "It is very easy for me to know I am pregnant, because the first month without my period and I feel so tired and from the first month I am always vomiting a lot, till four or five months".

Similarly Pua who had her fourth child, when asked what was the first thing that made her realise she was pregnant, replied. "Sort of nausea and I feel sick and another thing, I realised I've sort of missed my period".

Changes in sexual feelings were mentioned by a few women as suggestive of pregnancy in combination with other symptoms. Some women both continued to dislike and avoid sex while they were pregnant and this was frequently accompanied by an aversion to the smell of their husband, a phenomenon which will be discussed in a later chapter. Olana, who was having her second child after a gap of six years, said she suspected she was pregnant when "I got funny feeling, get sleepy, period stopped and I start not liking (sexually) my husband".

The changes which are happening in early pregnancy were quickly identified and interpreted by some women as symptoms of pregnancy. Leafa was sure she was pregnant before she had missed a period, as this exchange in the interview reveals. When Leafa was asked why she was so sure she was pregnant she said, "because when I had my last period at the end of August, September is not finished, but I can feel myself, you know, I am pregnant". Interviewer, "Did you feel sick?" Leafa,
What I mean is that I feel different and every time my husband, you know for example he was eating something and that thing usually I am crazy about it, but I was getting up and told him to take it away from me. Then I say I feel different. I think I'm pregnant. And when it come to October and I still have not had my period, by then I was really sure.

Factors Involved in Self-diagnosis

Previous Experience

As can be seen from Table 5.3 most of the Samoan women gave lack of a period as the primary symptom which made them suspect they might be pregnant.

Table 5.3
Pregnancy Diagnoses and First Baby

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Parity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of period</td>
<td>5</td>
</tr>
<tr>
<td>Sickness symptoms</td>
<td>3</td>
</tr>
<tr>
<td>Combination</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
</tr>
</tbody>
</table>

Evaluation Process

In making a pregnancy diagnosis, women weighed up and evaluated symptoms they were experiencing either against previous experiences or against what they considered was their normal non-pregnant state of being. Sometimes it was others, usually family members who drew the woman's attention to the symptoms as being representative of pregnancy. Either because they themselves, often other women in the family, had similar symptoms, or because the particular pattern was observed in a woman's previous
pregnancy. Sometimes the woman herself made the connection after talking with other women in the family. Husbands sometimes suggested that their wife might be pregnant as they were acting in a similar way to that during an earlier pregnancy.

Alisa's story illustrates how, for some women, particularly when this was their first experience of pregnancy, bringing all of the felt symptoms into a pattern was a gradual process. Recognition of pregnancy emerged out of negotiations with others. When Alisa was asked how she found out she was pregnant, she said "Mm, I didn't know I was pregnant, but it's just that every time I eat a lot. And then my cousin said that, ('cause I was staying with my aunty), 'gee you're getting fat'". This comment coupled with her change in eating habits prompted Alisa to ask another cousin who had been pregnant how she knew when she was pregnant. This cousin told her that she started to eat a lot. Alisa weighed up this information against her own change in eating behaviour saying, "I kept eating fruit. And my cousin said to me, 'gee your'e eating a lot. So I decided I was carrying. And I missed three periods". In Alisa's case the three missed periods were not sufficient evidence for a self diagnosis of pregnancy. But once she had made sense of other changes which were occurring like eating a lot and putting on weight, missed periods were given meaning.

Self diagnosis was also a cumulative process, as Lemapu's story illustrates. Lemapu, a first-time mother, said that she knew she was pregnant when she fainted at work, because she had already felt a funny change in her body and she'd lost her appetite. Because she had always had a good appetite and been very healthy she concluded that this change in health status was because she was pregnant.

Making a self diagnosis of pregnancy is more difficult if prior expectations of what constitutes 'being pregnant' is not matched by actual experience. This is illustrated by Melaia's story of how she tested her suspicions that she was pregnant on her sister. She told her sister, "I've got a funny feeling I'm pregnant. And she goes, 'how come?' And I said, 'I've missed my
period, but I don't have any morning sickness' (laughs). It was hard for her to notice too, because I was up and around... still going to discos... still norm then”.

Some women did not associate the symptoms they were experiencing with being pregnant and went to see the doctor because of sickness symptoms. The two women who were taken by surprise to find they were pregnant were older women who had a number of children. Both of the women found out they were pregnant as a result of a visit to the doctor for general symptoms of malaise and tiredness which were described as having the 'flu'. Both of the women had irregular periods and unlike other pregnancies had not experienced morning sickness with the current pregnancy. It is perhaps women like this on whom Niswander (1981) based his general assertion that fatigue often goes unrecognised as a symptom of pregnancy.

Table 5.4
Pregnancy Diagnosis Among Women in Oakley Study

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missed period</td>
<td>62</td>
</tr>
<tr>
<td>Nausea and/or vomiting</td>
<td>12</td>
</tr>
<tr>
<td>Sore breasts</td>
<td>9</td>
</tr>
<tr>
<td>Light period</td>
<td>5</td>
</tr>
<tr>
<td>'Felt pregnant'</td>
<td>3</td>
</tr>
<tr>
<td>Frequent urination</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>~6</td>
</tr>
</tbody>
</table>

While the first-time mothers interviewed by Oakley (1980) gave rather more emphasis to the absence of a period as the clue that they were pregnant, both Samoan (Table 5.3) and English women (Table 5.4) considered this was the most important diagnostic factor. Menstruation for all women is a marker around which time becomes organised. Menstrual time is cyclical. The time after one menstrual period, is also the time which precedes the beginning of the next menstrual period. For a woman whose life has been
characterised by the regularity of this cycle, not to have a period is a change in her perception of time.

This sense of awareness of change in menstrual time affects women whether this is their first pregnancy or not. Being aware of the absence of a period and linking it to pregnancy did not always occur immediately. A woman may attribute not having a period initially to causes other than pregnancy. This sense of feeling different was also spoken of by some of the women interviewed by Oakley. As one woman put it

I just knew I was pregnant... I thought there was something different. In fact I knew before I was on holiday, I knew there was something different, but I couldn't pin it down to my period or my bust increasing, I just knew that something different was happening (Oakley 1981a, 28).

Physiological changes which are occurring during early pregnancy are immensely complex. Equally complex is the process by which women interpret and evaluate the symptoms they are experiencing in making a self diagnosis of pregnancy. This involves not only awareness of change in menstrual time, but evaluation of the significance of other symptoms. In constructing a diagnosis of pregnancy on the basis of the selection and evaluation of discrete bodily changes, women would seem to be involved in a diagnostic process every bit as complex as the obstetrician who examines a woman's uterus or breasts for changes in colour, size and texture.

**WOMENS' CONSTRUCTIONS OF PREGNANCY**

Thirty four of the fifty Samoan women interviewed spoke about whether or not they felt the need to obtain confirmation of pregnancy from expert others. Twenty four of these women said they did seek expert confirmation from others, mostly their doctor. Two women visited a fofo for diagnosis of pregnancy and one of these women sought further confirmation from her doctor.
Samoan women were not shown to be unreliable reporters of the date of their last menstrual period. As can be seen in Table 5.5, the majority of the Samoan women in the total study population were aware of the month of their last period.

Table 5.5
Knowledge of Date of Last Menstrual Period

<table>
<thead>
<tr>
<th>Date and Month</th>
<th>Month only</th>
<th>Unsure of Month</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>47%</td>
<td>42%</td>
<td>11%</td>
<td>248</td>
</tr>
<tr>
<td>(116)</td>
<td>(105)</td>
<td>(27)</td>
<td></td>
</tr>
</tbody>
</table>

It was expected that a previous experience of pregnancy would mean that a woman would be less likely to feel the need to consult an expert or others to have a pregnancy confirmed. As can be seen in Table 5.6 a much larger proportion of women in having a first baby sought confirmation of their pregnancy. Thus while there was little difference in the kind of symptoms reported by women on the basis of parity, previous pregnancy experience did seem to influence a woman's confidence in her own diagnostic capacity. Confidence in her own diagnostic capacity tended to mean that women made their first visit to the doctor later in their pregnancy.

Table 5.6
Parity by Need for Confirmation of Pregnancy

<table>
<thead>
<tr>
<th></th>
<th>PO %</th>
<th>P1+ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>24</td>
</tr>
</tbody>
</table>
Confident In Own Diagnosis Of Pregnancy

Women who did not go to an expert for confirmation of pregnancy did so because they were very sure in their own mind that they were pregnant. Going to see the doctor therefore had a different meaning for these women.

Leata who went to the doctor when she was about four months pregnant said firmly. "I realise it (being pregnant) when I miss my period. I knew it and was sure of it".

By the time Uila went to the doctor she was sure she was pregnant. "I knew even before I went to see him that I was pregnant. I don't normally see the doctor, until after my second or third month".

Leafa was having her third child and like the other two women felt confident in her own diagnostic capacities. She did not however feel so confident with her first two pregnancies. With her first pregnancies Leafa said, "I had to go and see the doctor to find out if it is sure or not. But with this one I really sure I am pregnant and my husband keep on forcing me to go and see the doctor".

Though a previous experience undoubtedly helped in giving a woman's confidence in her own diagnostic abilities, not all the woman who self diagnosed without the need of confirmation had previous experience. Nana who was having her first baby suspected she was pregnant when she missed a period, although she did not have any other symptoms. When asked whether she needed a doctor's confirmation she replied, "I waited till my next period and when I missed that too, I was sure then that I was pregnant, especially when the third month came and nothing happened again".

Women Who Needed Confirmation

For those Samoan women who said they needed confirmation of pregnancy, going to see the doctor for confirmation of pregnancy
was synonymous with taking a pregnancy test. When women were asked to describe what happened when they went to the doctor to establish whether they were pregnant, all the women stated that they had a pregnancy test. In seeking confirmation of their pregnancy Samoan women actively drew on the technology available to them. For Tusiga it seemed as if taking a pregnancy test was the expected next stage to confirm her tentative diagnosis. "When I felt sick I went to see the doctor to make some tests". Anxiety about conceiving was also the motivation for some women to obtain early confirmation. Going to the doctor and taking a pregnancy test was a means of reducing the anxiety level. Fisaga had been having difficulty conceiving. As soon as she missed her first period, she went to the doctor for a pregnancy test. Though she was confident she was pregnant, she wanted reassurance by taking a test.

A theme which is also illustrated in the stories however is that pregnancy tests empower doctors rather than women. Doctors medically construct the pregnancy by declaring a test to be positive or negative. Pua went to see the doctor because she missed her period and felt sick. "So I went to the doctor and the doctor said, 'Take your sample down to the lab and ring me at four o'clock'".

Faasau did not have a period for three months but was unsure whether this was associated with previous use of Depo Provera. She went to see her doctor, "... to do some tests to find out what is the matter, whether I'm pregnant or what. He sent me to have the test and he rang me the other day, that I'm pregnant".

Medical construction of pregnancy based on pregnancy tests and interpretation of clinical signs can be unreliable. False positives and false negatives can also occur during testing. Thus a woman might be pregnant when she has been told she is not and not pregnant when she has been told that she is pregnant. Pregnancy tests can be deceptive as is illustrated by Alisa's story. A first-time mother she went to see the doctor when she suspected she was pregnant and asked him if he could tell her if she was pregnant. The doctor told her she would need to take the
pregnancy test. The test was negative. When Alisa still had not had a period, she went back to the doctor and had a second test done. This time the test was positive.

That some women suspected they were pregnant before clinical signs were evident is illustrated in this story. Gagau knew she was pregnant on three previous occasions, the month she missed her period. On this occasion the first thing that made her suspect she was pregnant was because she was vomiting. But she was confused because she was not aware she had missed a period. So Gagau went to see the doctor. "I went to see the doctor, but he thought it must be tiredness or the flu. I went back to work and fainted there. I went back to the doctor and he tested my urine and he found out that I was pregnant, one month".

Some women such as Matagi waited till their pregnancy was well established before they went to see the doctor. When Matagi was asked at what stage she went to the doctor she replied,

on my fifth month. That was when I was sure I was pregnant. I felt differently. There were times when I thought to myself that it wasn't a baby, but just a clot of blood, because it was different from my previous pregnancies. So, I came for the check, and it confirmed that I was five months pregnant.

Going to see the doctor to have confirmed what most women already knew or strongly suspected, may have been less for the 'knowledge gained', as it could be argued they had that already. Another explanation for women's willingness to 'go to the doctor' is that they perceive this as part of the ritual of public entry to the pregnant role in New Zealand society. By 'going to see the doctor for a test', woman also take the first step on the road to being maternity patients. Similarly most of the women interviewed by Oakley, felt a need for some form of medical proclamation. "Pregnancy having become a 'medical' condition, requires specialist diagnosis" (Oakley 1980, 29).

This hypothesis would seem to be strengthened when medical diagnosis and tests were also sought by women who were themselves knowledgeable about pregnancy. The mother of one of the young
unmarried women, was also a fofo. She said that as soon as her daughter told her she had missed her period for three months, she took the daughter to the doctor for a test and the doctor confirmed she was pregnant. Given this mother's experience in treating pregnant women, it would be unlikely that she would not have already been fairly sure that her daughter was pregnant. In the New Zealand context however going to see the doctor is the accepted pattern in which the social construction of pregnancy occurs.

CONCLUSION

In the Samoan paradigm, primary importance is given to the symptoms reported by the woman, in particular the cessation of menstruation. In diagnosing a pregnancy, a Samoan fofo relies on interpreting the symptoms the woman reports and in her clinical skills. The relationship between the fofo and the woman is one in which woman's subjective symptoms are given equal status to the signs observed by the fofo.

At the heart of the negotiation between a woman and her doctor over 'the problem of dates' is the issue of who is the 'real expert' in this interaction - the woman or the doctor? Modern technology such as ultrasound no longer needs to rely on the history given by the woman. While this further medicalises pregnancy and alienates the woman from her body, it further empowers the doctor vis a vis the pregnant woman. The medicalisation of pregnancy does not just begin with medical diagnosis of pregnancy. Health education programmes designed to promote healthy living are often implicitly or explicitly directed to women as potential mothers. Similar programmes are rarely directed at men as potential fathers. A number of the obstetric texts analysed advocated that women were medically assessed prior to conception.

Some ambivalence was found among obstetric practitioners about the advisability and reliability of certain clinical and technological diagnostic methods. Such ambivalence suggests that
the basis of such practices is clinically rather than scientifically derived.

Tensions exist between doctors and women in terms of how each constructs pregnancy time. Women know that doctors date pregnancies from the first day of their last menstrual period. However as Rothman notes there is an inherent contradiction for women in this calculation. Most women consider menstruation to be evidence of a non-pregnant state.

Yet if two weeks later she conceives, a physician will date her pregnancy from the first date of her last menstrual period. The very date on which she knows she is not pregnant becomes, retroactively, the first day of pregnancy. Furthermore, the pregnancy is always approximately two weeks older than the fetus whose existence presumably determines the pregnancy (Rothman 1988, 96).

Little information exists about the diagnostic process women use in establishing that they are pregnant. As Oakley noted prior to carrying out her study of pregnancy among a group of first-time English mothers, despite the numerous medical text books and books of advice for pregnant women which list pregnancy symptoms, no research based information existed on how 'normal' as opposed to 'medically or socially special' women first suspected they were pregnant (Oakley 1980, 27).

Most of the symptoms reported in the medical literature such as awareness of cessation of menstruation, urinary frequency, nausea and vomiting, nervous symptoms and fatigue, were also spoken about as pregnancy indicators by the Samoan women. However, some symptoms such as breast changes which were routinely reported in the medical literature were not mentioned by any of the Samoan women.

Though most Samoan women drew on medical knowledge in constructing their own diagnosis of pregnancy, with the exception of a few, the announcement of pregnancy by the doctor did not come as a surprise. Thus the social construction of pregnancy began with the women's own linkage of the physiological event of
conception to the socially recognised state of 'being pregnant'. A state of being which is explored in Chapter Six.
1. This text discussed issues to do with the cost-effectiveness of pregnancy testing as well as describing the tests and their application.

2. Symptoms/subjective observations/presumptive evidence of pregnancy identified in the texts.
   - Cessation of menses: Niswander; Green; Reid; Williams; Beischer and Mackay; Llewellyn-Jones; Miles; Turnbull and Chamberlain.
   - Breast changes: Niswander; Green; Reid; Williams; Beischer and Mackay; Llewellyn-Jones; Miles; Turnbull and Chamberlain.
   - Nausea/vomiting: Niswander; Green; Reid; Williams; Beischer and Mackay; Llewellyn-Jones; Miles; Turnbull and Chamberlain.
   - Bladder irritability: Niswander; Green; Williams; Beischer and Mackay; Llewellyn-Jones; Miles; Turnbull and Chamberlain.
   - Distension/discomfort of the lower abdomen: Niswander; Reid.

3. Signs/objective observations/probable and positive evidence of pregnancy identified in the texts.
   - Breast changes: Turnbull and Chamberlain.
   - Abdominal and uterine enlargement: Green; Williams; Beischer and Mackay; Llewellyn-Jones; Turnbull and Chamberlain.
   - Hegar's sign: Niswander; Reid; Beischer and Mackay; Llewellyn-Jones.
   - Enlargement and softening of the fundus: Niswander; Reid; Beischer and Mackay.
   - Chadwick's sign (bluish discoloration of vaginal epithelium): Reid; Beischer and Mackay; Llewellyn-Jones; Miles.
   - Softening of the cervix: Niswander; Williams; Beischer and Mackay; Turnbull and Chamberlain.
   - Fetal movement (examiner felt/seen): Niswander; Williams.
   - Ballottement of the fetus ("Pushing the internal examining fingers sharply against the lower uterine pole may cause the fetus, which is floating in a large amount of uterine fluid, to bump against the distal uterine wall of the uterus")
wall and return again to the examining fingers."
Niswander, 47): Niswander; Williams; Llewellyn-Jones.
Braxton Hicks contractions: Williams; Llewellyn-Jones.
Outlining fetus by palpation: Williams; Llewellyn-Jones; Miles.
Thermometry (elevation of skin temperature over breast):
Beischer and Mackay.
Fetal heart sounds: Green; Niswander; Reid; Williams;
Beischer and Mackay; Llewellyn-Jones; Miles; Turnbull
and Chamberlain.

4. Certain other diagnostic techniques formerly used in
eyear pregnancy have now been abandoned as potentially
harmful to the developing fetus. These include:
X-rays (Reid 1972; Green 1983; Beischer and Mackay 1986;
Llewellyn-Jones 1986; Turnbull and Chamberlain 1989 and
the 'hormonal withdrawal test', which used largish doses
of oestrogen/progesterone preparation to cause
withdrawal bleeding if the woman was not pregnant.
(Beischer and Mackay 1986, 44)

5. In fact, all but one of the four texts which note this
sign, without reference to harmful effects, were
published in the 1980's and could thus hardly be called
'old textbooks'.

6. Comparing pregnancy diagnoses by parity of the mother
needs to be treated with caution, as this question while
discussed with all the first-time mothers, was not
discussed with a third of the experienced mothers).
Chapter Six
BEING PREGNANT

INTRODUCTION

In this chapter Samoan and obstetric understandings of pregnancy are juxtaposed and similarities and differences identified. The way in which Samoan women drew from each of these bodies of knowledge in recreating their own understandings is explored and some explanations of variance among the women are proposed. The emotions and responses of the Samoan women at being pregnant and during pregnancy are discussed and located in the context of other descriptions of the meaning of pregnancy for women.

The chapter opens by locating Samoan beliefs of the vulnerable nature of pregnancy in the cultural context of Samoan understandings of sickness. The relationship between the vulnerability of pregnant women and what Samoans understand as ma'i aitu (spirit sickness) is discussed and explanations for the largely woman-specific nature of ma'i aitu are noted. The way in which Samoan women drew on these understandings of the relationship between pregnancy and ma'i aitu and how these beliefs shaped women's doing of pregnancy are explored. Where a woman fitted in my classification of cultural orientation was shown to explain some of the differences in the way women responded to advice designed to protect them and their unborn baby from ma'i aitu.

Discussion of Samoan understandings and women's reinterpretation of those understandings is followed by a section which deconstructs the obstetric paradigm in relation to its understanding of and management of pregnancy. The features of the obstetric paradigm identified include obstetric ambivalence regarding the nature of pregnancy and the way obstetrics seeks to manage that ambiguity; a view of pregnant women which reflects the professional and gendered nature of obstetric power in reproduction; the different ways doctors and women construct pregnancy and the potential for conflict which exists.
Through women's voices, the nature and meaning of pregnancy as a state of wellness or sickness is explored. Neither where a woman fitted in my typology of cultural orientation nor whether the woman was a first-time or experienced mother were sufficient explanations of variance among the women. Becoming a mother for the first-time or again, was not automatically welcomed by Samoan women. The social context in which conception occurred shaped a woman's reaction to being pregnant. While feelings of ambivalence were most clearly marked amongst women who were not married at the time of conception and were having a first baby, such feelings were also expressed by married women with children. Women have their own way of classifying pregnancy as 'good' or 'bad'. Pregnancy engendered strong emotions in women. For some women this was associated with periods of prolonged nausea and vomiting, for others (not necessarily the same women) pregnancy was marked by a deep inexplicable sadness. That women establish a tactile relationship with their baby during pregnancy, is illustrated in the way in which Samoan women described 'feeling' the baby move inside their bodies. Conclusions based on analysis of the material discussed, draws the chapter to a close.

**SAMOAN CONSTRUCTION OF PREGNANCY**

The Nature of Pregnancy

There is general agreement in the literature, that Samoan understanding of the nature of pregnancy is such, that a pregnant woman is considered to be more at risk than she is in a non-pregnant state. There is variation however as to whether being 'at risk' is synonymous with sickness. The Samoan view is considered by some writers to be that while pregnancy is essentially natural, the pregnant woman herself is vulnerable.

> Although pregnancy is considered straightforward if proper physical and social precautions are taken, it is a period in which a woman is vulnerable to certain stresses which may lead to complications (Macpherson and Macpherson 1990, 185)
Others who have examined Samoan understanding of pregnancy argue that

"the pregnant woman is in a weakened, threatened condition; a conclusion supported by the merging of the two concepts of sickness and pregnancy in the common word for pregnancy (ma'itaga)" (Neich and Neich 1974, 464).

While these authors implicitly link a pregnancy condition with a sickness condition, a more explicit link between pregnancy and sickness is made by Kinloch, who argues that "pregnancy (ma'itaga, ma'ito) is thought of as a sickness" (Kinloch 1985, 203).

Kinloch bases this claim on the similarity of the precautions which are taken to protect pregnant women and sick people.

The sick are constantly attended and Samoan people believe that any sickness experience is potentially spirit sickness (ma'ili aitu). Every effort is made to prevent the potentiality from becoming a reality, therefore pregnant women should have constant company (Kinloch 1985, 205).

The Samoan belief that the vulnerability of pregnant women to aitu who may "seek to punish people who have given them offence by visiting women or their unborn children", is reduced when in the company of others is also noted by other writers (Macpherson and Macpherson 1990, 186). Though pregnant women are cautioned never to be alone, it seems that it is the night time hours when a woman is most at risk. The belief that going out in the dark is dangerous to a pregnant woman does not only apply in Samoa. Research in New Zealand in the mid 1970's suggested that this belief was also held by migrant Samoan women. The researchers were told by their informants that:
A pregnant woman should never be alone in the dark. Otherwise a family aitu or other aitu may affect the unborn child. Legends tell of women giving birth to lizards, geckos and other animals as a result of an aitu getting near the pregnant woman. A handicap or deformity in a baby could have been caused by an aitu. It was said of a still-born deformed baby that the mother must have been out in the night alone, thereby allowing an aitu to strangle the baby in the womb (Neich and Neich 1974, 462).

Samoans consider that sickness may be caused by physical, social and supernatural forces. Though some conditions may be explained more readily by one cause than another, because Samoans have an essentially holistic view of health and illness there is often causal overlap. Thus a fall resulting in injury may have been caused by an aitu, while neglect of social relationships might precipitate ma'i aitu in order for the relationship to be mended (Macpherson and Macpherson 1990, 256). Kinloch argues that the Samoan construction of sickness is an event which has its origins not just or even primarily in the mind/body of the individual, but in disruptions in the normal conduct of social relationships which define a person's position in the social order. She describes the Samoan view of sickness as "an inevitable, unpredictable and powerful discontinuity in the flow of life, a disruption of social order" (Kinloch 1985a, 204). Sickness events can have both destructive outcomes, the ultimate being the death of the sick person or the break up of the social group, but can these also be media of reconstruction.

As was discussed in Chapter One Samoans believe that there are two types of illness, 'ma'i Samoa', those indigenous to Samoa and 'ma'i palagi', those introduced to Samoa. Ma'i aitu are associated with the first type of illness and are therefore considered to be conditions which need to understood and treated within a Samoan framework. This belief that ma'i Samoa are outside the understanding of scientific medicine, is reinforced when European medical practitioners can find no pathological cause for symptoms complained of by Samoans who when treated by a Samoan healer are found to have a spirit sickness. Samoans believe that a person who is afflicted with 'ma'i aitu', may have
brought it upon him or herself, by failing to carry out appropriate or proper social obligations in relation to the dead person in life or in death. Various kinds of behaviour are believed may lead to aitu retribution such as neglect of a relative or failing to contribute enough material goods to aiga events (Lazar 1985, 173). Samoans also believe that a person can be an 'innocent' victim of another's social transgressions and be used by the aitu as a medium to redress the situation. Women and children are said to be more likely to be vulnerable to this form of spirit possession (Kinloch 1980, 16). Where it is known that a husband has been unfaithful, sickness in his child or difficulties his wife may have in labour, will be attributed to his failure to behave properly (Lazar 1985, 173). Such a belief can also be used as a means of exerting social control over a potentially wayward husband as this exchange reported between Leuma and her husband reveals.

During her pregnancy Leuma's husband had roamed around a lot, drinking and she suspected having affairs, but his support to her in labour and his solicitude after the birth led her to believe he had changed his behaviour. Some weeks after the birth of their child he seemed to revert to his previous behaviour, having not returned home after going to a dance in Newtown. Leuma's reaction was predictable.

I was really mad eh. So he came around Sunday afternoon. I told him 'are you staying with us or in a flat'? And he say, 'oh, sorry I was really drunk at that party.' And I say, 'pick up your stuff and get out of the house. I don't want to see you again, wasting my time. I love my son. He might be sick or something if you fool around.' And he said, 'oh sorry I not sleep with the girls or anything, I just drinking and I was really drunk.

Leuma feels though that her husband has changed his ways as he tells her that when he does go to the pub or a party, he always thinks of his son, which stops him doing wrong things.

It also seems that various degrees of ma'i aitu may occur². In some cases the sick person shows obvious signs of spirit
possession. An extreme version of ma'i aitu would seem to be that reported by Lazar, which is restricted to women and closely resembles the Western medical understanding of hysterical psychosis (Lazar 1985, 165). In other instances the illness or injury is not of itself indicative of spirit possession. However, when the condition fails to respond to physical treatment, then spirit involvement is suspected and the help of a taulasea (polite word for healer) will be sought.

In contemporary Samoa, women are said to more frequently be the victims of aitu type illness. Adolescent girls are thought to be vulnerable to a particular form of aitu attack though boys are not immune. Two accounts are given by Schoeffel of such attacks. In the first, "a boy speaks to a beautiful girl who is described as 'combing her hair' and becomes ill. The ghost is often said to have been seen in the vicinity at the time by other people". In the second "girls with long hair and especially brown hair are liable to ghostly attack if they walk about in public with their hair loose (regarded as flirtatious or provocative behaviour)" (Schoeffel 1979, 416).

Reports of aitu caused illness are not confined to Samoa, but have been recorded in the United States and New Zealand (Lazar I. 1985; Lazar T. 1985; Macpherson and Macpherson 1990; Kinloch 1980). An account of two episodes involving reports of aitu caused illness in an adolescent girl and the nature of the illness and treatment which followed, was given by the husband of one of the Samoan women interviewed in Wellington. The victim was his younger sister. The first experience occurred in Samoa when she was about fourteen, the second in New Zealand.
The first experience occurred in Samoa.

When she just finished school back in the Island, she was waiting for the bus to go home and then all of a sudden this handsome man walked towards me and just said not to do her hair like that... because she had long, long, hair... And my sister said, 'what's it to you, it's not your hair, it's my hair. I like the way I do my hair.' And he smack her in the mouth and she just went and scratched him right on the chest. And the policeman saw her and this handsome man and he ran across the road to him and he just disappear... he was some kind of spirit. And then my mother took her to one of the you know ladies they do... (healer) and they told my mother that handsome man wasn't a... (man), it was a spirit. And then that lady (healer) advised my mother to cut my sister's hair, because it was really, really, long, that's probably why and which they do and then everything was fine.

The second experience occurred in Wellington.

And then the other day, by that time her hair has really got long and she does her hair in the same way as she does it back in the Island. And then she saw his face as well, I mean that spirit, same one... 'cause the other day she said, 'oh, it's him again' and we said, 'who, who's him?' And she said, 'there, he's sitting right there on top of that hill right there'.

The brother went on to say that his sister became very ill again and described the symptoms.

She got real sick again. And she sort of you know at night time, the spirit turned into me. 'cause she said to me, 'oh, what did you do in my bedroom?' And I say, 'what for, I was asleep in my room.' Cause she said that I walk in the room and ask her to come outside and play the record player in the middle of the night. But it wasn't me. It wasn't me. And her eyes were really red. And it was really, really bad and we took her to the man (an Indian) they do a lot of healing of people in Newtown. And then that man described that's the reason why that spirit came back. Because of the way she does her hair. But now she's got her hair really, really short. And now it never happen again. It's alright now.
An explanation as to why women are more frequently the victims of aitu, it has been suggested lies in the nature of Samoan social organisation. Within the hierarchical structure of the Samoan household young women whether single or married, are "surrounded with restrictions and have the least opportunity to express anger, resentment or aggression" (Schoeffel 1979, 415). Unlike children or adolescent boys or young men they have few socially sanctioned avenues to react to feelings of oppression. Gender differences also exist in culturally acceptable expressions of emotion in Samoan culture. Women are precluded from expressions of 'ita' (strong anger or hate). The most severe form of which is said to be 'ma'i ita' (a raging anger) (Lazar I. 1985). Sickness however does provide an avenue which is both socially sanctioned and the person so afflicted becomes the focus of interest and concern given the general Samoan concern to help the sick. The victim of a ma'i aitu is able to make accusations and express anger in a way which would not normally be acceptable, but because of the possession it is accepted that it is the aitu and not the person who is talking (Schoeffel 1979, 415). An example of this can be seen in the account which the brother gave of his sister's accusations. The proper relationship between a brother and sister should be restricted and formal. To merge the persona of the brother and the aitu in such an intimate way as was evident in the account given conflicts with what is held to be the proper relationship between brother and sister. Such a relationship institutionalised in the 'feagaiga' is based on mutual respect and characterised by restricted and formal interaction (Schoeffel 1979, 319).

SAMOAN WOMENS' CONSTRUCTIONS OF PREGNANCY

Ma'i Aitu and Pregnancy
Thirty one of the fifty women interviewed spoke about the dos and don'ts of pregnancy. As is seen in Table 6.1 a higher proportion of the women who were interviewed during pregnancy spoke about this topic, than women interviewed only after birth. As was noted in Chapter Two, while an attempt was made to discuss all topics with all the women, interviews with women who were pregnant at the time were able to focus in greater detail on the
pregnancy, while interviews with women after birth had to cover both pregnancy and birth topics. This meant that not only was there less time available to discuss all themes during the interview, but the woman tended to be more focused on her recent experience of giving birth, than pregnancy itself.

Table 6.1
Dos and Don'ts of Pregnancy by Interview Timing

<table>
<thead>
<tr>
<th></th>
<th>During Pregnancy</th>
<th>After Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>74% (20)</td>
<td>43% (10)</td>
</tr>
<tr>
<td>No</td>
<td>26% (7)</td>
<td>57% (13)</td>
</tr>
</tbody>
</table>

It was expected that the typology of cultural orientation which I constructed, would be useful in differentiating between those women who adhered to Samoan advice during pregnancy and those who did not. In order to establish whether the women who spoke about the dos and don'ts of pregnancy were representative of the total interview group, the distribution of cultural orientation in each group was compared. As is seen in Table 6.2 a slightly smaller proportion of women classified as more Samoan oriented and a slightly larger proportion of women classified as less Samoan oriented were included in the group who spoke of the dos and don'ts of pregnancy. However the distribution pattern was similar between the two groups. This suggests that women who spoke of being advised to behave in a particular way during pregnancy, can be considered to be representative of the patterning of cultural orientation among the fifty women interviewed.
Table 6.2

Distribution of Classification of women by Cultural Orientation of Dos and Dont's Interview Group with Total Interview Group

<table>
<thead>
<tr>
<th></th>
<th>Dos and Don'ts group</th>
<th>Total Interview group</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Samoan oriented</td>
<td>29% (9)</td>
<td>32% (16)</td>
</tr>
<tr>
<td>&lt; Samoan oriented</td>
<td>45% (14)</td>
<td>40% (20)</td>
</tr>
<tr>
<td>Biculturally oriented</td>
<td>27% (8)</td>
<td>28% (14)</td>
</tr>
</tbody>
</table>

As is seen in Table 6.3 a larger proportion (70%) of women classified as less Samoan oriented spoke about the dos and don'ts of pregnancy, when compared with women classified in the other two categories. This reflects the fact that a larger proportion of women classified as less Samoan oriented and a smaller proportion of women classified as more Samoan oriented were among the twenty seven women interviewed during pregnancy. As is shown in Table 6.1 above, women interviewed during pregnancy were also more likely to talk about the dos and don'ts of pregnancy than women interviewed only after the birth of their baby.

Table 6.3

Dos and Don'ts of Pregnancy by Cultural Orientation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>56% (9)</td>
<td>70% (14)</td>
<td>57% (8)</td>
</tr>
<tr>
<td>no</td>
<td>44% (7)</td>
<td>30% (6)</td>
<td>43% (6)</td>
</tr>
</tbody>
</table>

The most commonly mentioned advice which women were given, related to protection of the pregnant women from ma'i aitu
(spirit induced sickness). Twenty two of the thirty one women who spoke of the dos and don'ts of pregnancy, said that they were given such advice. Women who were having a first baby were more likely than other women to have received such advice during the current pregnancy. Mostly advice was tendered by older females, mothers, aunties, sisters, female in-laws or friends. A higher proportion of women classified as less Samoan oriented were also having their first baby. This may explain why a much higher proportion of women classified as less Samoan oriented (92% 12/13) were given such advice, in comparison to women classified as more Samoan oriented (75% 6/8) or biculturally oriented (50% 4/8).

Women varied however in the way they responded to such advice. Women who fitted my classification of more Samoan oriented were generally more receptive of and followed the advice given than other women. Women varied however in the way they responded to such advice. Some women appeared to be generally receptive and to follow the advice without question. Other women were more ambivalent in their response. While a third group of women seemed to consider that while such beliefs might have meaning in Samoa, they were not relevant in New Zealand.

Acceptance Of A Samoan Construction Of Pregnancy

For fourteen of the twenty two women such advice shaped the way in which they constructed their pregnancy. The understandings which these women had of ma'i aitu and pregnancy reflected the understandings said to be characteristic of a Samoan model of health and sickness. The fourteen women included both first time and experienced mothers, younger and older women. Women differed however in terms of where they fitted my classification of cultural orientation. All the women classified as more Samoan oriented women accepted the advice, in contrast to only half of the women classified as less Samoan oriented and biculturally oriented. Although women differed in terms of age and whether or not this was a first baby, 85 percent of the women who
accepted the advice appeared to be, by my classification, more
Samoan oriented. This suggests that the attributes which I saw
these women as having when developing the typology, framed their
response to Samoan traditional beliefs about health and sickness.
One such woman was Kuini who was having her third child. When she
was having her first children in Samoa she was told, "do not go
around on your own". She followed this advice then and continued
to do so now, with her first pregnancy in New Zealand saying, "I
don't go alone anywhere now". Kuini's recognition of the
vulnerability of the pregnant woman to ma'i aitu is evident in
this story in which she expressed concern that the early symptoms
of pregnancy which she experienced might have been that of a ma'i
aitu. Kuini recalled the circumstances which she felt could have
contributed.

Where my husband's home is... behind our
house, behind the fence is a big cemetery,
our neighbour. And this made me wonder
whether I got afflicted with some bad spirit,
right at the beginning before I realised that
I was pregnant. It was the very first-time
since I first got here, when I had headache
and indigestion.

From the interviews with Samoan women it seemed that husbands
also understood the need for a pregnant woman to be protected
from aitu attack. The husband, whose accounts of the ma'i aitu
episodes suffered by his sister were given earlier, spoke of the
cause and outcome of another sister's exposure to aitu during
pregnancy in Samoa.

Back in the Island, a pregnant woman is told
not to go out at night time alone. Or if she
does go out at night, to be in the middle,
not at the back... I think I believe that,
but that's the only thing I believe...'cause
I know my sister back in the Island, when she
get mad at everyone, she just walk away, go
for a walk at night time. When the baby
comes, the baby never keep quiet, so that
every night you couldn't get to sleep. And
then we take the baby to the old lady and she
massage and all that and she says that's why
the baby was crying all the time.

Three forms of treatment used by Samoan healers for the treatment
of ma'i aitu conditions were spoken of by women. These treatments
involved use of internal herbal medicine, massage, and exorcism. One such medicine was named by Kuini as 'fu'esina'. This medicine she said a pregnant woman drank, "to purify the baby, if you had been out on your own at night". As was noted above Alice's husband spoke of his sister's baby being taken to the healer in Samoa for excessive crying and treated by massage. Uila was aware that sometimes the cure involved powers of exorcism on the part of the taulasea. "There's a special woman who has these medicines and cures. Sometimes they work, but there are those ones in which an 'aitu' talks back at them". Studies of treatments used by Samoan healers in ma'i aitu conditions in Los Angeles, identified similar treatment forms and suggest that these are often used in combination (Lazar I. 1985).

Ambivalence And Situational Relevance In Acceptance Of A Samoan Construction Of Pregnancy

The remaining eight of the twenty two women expressed different views. The eight women included younger and older women, Samoan and New Zealand born women and first time and experienced mothers. However none of the women who expressed ambivalent or situationally based beliefs, fitted my classification of more Samoan oriented. All of the eight women were classified as either less Samoan oriented or biculturally oriented.

Four of the women were ambivalent about the existence of aitu and therefore the danger to a pregnant woman, while the others held a situational belief in aitu, that is what is relevant in Samoa is not necessarily so in New Zealand. These eight women did not consider that failure to follow Samoan prescriptions during pregnancy had made them vulnerable to aitu caused sickness. But as will be seen their pregnancy experiences were also shaped by Samoan understandings of ma'i aitu and pregnancy. Five of the eight women, despite their ambivalence and apparent scepticism, said they generally followed the advice given, even though they were only giving lip service. Most had little choice in the matter as other members of the family ensured that pregnant women were not alone at night. None of the eight women fitted by classification category of more Samoan oriented. All were
classified as either less Samoan oriented or biculturally oriented. This finding is in marked contrast to that of women who did not question Samoan advice designed to protect them from aitu induced sickness during pregnancy, who were mostly classified as more Samoan oriented. Length of residence in New Zealand may have been one of the attributes which influenced women's attitudes. Two of the eight women who seemed to hold ambivalent or situationally based beliefs in the existence of and effect of aitu on pregnant women, had been brought up in New Zealand. Of the other six women, most were medium to long term residents.

Ambivalence

Melaia was living with her older sister and her sister's husband. She expressed a degree of scepticism about the advice tendered by her brother-in-law

Oh, yeah, my brother-in-law tells me about me going out at night time. Don't know if I believe all that (sounds sceptical)... He tells me not to be out in the street or just out there, (waves hand towards backyard) by myself... out at the mailbox in the dark.

Q. "Did you ask why?" "No, he just says it's bad for a pregnant woman to go out there. Even when I go out to the garage, he says to me... (pauses)... But when I think of it, how come I sleep by myself (that is, in own bedroom)".

Like Melaia, Saua was also young, having her first baby, single at conception and had spent most of her life in New Zealand. She too was living with her family during pregnancy. Her pregnancy experience was also shaped by others understandings of what she should and should not do. Her mother insisted not only that she not go outside in the dark alone but also that she no longer sleep alone. Saua found this a constraint saying, "I used to have my own room, but now, I've got my sister in with me". Like Melaia, she was sceptical of the necessity of her mother's precautions, but also like Melaia, she had little choice in the matter.
Even older women who had children already, were subject to attempts by family to ensure that they were not exposed to aitu when pregnant. Clare who rejected aitu beliefs on the grounds that they were superstitious and therefore contrary to her Christian beliefs, at the same time recognised that for others such beliefs had meaning. (Coexistence of Christian belief and beliefs about aitu is also noted by Macpherson and Macpherson 1990, 239).

My aunty, they come from Wellington when I had my last girl, she would never let me walk by myself, even at six o'clock at night. 'Cause I always go for a walk, she always follow me. And I would say, 'why are you following me?'"Clare laughs and adds, "She doesn't want me to go in the dark. They thought if you go in the dark, someone should walk behind you. They say the baby's facing back. But they not saying it for nothing. I don't mind them saying it, but I don't believe what they say.

Situational Relevance

Olana who was having her second child after a gap of ten years, was told by some of the women who visited her during this pregnancy that she should not walk by herself in the dark or stay on her own in the house. Olana was very surprised and said that her response had been, "Oh, must be only in Samoa, not here". Although Olana was sleeping in the same room as her daughter at night time, this may have had more to do with other factors related to beliefs about sex during pregnancy, (which will be discussed in Chapter Seven), than to the association of ma'i aitu and pregnancy.

Telesia who had lived in New Zealand since she was one year old, said her mother had told her, when she was pregnant and after the baby was born, "Don't go out at night, there are evil things out there". Telesia's response was, "That's all rubbish Mum, this is New Zealand, this isn't Samoa. It's a different atmosphere, different culture. "Despite rejecting her mother's advice when she was pregnant, she mostly followed similar advice regarding her children. Telesia said that she always brought her children
home before dark, because her mother "seems to have drummed it in my head".

Susana, who was a long-term resident when asked whether she had been given any Samoan advice since becoming pregnant, replied promptly,

Yeah, my girlfriend's mother said in the Samoan way, you can't go out in the dark by yourself and don't sleep by yourself in an empty house. But you know, I don't believe that... I ask her why, but she said, that's how they said it from the old days, the older generation... She said if you go out at night by yourself, then it's the smell of the spirit that gets into you, something like that... That's because in Samoa, they've got so many ghosts already hanging about, but here's only fresh air.

Susana is scornful of the old people for holding such beliefs, saying that none of her age group believe these things. "Just old people, they talk about it, but we just annoyed and make fun of it you know. That they always go to church, but you always believe in ghosts and things like that". "But they might be right in the Island, I don't know". She adds when she lived in Samoa, she heard lots of stories about ghosts and cemeteries.

Summary

Although Samoans distinguish between conditions which are considered to be 'ma'i Samoa' and those which are considered to be 'ma'i palagi, similarities would seem to exist in the way explanations are constructed by Samoan medicine and by medical science about environmental causes of illness. In a number of the stories about aitu influence in pregnancy told by the women, there were similarities in the way medical science describes the causation of sickness from viral, bacterial and toxic agents which exist in the physical environment. Both aitu and such physical agents are invisible to the human eye, however they are able to penetrate the body defences, and in the case of the fetus to cross the placental barrier.
Similarities also exist in the concept of protecting the unborn fetus from environmental hazards. Just as a pregnant woman who has been exposed to an infection such as measles can seek to protect her unborn baby from the harmful effects of this exposure by an immunoglobulin injection, in a similar way Samoan medicine seeks to protect a fetus who has been exposed to the danger of aitu influences by such medicine as fu'esina. This also reflects a Samoan recognition in the flow of physical and non-physical elements between the mother and unborn child. In this way it resembles contemporary recognition by the obstetric paradigm that certain substances can cross the placental barrier. Until relatively recently, medical science considered the placenta acted as a barrier to protect the fetus from harmful agents.

Most Samoan proscriptions during pregnancy, including those related to ma'i aitu, are concerned with ensuring the development and eventual birth of a healthy baby. Such proscriptions are also methods of social control in that Samoan understanding of causes of illness also include those which result from improper conduct of social relationships. Congenital abnormalities or sickness in babies may be attributed to failure on the part of the parents to undertake social obligations. In the absence of any obvious physical cause the diagnosis and aetiology is likely to be linked to failure of others for example, parents to observe Samoan mores. The mother's behaviour in pregnancy or the father's extramarital affairs are prime suspects. In the example given, the baby whose excessive crying was considered by the fofo to be the victims of a ma'i aitu, was known to have been exposed to this danger in that the mother flouted the rule of not being alone in the dark. While excessive crying in a baby is also of concern to parents and adults in Western societies, Samoans consider that prolonged periods of crying by a baby is always assumed to be a sign that the child is ill (Schoeffel 1979,101).

Variations existed in Samoan understandings of what constitutes appropriate protection of a pregnant woman from aitu sickness. A different interpretation seems to be placed on being alone in an empty house and sleeping on one's own in a separate bedroom.
This difference was identified by Melaia who considered there was an apparent contradiction between her brother-in-law's injunctions that she was not on her own in the dark, and the fact that she was sleeping alone in her own bedroom. Other women such as Saua indicated that having someone sleep in the same room was a change which had occurred with pregnancy. These differences can perhaps be understood as reflecting changes in housing styles which are given different meaning by different people. A traditional Samoan fale is not divided into separate rooms by permanent dividing walls as is a palagi house and therefore in Samoa a pregnant woman never sleeps alone.

Samoan women varied in the way they drew on Samoan understandings of sickness and related these to their own pregnancy. Women who were classified as more Samoan oriented drew more heavily on Samoan beliefs and practices in their construction of pregnancy than other women. Another pattern was that generational differences existed in that older women placed greater emphasis on the observance of such practices than younger women.

While women who were classified as less Samoan or biculturally oriented were less likely to feel such beliefs had personal meaning for them, some considered that such beliefs did have meaning within a Samoan context. These women considered that while aitu caused sickness has meaning in a Samoan context because Samoan is the dominant culture, it has less meaning in a New Zealand context, because palagi rather than Samoan culture is dominant.

OBSTETRIC CONSTRUCTION OF PREGNANCY
Features of obstetric understandings of pregnancy and pregnant women are described in this section, based on an analysis of the obstetric literature. The following questions were addressed.

1. Is pregnancy considered to be a normal physical and psychological experience for a woman?

2. How are pregnant women portrayed in the obstetric literature?
3. What do obstetricians consider is the meaning of pregnancy for women?

4. Are women's voices evident in the obstetric literature?

5. What is the relationship of health professionals to the pregnant woman?

A feature of the obstetric texts in use at the Wellington School of Medicine and other medical literatures is that pregnancy is considered to be on the one hand, a normal physiological state and on the other hand a potentially pathological state. There appears to be considerable obstetric ambivalence about the nature of pregnancy.

New obstetric technology it is argued enables pregnancy to be conceptualised, "as a process, infinitely divisible, analyzed in fine detail so that one knows what is 'needed' at each incremental step in the course of a natural process, and then if one subjects each pregnancy to continuous surveillance and monitoring, one can interject just what is "needed", no more and no less, into a process that begins to stray from its 'natural' obstetrically known, course (Arney 1982, 138).

Such a conceptualisation of pregnancy means pregnancy can never be considered to be truly 'normal', until proved otherwise - ie by the birth of a healthy baby.

,
Modern obstetric technology enables the identification and treatment of abnormalities in the mother and the fetus during pregnancy. The modern obstetrician considers he has two 'patients', the mother and the fetus.

Until relatively recently, the intrauterine sanctuary of the embryo and fetus was held to be inviolate. The mother was the patient to be cared for; the fetus was but another, albeit transient, maternal organ....the fetus is no longer dealt with as a maternal appendage ultimately to be shed at the whim of biologic forces beyond control. Instead, the fetus has achieved the status of the second patient, a patient who usually faces much greater risks of serious morbidity and mortality than does the mother (Williams 1985, 267).

A great deal of modern antenatal care is concerned with monitoring fetal health. Certain factors in the mother are considered to have a potentially adverse effect on the health of the fetus. These include such factors as the teenage or older mother, women from lower socio-economic classes, women having first babies or more than four, as well as women with a history of medical or obstetric complication. It is recognised that, "only a small percentage of the total pregnant population accounts for a large percentage of pregnancy complications" (Niswander 1981, 50). Screening in early pregnancy of the pregnant population to identify high risk pregnancies is an established part of modern antenatal care. Women who are identified as having a high risk pregnancy are more intensively monitored during pregnancy and labour.

Parity is one factor considered to contribute to risk. Obstetric classification of pregnant women reflects this understanding. A woman who becomes pregnant for the first-time, is labelled as a primigravida, while a woman who has had more than one pregnancy, is termed a multigravida. Giving birth previously warrants a different label. A woman who has never given birth, even though she may have been previously pregnant, is called a nullipara, while a woman who has given birth to one child is a primipara,
and a woman who has completed two or more pregnancies to a stage where the baby can survive is labelled a multipara. Women are also labelled differently on the basis of their age. Thus a thirty five year old woman pregnant for the first-time, is called 'an elderly primigravida', while a woman with four or more children would be described as a 'grand multipara'. Obstetrics considers that parity is a useful predictor of pregnancy and birth outcome.

Not all obstetricians favour the screening approach to the clinical management of pregnancy. In this approach, women identified as `low risk' receive routine antenatal care, while women with high risk pregnancies are intensively monitored. Critics of the screening approach argue that,

one problem inherent in such attempts to identify the "high risk" pregnancy has been a tendency to ignore subsequently the pregnancy that early on had been categorized as "low risk" yet proved later to be "high risk (Williams 1985, 248).

Other obstetricians recognise that risk assessment programmes in antenatal care are not without serious problems and pitfalls. The concept of risk and its assessment it is argued while frequently used, is often not well understood by clinicians. Risk of what and risk for whom are questions which are seldom addressed in discussion of obstetric management of pregnancy. (Turnbull and Chamberlain 1989, 249). Obstetric concern about the inability of screening techniques to identify all `at risk' pregnancies, leads to the argument that monitoring should be extended to all pregnancies, regardless of assessed risk. This view is exemplified in this extract from one of the texts reviewed.

Fewer than 50% of all perinatal deaths occur in identifiable high risk pregnancies - hence the crusade of the modern obstetrician to investigate fetal well-being in 'normal' pregnancies (Beischer and Mackay 1986).
This concern was also the theme of a recent lecture attended by clinicians, academics and students in the Wellington School of Medicine. The title of the presentation was, "Low Risk Pregnancy: is there any such thing?" The presenting clinician, put forward the case histories of three pregnant women, who had all been in potentially life threatening situations from haemorrhage, before and during pregnancy and after birth. All three women had been classified during pregnancy as 'low risk, though one woman who had a previous miscarriage had been first examined by a specialist obstetrician. The thesis of the presentation was, that pregnancy and labour is inherently risky. Obstetricians, the presenter said, "can't afford to minimise risks and lose babies". However, two of the potentially life threatening situations, followed medical interventions while the woman was in hospital. The procedures which were adopted in each case, that is, to induce labour, were described as standard responses to the initially presenting situation. The arguments made in the presentation of these 'obstetric cases' exemplify a strongly held obstetric belief that pregnancy is an inherently risky business requiring close obstetrical monitoring.

There is little discussion in the obstetric literature as to how women feel about being pregnant. Substantive discussion about pregnancy in the obstetric texts reviewed, was mainly concerned with identification and management of pathological conditions arising in pregnancy. The common conditions such as nausea and vomiting in early pregnancy, are termed 'minor disorders'. There was little discussion as to how such 'disorders' were viewed by women.

Clinicians vary in the extent to which such symptoms are considered to be a 'normal' part of pregnancy. Some clinicians consider nausea and vomiting to be "almost universal in early pregnancy" (Niswander 1981, 45). Others suggest that "about 50 percent of pregnant women complain of the symptoms" (Llewellyn-Jones 1986, 181). While others suggest a range of between 30-60% of women suffer from morning sickness (Beischer and Mackay 1986, 306). Although the term 'morning sickness' is commonly used by doctors and by women, not all women get sick in the morning.
Sickness occurs at any time of the day, with upwards of 30% of women in one study reporting their sickness occurred in the afternoon or evening (Turnbull and Chamberlain 1989, 219).

Pregnancy is understood by the obstetric paradigm to represent a rite of passage for a woman. The following extract indicates how obstetric expertise is seen as having a legitimate contribution to make, in assisting the woman to make a successful transition.

Pregnancy offers an opportunity for attaining emotional maturity, and it becomes a period for recognizing and discarding some of the less desirable attitudes the patient may have had toward her social environment. Under medical guidance, it is possible for the patient to gain greater insight and emotional stability through the experience of pregnancy. It is within the ability of any sympathetic and understanding physician to identify and, through discussion, resolve most of the patient's personal problems (Reid, Ryan and Benirschke 1972, 409).

Obstetrics considers that it is normal for women to want to have babies. (This argument is often used to defend the high costs of clinical research and management programmes designed to assist an infertile couple to have a child). Women want babies because they have 'maternal instincts' (Beischer and Mackay 1986, 253). Such a view mirrors the popularly held societal belief in 'maternal instincts'. As one writer said,

This concept is often taken to imply that humans (and especially women) want to have babies, or have instinctual drives towards reproduction; that this drive has individual and species survival value; that pregnancy is normal; and that childbearing is woman's highest, yet most basic, function (Macintyre 1976, 151).

In obstetric writings, women are portrayed on the one hand as happy to be pregnant. "Most women are calm and more emotionally stable in pregnancy, and for some, life appears purposeful for the first-time" (Reid 1972, 410). And on the other hand as emotionally vulnerable during pregnancy. "Mental depressions and emotional upsets are common" (Green 1983, 52). Anxiety levels are
considered to be high, particularly among first-time mothers. But, negative feelings are considered to be transitory. "Usually related to inconveniences resulting from the pregnancy (affecting career, home accommodation, finances, social activity) and normally dissipate during the second trimester" (Beischer and Mackay 1986, 253). Common obstetric explanations for anxieties in pregnancy are, that firstly women are concerned for the wellbeing of their baby and secondly they are afraid of pain in labour. The role of the health professional is to reassure the woman that such feelings are normal. As the author of one text wrote:

While pregnancy and delivery are usually physiologic rather than pathologic events, they engender strong emotional reactions and cannot be taken casually. Pregnancy is normal for everyone but the patient herself (Niswander 1981, 56).

While another author urged that, "the idea that pregnancy and labour are normal physiological functions of viviparous mammals must be suggested to the patient as often as possible" (Llewellyn-Jones 1986, 60).

The obstetric paradigm has traditionally distinguished between conceptualisation of pregnancy in married women and that in single women. The classification of women by marital status is based on a belief that married and single women differ in their motivation for getting pregnant, that marital status will alter the way a woman feels about her pregnancy, the choices she will want to make and the outcome of her pregnancy (Macintyre 1976). This view is exemplified in this extract from the obstetric literature in which the interests of married and unmarried women are juxtaposed.

The duration of marriage is important in patients with infertility. If the patient is unmarried, a number of details will need to be explored, preferably with the assistance of a social worker (Beischer and Mackay 1986, 47).

The relationship of the pregnant woman and her doctor is one of patient and expert. In all but the latest text reviewed (Turnbull
and Chamberlain 1989) pregnant women were consistently described as patients. Being a patient invokes an image of a person who is sick and in a dependent relationship to the care provider. The co-operation or compliance of the pregnant patient in the medical management of her pregnancy must be obtained by the health professional. "If the patient is treated as an intelligent woman, interested in her pregnancy at this stage, her full co-operation in her prenatal care will be obtained" (Llewellyn-Jones 1986, 70). The pregnant woman is not portrayed as an equal participant, but one who will, given access to the 'correct' information behave in ways considered to conform to obstetric beliefs and practices.

Obstetric 'knowledge' is portrayed as superior to 'women-derived knowledge'. It is the responsibility of the health professional to ensure during pregnancy that women derived beliefs and practices related to pregnancy and birth, are supplanted by obstetric derived beliefs and practices. Such a view is exemplified in this extract.

Added to this are the cultural misconceptions regarding pregnancy and labour which are handed down by word of mouth from mother to daughter in all communities. The attitudes derived from this ancestral information are frequently disadvantageous and often dangerous to the health of the mother and baby... the attendants of the pregnant woman have a unique opportunity to inform, instruct and educate women in elements of hygiene, in baby care and to demolish the accumulated racial myths related to parturition (Llewellyn-Jones 1986, 59-60).
Obstetric control over pregnancy is facilitated by early attendance for antenatal care. Most obstetric texts advocated that the first visit to the doctor should occur as early in pregnancy as possible.

Ideally, each pregnant woman should be seen first before the tenth week of pregnancy. The advantages of this early visit are that a baseline can be obtained against which the physiological changes occurring in pregnancy can be assessed, and any abnormalities can be noted and treated before they have a detrimental effect (Llewellyn-Jones 1986, 70).

Women who do not conform to this expectation are considered to be deviant. A woman who leaves her first visit to a medical practitioner until after twenty weeks, will be labelled a 'late attender'. As this itself is considered a risk factor, late attendance may shift a woman from a low risk category to a high risk category with implications for the subsequent obstetric management of her pregnancy and birth.

Summary

Analysis of obstetric texts revealed ambivalence about the nature of pregnancy. New technology and a re-conceptualisation of pregnancy as an infinitely divisible process, provides for the continuous monitoring and surveillance of all pregnancies. The dilemma for obstetrics is how to justify further medicalisation of pregnancy when the majority of pregnancies and births occur without complication. The obstetric construction of pregnant women as pregnant patients was evident in the texts reviewed. Obstetric understandings of pregnant women are framed by a generally held view in the existence of 'maternal instincts'. Obstetric control over the construction and management of pregnancy, is maintained by obstetric claims for the superiority of its knowledge vis a vis women and by early and regular medical surveillance of pregnancy.
Pregnancy as a State of Health or Sickness?

Analysis of the Samoan paradigm suggests that pregnancy is conceptualised as a vulnerable or potential state of sickness. A great deal of the care of a pregnant woman is thus directed towards protecting her and her unborn baby from harmful forces in her environment. Samoan women were on the whole familiar with such understandings, but varied in how they drew on them in doing pregnancy. Seventeen of the twenty two Samoan women with whom beliefs about pregnancy and ma'i aitu were discussed, were also asked whether they felt pregnancy was a state of wellness or sickness.

Most of the women with whom this was discussed were pregnant at the time of the interview. Many of the women initially found this question difficult to understand. In those interviews conducted primarily in English, it was one of the questions that often prompted a request for an interpretation in Samoan. The difficulty seemed to stem from the difference between conceptualising pregnancy as an abstract state, (which was how the question was usually phrased) and the actual process which women were experiencing. While the responses of most women were informed by their own immediate or previous experiences of pregnancy, a few women differentiated between pregnancy as an ideal/typical state and their own personal experiences.

Women were divided between those who considered pregnancy to be a sickness (7), those who felt it to be a state of wellness (6) and a small number of women (4), who were more ambivalent. It was expected that women who were classified as more Samoan oriented would be more likely to reflect traditional Samoan understanding that pregnancy is a time of vulnerability for the pregnant woman and thus is more like a sickness. In fact the opposite was found. Two thirds of women who considered pregnancy to be a state of wellness were classified as more Samoan oriented, in comparison to one third of women classified as less Samoan oriented. On the other hand, 57% of women who thought pregnancy
was a sickness were classified as less Samoan oriented, in comparison to 43% of women classified as more Samoan oriented. While the typology of cultural orientation constructed did differentiate between the Samoan women, the trend was in the opposite direction to that expected. Being classified as more Samoan oriented was more closely associated with understanding pregnancy to be a state of wellness rather than sickness.

That women classified as more Samoan oriented were more likely than those who fitted my classification of less Samoan oriented to consider pregnancy to be a state of wellness may reflect the fact that being an experienced mother was also more closely associated with an understanding of pregnancy as a state of wellness, rather than sickness. On the other hand first time mothers who were over represented among women classified as less Samoan oriented were more likely to feel pregnancy was more of a sickness than a state of wellness.

Wellness

While some women who considered that pregnancy was a state of wellness also had 'good' pregnancies, others who expressed similar views had periods of sickness during pregnancy. Kuini and Telesia were among the women who felt well through most of their pregnancy.

Kuini, classified as more Samoan oriented, was a recent migrant to New Zealand. Though only nineteen she was already six weeks pregnant with her third child when she arrived with her husband and was living with her parents in a State house in Porirua. Kuini felt that "pregnancy is a natural happening".

Telesia classified as less Samoan oriented, had grown up in New Zealand. Like Kuini she was also a young mother. Aged twenty, she was having her second child. She and her partner lived with her mother and siblings, in a State house in Porirua. Not only did Telesia feel that pregnancy was 'normal and natural' but she drew explicit distinctions between pregnancy and sickness. "I think
if I had a choice between being pregnant and being sick, I'd be pregnant, 'cause I hate being sick".

Some women who had been sick during their pregnancy distinguished between their subjective experience and pregnancy as an ideal/typical condition.

Panesa classified as less Samoan oriented, was in her mid twenties. This baby, her fourth, was the symbol of a new life. Her first marriage had not been a happy one and she came to establish a new life in Wellington. Despite being quite depressed at times during this pregnancy, particularly in the latter stages, Panesa was convinced being pregnant was not comparable to being sick.

Um, I don't think it's a sickness. I mean I've really enjoyed my pregnancy, you know. I mean, ok, I get tired and depressed about this one, but I'm really happy that I'm... you know. Every time this baby kicks, I go 'mm' (contented sounds) 'still kicking, it's alive'. So I don't think I'd call it a sickness.

Sickness

Other women, considered that pregnancy is more a state of sickness, than wellness.

Tasi was an older mother in her late thirties. She was classified as more Samoan oriented. She and her husband lived in a State house unit in Porirua with her husband's sister and mother. Though able to communicate in English, Tasi preferred to use Samoan especially when she was expressing her feelings. She drew on her own experiences of pregnancy in concluding that pregnancy was a sickness. "Oh, I felt my headache, and I wanted to sleep all the time. I didn't want to get up. This was with my first one. I didn't want to eat. But with this one, I didn't feel so sleepy and tired. I just felt dizzy and that's all".

Uila was also classified as more Samoan oriented. However, she was much younger than Tasi. Her main occupation since marriage
had been as a full-time wife and mother. This was her second pregnancy. "Personally I feel it's a sickness. I'm usually very, very sick during my pregnancies. With my daughter I didn't vomit, but with this one, I vomited a lot. I'm usually sick for a whole month".

Some women such as Alice, justified their belief that pregnancy was a sickness by pointing out as others have, that Samoan words for pregnancy incorporated the word for sickness (Neich and Neich 1974). Alice appeared to fit my classification category of less Samoan oriented.

Isalei was, at eighteen, one of the youngest women in the study. This was her first experience of pregnancy and she considered being pregnant was like a sickness. Hers was an unplanned and at first unwanted pregnancy. Isalei with the support of her boyfriend had sought a termination, but her pregnancy was too far advanced. Though her parents had been very upset when she told them she was pregnant, since her marriage they have been very supportive. Isalei and her husband live with her parents in their new, well furnished house in a new housing development. She stopped work early in her pregnancy because of severe morning sickness and did a lot of sleeping during the daytime when she was pregnant as she was home on her own. Isalei felt that one of the reasons she thought pregnancy was a sickness, was that her family but her aunties in particular, treated her like a sick person rather than a well person. Isalei was classified as less Samoan oriented.

Ambivalent

Other women considered that pregnancy comprised dimensions of both wellness and sickness at different points in time.

Olana, in her early thirties, was having her second baby. Her first experience of birth some ten years earlier had been so traumatic, that she had avoided getting pregnant again until now. Olana gave up work in the factory where she had been working as a supervisor when she became pregnant and was currently on
maternity leave. She lived with her husband and daughter in a nuclear family household in a State house in Porirua. Olana was classified as more biculturally oriented.

When asked what her views of pregnancy were, she replied, "in the very beginning it's a sickness, especially in the first few months when the symptoms are felt. But after discovering that one is pregnant, it becomes a natural thing. It becomes just one of those things that happen in life".

Unlike Olana, Alisa was a first-time mother who had come to New Zealand when she was four years old, having been adopted by her mother's sister. Pregnant and unmarried, she was living with her partner's family, as her own family were most unhappy about the relationship and her pregnancy. At the time we first met her, Alisa appeared not to be a fluent Samoan speaker. She was classified as less Samoan oriented. When she became pregnant, Alisa left her job in a local factory. She considered that while the first few months of pregnancy were more like a sickness, as time went on, being pregnant was more like being normal that is, non-pregnant, "because you don't feel sick in the morning".

Clare also felt that pregnancy alternated between a state of sickness or wellness. A woman in her late thirties, she was having her fourth child although she had been advised not to have another child because of her medical condition. Clare was classified as biculturally oriented. She lived in a nuclear family household with her husband and children in a State house in Porirua. Though Clare felt that most of the time pregnancy was more like a sickness at other times she felt it was different. "Like when baby's kicking, then I'm really enjoying it".

Summary

Samoan women tended to be less ambivalent as to whether they understood pregnancy to be a state of sickness or wellness, in contrast to the views of other women reported in the literature. Few of the women whom Oakley interviewed felt that pregnancy was a normal state. Even amongst those women who considered pregnancy
to be a normal condition, there were undertones of ambivalence. As one woman said, "I think you should behave as you normally would. Women work out in the fields till they give birth. That's what I keep saying to myself" (Oakley 1981a, 47). In this imagery, pregnancy and birth are abstract events which are largely divorced from the woman's own reality that is life in a major urban centre. Another woman interviewed by Oakley understood pregnancy, "not as an illness. But it's not really normal either is it?" In contrast half of the Samoan women with whom this was discussed unequivocally considered pregnancy to be natural or normal.

Pregnancy has unpleasant symptoms each of which can in another context be evidence of illness (Oakley 1979, 46-47). Though the early months of pregnancy usually most mimic sickness, with nausea and vomiting and tiredness being the commonest complaints, later months are often characterised by other symptoms, backache, inability to sleep, swollen hands and feet, indigestion etc. If a woman is unprepared for such symptoms she may end up redefining pregnancy as a sickness.

That Samoan women were less ambivalent about the nature of pregnancy than the women Oakley interviewed may in part be explained by the fact that all of the women in the Oakley study were first-time mothers, while only a small proportion of Samoan women were first-time mothers. The difference might be one of different levels of experience. The benchmark which the women Oakley interviewed used was the non-pregnant state. Most of the Samoan women however were able to make their assessment from their previous experience. The different cultural understandings which Samoan and English women drew on in their construction of pregnancy might also explain differences between the two groups of women.

Samoan women drew on a range of resources in constructing their understanding of pregnancy. These included Samoan and obstetric knowledge bases as well as their own experiential knowledge. For both the Samoan women and English women interviewed, pregnancy was not an abstract concept or an ideal/typical state, but an
individual and social reality. Although most Samoan women were aware of Samoan beliefs about the association of pregnancy and ma'i aitu, they did not explicitly link their personal views of pregnancy with general Samoan beliefs about the vulnerability of pregnant women. In defining pregnancy as a sickness, Samoan women put more emphasis on the physical symptoms they were experiencing.

FEELINGS ABOUT BEING PREGNANT

A dominant theme which emerged from the interviews with Samoan women was that becoming a mother was considered to be an inevitable and desirable part of being a woman. This did not mean that women automatically welcomed pregnancy when it occurred. How a woman felt about being pregnant was discussed with a third of the Samoan women interviewed. (Again this topic was more frequently discussed in interviews done during pregnancy). The belief that a married woman who is having a baby will be pleased to be pregnant is commonly held from a Samoan and obstetric perspective. That women, whether they are Samoan migrants or urban dwelling English women, are not necessarily happy to be pregnant is evident from Table 6.1 which compares what Samoan women said with that of Oakley's informants (Oakley 1979, 37). While half of the women in each study were happy to be pregnant, a significant proportion of the remainder were ambivalent while a small proportion were unhappy.

Table 6.1
Women's Feelings About Being Pregnant

<table>
<thead>
<tr>
<th></th>
<th>Happy</th>
<th>Ambivalent</th>
<th>Unhappy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samoan women</td>
<td>50%</td>
<td>42%</td>
<td>8%</td>
</tr>
<tr>
<td>Oakley's informants</td>
<td>52%</td>
<td>38%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Happy to be Pregnant
A number of themes were evident among the women who were happy to be pregnant. For those women who had fertility problems and who had been trying to get pregnant, there was relief and happiness they had attained their goal. Other women who were happy to be pregnant saw being pregnant as a chance to achieve or move closer to what they felt was their ideal family size. (Samoan deferral of contraception until the ideal size is reached was noted in Chapter Five). Some women saw pregnancy as a chance to balance the sex ratio in their family. While the women interviewed did not appear to be particularly concerned whether they had a boy or a girl as a first baby, where the previous children were of one sex, women did express a hope for a baby of the opposite sex. (As none of the women had an amniocentesis they were not aware of the baby's sex before birth).

Ambivalent or Unhappy to be Pregnant

There were three main reasons why women felt ambivalent or unhappy about being pregnant.

1. being single at the time of conception
2. conflict with other social roles
3. negative expectations of pregnancy based on previous experience

Being Single

Of the five women who were single at conception, four expressed feelings of ambivalence about being pregnant. With the exception of one older woman, all of the young women who were single at conception, reported fearing and experiencing negative responses to their pregnancy from close family members. The reactions of families to the pregnancy of an unmarried daughter or sister would seem to reinforce the argument that virginity continues to be highly valued in Samoan society (Freeman 1983; Schoeffel 1979; Holmes 1987).
The shame which families experienced and the reconciliation which came with acceptance of the situation was evident in what Alofa's mother felt when she found out Alofa was pregnant. Alofa who had been in New Zealand for less than two years, was classified as more Samoan oriented. The father of the baby who was already married, had been in New Zealand on a visit and had returned to Samoa.

I have always warned her and told her not to make friends with other bad Samoan girls. I told her time and time again, if you befriend a thief, eventually you become a thief too. I always tell them to go to things and when it is over, come home straight away, do not go anywhere else. This is the result of a girl who do not listen to her mother. Anyhow it is behind us now. It was horrible when I first heard the story, but now we are all looking forward to the baby.

Alofa continued to live with her widowed mother and sisters. Her mother contrasted the easy life Alofa had during pregnancy, in which she was not expected to contribute to normal household chores, with that of most single pregnant women in Samoa. Her mother recalled that while a married woman when she is pregnant is not expected to do much in the way of hard work and is allowed to take things easily, particularly when she was living with her own family, the single pregnant woman is not made a fuss of by the family. She would continue to work hard, sometimes because of her own guilt, as well as being thankful that she had been accepted and not ejected from the family. Alofa's mother also recalled that some families insist the young woman works hard during her pregnancy, to teach her a lesson and ensure she does not let the family down again.

At eighteen, Isalei was one of the youngest woman in the study. Although her story was quite different to Alofa's, in that she was born in New Zealand and on my classification system she appeared less Samoan oriented. She was in a steady relationship with her Samoan boyfriend, and had been afraid to tell her parents she was pregnant. She tried to have an abortion, but her pregnancy was too advanced by the time she went to the doctor so she was forced to tell her parents. She felt in two minds about
being pregnant. "I felt half of me was scared and half wasn't. The half that was scared, was telling my parents. When I told my parents, they took it really hard. Well, my Mum took it hard, my Dad didn't". Her mother it seems felt that apart from not being married, her daughter was too young to be having a baby. Unlike Alofa, Isalei regularised her pregnant status by marrying the baby's father. Once over the shock of finding out she was pregnant, her parents she said were very supportive.

Other Social Roles

Not all the women who felt ambivalent or were unhappy to be pregnant, were single mothers. Some women in stable relationships, also felt ambivalent about getting pregnant as pregnancy conflicted with paid employment. Where a woman fitted in my classification of cultural orientation did not seem to be associated with ambivalence among married women. Ambivalence was however associated with a pregnancy which was the outcome of failed contraception.

Leata, a less Samoan oriented woman, aged twenty nine already had three children. She was working when she got pregnant again. She said that when she found out she was pregnant, "I wasn't very happy, because I was going to miss my job".

Rosa, a biculturally oriented woman aged thirty six who had three sons all at school thought she had completed her family and had only recently gone back to work. Up till then, she had been a full-time mother at home. Her ambivalence about getting pregnant, also stemmed from her experience of past pregnancies when she had been incapacitated with severe morning sickness. Her expectations of pregnancy were therefore associated with months of feeling dreadful. "It makes me so sad when I know I am pregnant, because I know what is coming".

However even some married women who had intended to conceive expressed ambivalence about pregnancy itself. This was usually associated with recall of a previous 'bad' pregnancy. Women were unhappy or ambivalent about being pregnant, but not about having
another child. It was the means and not the end that was the problem. Lila, a thirty two year old mother of two, had bad past experiences of sickness in pregnancy. Though looking forward to the birth of another baby, she was not looking forward to being pregnant as she dreaded the prospect of another experience of morning sickness.

For Clare, ambivalence about being pregnant reflected the dilemma she faced in balancing her belief that getting pregnant was something she could not avoid, as it was 'God's will' she should have another child, with her awareness that pregnancy could have been avoided if she had 'taken' certain actions. "I wasn't too happy about it, but I just can't do anything about it. And then sometimes I blame myself, because I didn't take up the injection".

**WOMEN'S FEELINGS DURING PREGNANCY**

When Samoan women were asked during or after pregnancy, whether they had enjoyed the experience of being pregnant, many of the women found this question difficult to answer. This confusion might have been because of the level of 'generality' or 'abstractness' of the question asked. It may also be because few women considered the means to having a baby that is, pregnancy was something they would or should have affective feelings about, in contrast to the end product that is, the baby itself. Like questions about whether women thought of pregnancy as a sickness or wellness, more women were likely to ask 'what we meant' by the question and ask for it to be translated into Samoan. Those who responded to the question were those who were more fluent in English or where the interview had taken place totally in Samoan, rather than a mixture of Samoan and English. A greater proportion of the fourteen women who spoke about their feelings for one reason or another had a 'bad' pregnancy (some of the reasons for this were discussed in Chapter Two).
Some women were very unhappy during pregnancy. An unhappiness which they were not able to openly discuss with their husbands or close family. The way in which people express emotions needs to be understood within a cultural context. For Samoans as for palagi New Zealanders, not being happy can range from a mild to a strong emotion. This range is shown in the stories which three Samoan women told of their feelings during pregnancy. Emotional expression in Samoan culture as in other cultures is gendered. Expressions of 'ita', (hate or strong anger) the most severe form of which is 'ma'i ita' (a raging anger) is a masculine form of expression. Women it has been suggested express strong feelings of anger and frustration through ma'i aitu (Lazar I., 1985). Feelings of sorrow or sadness which are associated with everyday life, rather than in the context of mourning for the death of a loved one, is said to be a mood which prevails among women. It is associated with such things as sadness over marital problems, or an inability to fulfil family obligations. This mood of fa'anoanoa is described as a deep emotion of a longer duration than moods such as lefiafia (unhappy or upset) which come and go quickly (Lazar I., 1985). Women who described having such moods during pregnancy included women who were classified as more Samoan oriented, as well as women who were classified as less Samoan oriented; women who were having their first as well as those having additional children; and pregnancies which had been 'planned' as well as those which were 'unplanned'.

Sose intended to get pregnant she said to improve their housing status. Her second pregnancy is marked by periods of emotional distress. "The main one I don't like, is you got angry very easily, even when someone you like very much and another day she came in and you just automatically don't want her". Sose's turbulent feelings are outwardly expressed as physical symptoms. In adopting the sick role, behaviour which would be seen as deviant, becomes acceptable to others...
But why I didn't like it because I couldn't carry them with my mind. I just have a feeling that it's going to burst or something like that. Sometimes I got headache and I tell my husband I got a bit of headache and he thought I'm sick and offered me a tablet. But I didn't want it, I just wanted a quiet environment and not to talk.

Pua recalled the problems she had with her first two pregnancies when they were living in Auckland with her husband's aunty.

Oh, I had a hard time. It was a struggle to do my housework and all. I think it was because I was unhappy. Two children were born in Auckland and two were born here. I had a bad time with my husband's auntie, till my brother got drunk and came and told her off and then told my husband that we should leave his auntie and start our own family on our own. Sometimes I was wishing I never got pregnant.

Panesa who had wanted and planned to have this baby also had bouts of depression during her pregnancy. She described her feelings of unhappiness of the previous night. "I don't know why, I just burst into tears. I cried and cried". Panesa found it difficult to understand why she should feel like this, when as she said she had more support than during her other pregnancies.

That's another thing. Like with my kids' father, that's the time I should have been having problems, because he was always pressuring me. I was under a lot of pressure, but I suppose that took up all my time. I didn't even think about myself. But with this one, I've got all the support from my husband. He does everything now. I hardly do anything around the house. And yet I was down.

As she moved through her story it became more evident that some of her unhappiness may have been associated with coping with a new relationship after an early and unhappy marriage.
I never thought I'd make him understand, because he's only been here that long (12 months) and that he'd ever accept the fact that I'm living a different life. But he's pretty up with me... He could never talk with me before. I couldn't talk to him before, well that's what I thought, I couldn't make him understand. But um you know, my friends said to me, 'why don't you just try, you never know.' Just say to him come on, lets talk about this and it's worked... So I don't chuck things around any more and he doesn't walk out the door when he's angry. We didn't know each other long enough when we got married. But we're getting there.

Lemapu a young woman who was having her first baby described her feelings in a way which seemed closest to the mood of fa'anoanoa. She was ambivalent about getting pregnant, having wanted to wait for a while, but her partner was keen to have a baby. Lemapu contrasted the freedom of the time before pregnancy with her feelings during pregnancy.

When I first got here it was so good, free life, no ties, everything seemed so easy and I was very happy. Then I got married and got pregnant, well everything change, because I got to hate everything. Even just lying on the bed it was different. I was sad and I started to feel homesick. Oh, boy did I want to go to Samoa. I was so lonely, but now the baby is here, I'm happy again. It was so bad when I was pregnant, nothing seemed to cheer me up. I tried gardening, walking, I ended up lying down and sleep my sorrow away. I used to sleep a lot.

Lemapu wanted to talk to her sisters about her feelings but felt she couldn't.

Oh, I would have like to talk to them, because we are quite close, but somehow I don't know. See it was quite different, not like you and me now. I feel quite warm and encouraging just talking to you now. If I talk to my sisters, somehow they do not realise that I really do need their reassurance. They did not seem to pick it up that I do need them". Lemapu tried to talk to her husband about her feelings, "but he did not understand, so I thought, oh, well, I'll just have to fight it on my own.
Lemapu's feelings of unhappiness were accompanied by severe morning sickness throughout her pregnancy. Her nausea was exacerbated by the smell of her husband and she was uninterested in having sexual relations during pregnancy. Her husband found it difficult to understand her feelings and their relationship was thus put under a lot of stress.

Summary

While these four women differed in the way they described their feelings similar themes can be found in all four stories. The image which they and others close to them had that women who are married and pregnant are happy, conflicted with the feelings and fears they were faced with. Not only did the women feel that their emotions were less controllable, but pregnancy also brought other unanticipated worries. Pregnancy even when planned can as Graham suggested in her study 'aggravate or jeopardise' existing social situations such as marriage or housing (Graham 1977, 91).

Differences also seem to exist between the pregnancy experiences of Samoan women and those interviewed by Oakley (1980). A greater number of Samoan women appeared to feel very depressed during pregnancy than the first-time mothers interviewed by Oakley. However in contrast postnatal depression was not reported by the Samoan women and indeed seemed to be an unimaginable state of being.

Role Changes

Having a first baby is often described in the literature as a rite of passage. For some Samoan women a first pregnancy was described as the end of their personal freedom.

Susana missed going out with her friends and having a 'good time'. As well she missed her job. "Oh, I miss working, because I always like working. When I'm in town, I call into the shop and help out for a couple of hours".
Telesia, who was having her second baby, recalled how frustrated she felt during her first pregnancy. "Oh, with my first one, definitely. Oh, can't go out, got to stay home. Oh, got to do this, do that". This was said with great emphasis. "And I can't go anywhere. It was as if I didn't have a social life any more, when I fell pregnant with her".

Melaia a New Zealand born young woman did not feel that she liked anything about being pregnant. In particular Melaia was frustrated that she had been missing out on all the fun that her non-pregnant friends were having. Samoan expectations of what constitutes proper behaviour by a pregnant women conflicted with her perception of herself as an eighteen year old unmarried woman.

I'm quite an outgoing person, but now... going to be staying home, locked away from my friends. My friends still come around and tell me about what they have been doing lately and what I've missed out on. Then I just wish I wasn't pregnant.

Becoming pregnant was described by these women as heralding marked change in their lifestyle. While becoming a mother was something they expected to do sometime, getting pregnant when they did was unexpected. All of the women had been unmarried and in paid employment at the time of their first pregnancy. All of the women were classified as less Samoan oriented. The way they described their pre-pregnancy lifestyle reflected a greater focus on the individual rather than the group, and social activities centred in the wider world rather than aiga based. Women themselves saw differences between their pre-pregnancy lifestyle and those of other Samoan women. When Melaia was asked whether any of her friends had children she replied.

Yes, but they weren't the outgoing ones. They were always the quiet ones, who stay home. It's good for them, because they are not really interested in the outgoing life. They were the ones who were born in Samoa. I don't know whether they have changed, but they weren't really interested in the things we were interested in.
A quarter of the Samoan women had medically defined 'bad' pregnancies, while 20% of women had some obstetric complication during a previous pregnancy. Three-quarters of all the complications occurred in the first pregnancy. Pregnancy complications tended to recur. Having a previous pregnancy complication was shown to be strongly correlated with a complication of the current pregnancy (p=0.001).

The major physical symptom Samoan women, who were interviewed, complained of during the current or a previous pregnancy was morning sickness. Over a third of the twenty five women with whom feelings in pregnancy was discussed, (again mostly in interviews done during pregnancy) had morning sickness. For these women although this was not an enjoyable experience, it was a temporary phase. However six of the women interviewed had more severe sickness over a longer period. The six included women who were young first-time mothers as well as older experienced mothers. Experiencing severe nausea and vomiting in pregnancy did not appear to be related to my classification of the cultural orientation of the woman. While women who had severe nausea and vomiting felt ambivalent about or did not enjoy the experience of being pregnant, it was experienced both by women who very much wanted to get pregnant as well as those who did not.

Malia who had great difficulty getting pregnant and had very much wanted this baby described her experience of this and previous pregnancies.

It was horrible. I was very, very sick with every pregnancy. It was hard for me, can't do anything. Just lie down and vomiting. Oh, it's horrible. I'm fed up with having a baby now, 'cause I'm sick all the time. I can't eat properly. By the time I try to eat something, it's all come out from my mouth.

Rosa was very sick with all of her pregnancies. In contrast to Malia her current pregnancy was the result of failed contraception and initially she was not happy to be pregnant again. She was sick for a substantial part of the current
pregnancy and was forced to resign from her job. Rosa linked enjoyment to having a 'good' pregnancy. She said,

those women who had a good pregnancy and do not feel ill or sick, I think they really enjoy being pregnant. It is easier for them, even if they have a baby every year. They are happy to be pregnant, it's nothing to them.

Sickness in pregnancy was also shown in the analysis of women's hospital records in that the two major complications recorded for all the Samoan women in the Wellington study were hyperemesis gravidarum (excessive nausea and vomiting) and hypertension (elevated blood pressure). Hyperemesis was the most frequently reported complication for all women who had a previous pregnancy and was the second most common complication for the current pregnancy.

The recorded incidence of hospital admission for hyperemesis gravidarum among the Wellington Samoan women was 3% (8/248). This would seem to be higher than the hospitalisation rates reported in the literature. A review of admissions to a teaching hospital gave a figure of 1% of women having hyperemesis gravidarum of sufficient gravity to warrant admission to hospital (Beischer and Mackay 1986, 305). It has been suggested, based on clinical observations, that Samoan women in Samoa, may have a higher incidence of hyperemesis gravidarum than women in countries like New Zealand. However, no studies have been undertaken to explore this question. It is not possible therefore at this time to establish whether the level of hyperemesis gravidarum reported among the Samoan women in Wellington is 'normal' in Samoan terms, or whether it differs from that of women in Samoa and can therefore be attributed to factors related to migration.
Table 6.2

Hyperemesis Gravidarum by Parity

<table>
<thead>
<tr>
<th>Current Pregnancy</th>
<th>Current Hyperemesis Gravidarum</th>
<th>Parity</th>
<th>Prev preg</th>
<th>No prev preg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>3</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>No</td>
<td>98</td>
<td>184</td>
<td>92</td>
<td>56</td>
</tr>
</tbody>
</table>

There were two main factors associated with hyperemesis gravidarum among those Samoan women who were hospitalised during the current pregnancy. As can be seen from Table 6.2 a greater proportion of the Samoan women having their first baby were hospitalised for hyperemesis than were women having their second or subsequent pregnancy. While as can be seen from Table 6.3, women who reported having hyperemesis gravidarum in a previous pregnancy, were more likely to be hospitalised in the current pregnancy. The likelihood of recurrence of hyperemesis in a subsequent pregnancy is also reported in the obstetric literature although the physiological mechanisms for this are said not to be well understood (Llewellyn-Jones 1986).

Table 6.3

Hyperemesis Gravidarum by Previous Experience

<table>
<thead>
<tr>
<th>Current Hyperemesis Gravidarum</th>
<th>Previous Hyperemesis Gravidarum</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>83</td>
<td>5</td>
<td>99</td>
</tr>
</tbody>
</table>

Severe nausea and vomiting in pregnancy is recognised as a Samoan illness able to be treated by Samoan healers. The diagnosis given by fofo is that pregnancy has displaced the to'ala which is
pressing or blocking the stomach. Most of the women with nausea and vomiting whether mild or severe, diagnosed the cause of the problem and avoided those foods or situations which would exacerbate the condition. Women also drew on Samoan and Western bodies of knowledge to diagnose and treat their nausea and vomiting. The way in which five women drew on their own understandings as well as those of Samoan and Western medicine is laid out in Table 6.4. That the Samoan women sought alternatives when one treatment was not successful rather than return to the same practitioner, has been shown by others to be a Samoan pattern (Kinloch 1980).

Table 6.4

Pattern of Help Seeking Behaviour

<table>
<thead>
<tr>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
THE MANAGEMENT OF TIME

Samoan women divided pregnancy into early, middle and late periods. Different characteristics were associated with different periods of time. At first women were concerned with woman centred changes for example, not having a period and/or feeling sick or tired. As pregnancy progressed this focus shifted to incorporate the reality of the baby growing inside them. Perhaps the single most significant indicator to a woman that she is indeed pregnant is when she first feels the baby move inside her. For the woman, this is an inalienable confirmation of her pregnancy. Feeling the baby move is something that only she can truly experience. In a world where pregnancy has become increasingly medicalised, this experience remains hers alone. Feeling the baby move aroused strong even passionate feelings among many of the Samoan women. For some there was a sense that this marked the beginning of their love affair with their baby.

While four months was the most frequently mentioned time when women first felt movement, it ranged from as early as three months to as late as six months. Women's reactions to feeling their baby move included expressions of happiness, pleasure and relief. Alice said laughingly, "I was really happy, and I said, 'oh, I feel the baby moving'". When Morina was asked what it felt like when she felt the baby move she replied, "oh, I feel happy and I think the baby's alright inside my tummy". Similarly Sarai recalled, "I could feel him kicking inside and it made me happy, because that assured me that he was fine and strong". Panesa was shocked when she first felt movement around four to five months.
Well at first I was sitting right on the couch watching television, when I felt the first kick and I jumped (laughs). And I thought well that's probably you know baby kicking now. And it was true you know, when I went to the doctor's, 'yea, baby's already moving'... And I thought, my God, so I am really pregnant.

But women also described the first sensation of movement by using animal similes which suggests the alien character of such movement.

Josie, who already had five children, felt movement this time at about three and a half months. When asked to describe it, she thought for a moment and said, "you can feel it's like a worm or something like that". She considered the sensation was similar for each of her previous pregnancies.

Olana gave what was undoubtedly the most dramatic rendition of what the sensation of movement was like with her first pregnancy.

It's hard to tell, because I just feel like a small rat, (said with dramatic emphasis). Something just like a little thing, just going up like a worm on the side. And I says to my husband, it was funny I can feel something move inside and I say, 'oh, must be the baby, oh, I don't know... And then I went to see the doctor and he said, 'yeah it's the baby just moving'.

The alien nature of this movement was strongly present for women who were experiencing it for the first-time. Lemapu, who was having her first baby, also used animal imagery in her description. The first sensation of movement at around three or four months, she felt were very scary. "It felt like an animal, a lizard crawling over your stomach. Before that it felt like something shifted from one side to the other, like it was something sliding around you". Lemapu found these experiences scary until the baby started kicking at around five months and the doctor told her the baby was now completely formed.

Susana who was also having her first baby said, that the sensation of first feeling the baby move, was "scary! I didn't
know it was the baby you know... like tick, tick, tick inside my stomach. So I told that to the doctor and told me nothing to worry about".

In describing what it felt like when their baby moved inside them, women used vivid and detailed imagery. That women establish a relationship with their baby before birth was evident in the way women described adapting to the baby's 'waking and sleeping' times in utero.

When we talked to Olana, in the last weeks of pregnancy, she said,

> When I try to go to sleep and the baby kicking, I can't go to sleep. Because when I go on this side, it's down this side and on that side, it's on this side. And I say, oh I can't sleep, I just lay down or walk around, until the time I can feel the baby's not moving. Then fast to sleep and when the baby wake up, I have to wake up again.

Lagi said that the baby was particularly active at night time, waking up around five o'clock and starting to move. Her other babies also used to be active early in the morning and after birth used to wake up at the same time.

Clare also had similar patterns of activity for all her pregnancies. This baby she thinks "this one I think he's a good sleeper, 'cause she got up about half an hour at twelve o'clock and back to sleep, got up at six o'clock".

Movement of the baby is also a time when as one woman expressed it "the silent kicking inside me", becomes a phenomenon which women can share with others. As Lila said,

> I told my husband when the thing start moving around, I make sure my husband around and I just told him to come and feel. Gentle at first and then moving a lot. I just told my kids to come and have a look. They were really excited. So I told them they were like this when they were babies. And they laughed and they couldn't believe it.
While first pregnancies are occasions in which women make the link between expectation and experience, experienced mothers used differences in movement as a basis for establishing the sex of the baby. Leata who was having her fourth child, not only noted movement differences between pregnancies but between her daughters and sons.

The girls were very active in my stomach, in contrast with the boys. The boys hardly moved or kicked about in my stomach, whereas the girls they were totally the opposite. They moved, kicked and God knows what they else they did to torture me. And whoever said girls are quiet creatures!

Summary

Women and doctors bring different understandings to pregnancy. The descriptions given by Samoan and other women have little in common with the descriptions of movement in the obstetric texts reviewed. Obstetrics interpret fetal movement either as an indicator of pregnancy or an indicator of fetal death. Obstetric technology has made 'quickening' a redundant sign of pregnancy. Some texts did not include fetal movement as a sign of pregnancy. Others mentioned it, only to dismiss it as occurring too late to be useful to anyone but the woman. "Who now knows that she has a living child within her womb" (Llewellyn-Jones 1986, 72).

Doctors claim a monopoly on reproductive knowledge even when they are dependent on that knowledge being constructed through women's experience. The rich, vivid and diverse imagery which women use to describe the sensation of movement contrasts with the restrained and depersonalised images in obstetric texts. That pregnancy is also seen as an invasion of the woman's body is reflected in the imagery and women's reactions to early movement. One text referred to movement as a 'fluttering' or "a bubble bursting" (Green 1983, 51). While another text described a first movement as "the first faint fluttering movements" (Llewellyn-Jones 1986, 56). The powerfulness of obstetric claims to the superiority of its knowledge is demonstrated in the way some of the Samoan women as well as the women interviewed by Oakley felt
the need to confirm with the doctor that what they experienced was indeed the baby moving (Oakley 1979, 51).

CONCLUSION

Both Samoan and obstetric understandings of the nature of pregnancy are characterised by ambivalence. The pregnant state is considered to be both normal and not normal. Samoan and obstetric practices are designed to protect the pregnant woman and her unborn child from the unpredictability of natural and supernatural forces. Understandings of the nature of pregnancy are culturally constructed. Samoan healers and Western obstetricians draw on different paradigms in making sense of reproduction. The former draw on a holistic model which seeks to explain health and sickness in terms of the inter-relationship of physical, supernatural and social forces, while the latter draw on a scientific model in which biological and physiological forces are considered to be the major explanatory factors of health and sickness.

In both Samoan and obstetric understandings it is women not men who are held to be primarily responsible for ensuring the safety of the fetus. The beliefs and practices which exist in both Samoan and obstetric cultures are means by which society seeks to control the way in which women do pregnancy. While being pregnant is the unique experience of individual women and as such a deeply personal affair, the outcome of pregnancy is considered to be the affair of the wider society. In bearing and giving birth to children, women are at the same time involved in an act of cultural renewal. The social meaning which is given to pregnancy, a physical phenomenon is thus framed by the cultural context in which it occurs. The beliefs and practices of pregnancy of Samoan fofo and obstetric practitioners though different are both framed by understandings of the nature of sickness.

Samoan culture seeks to control the unpredictability of pregnancy by protecting the woman and her fetus from dangers of a supernatural nature. Obstetric culture on the other hand seeks
to control the unpredictability of nature by imposing cultural tools such as classification systems related to parity or degree of risk involved. The dilemma for obstetrics is that these systems are not sufficient to cover all eventualities. In coping with the dilemma obstetrics has expanded the definition of abnormality or to obliterate it, as the title of the lecture referred to "Low risk pregnancy: Is there any such thing?" would suggest. It has been facilitated in doing this by the use of modern technology.

Pregnancy is something which women do. This act of doing frames the meaning which women give to pregnancy. Giving meaning to being pregnant is to give meaning to what is happening in women's bodies. Women also expressed ambivalence about the nature of pregnancy. Being pregnant changes women's lives. Pregnancy makes some women very sick both physically and emotionally. Women make sense of this by classifying pregnancy as either 'good' or 'bad'. Such a classificatory system does not necessarily match that used by obstetrics. Doctors and mothers give different meanings to the sickness like symptoms which often accompany pregnancy. Obstetrics understands these as minor disorders of pregnancy, of nuisance value. Yet for women they are disorders which can shape the meaning they give pregnancy as well as shaping how they did pregnancy. The data was suggestive that hospitalisation for hyperemesis gravidarum might be more common among Samoan women than for other women for whom similar data exists. Further research is needed to establish the incidence of hyperemesis gravidarum among Samoan and non-Samoan women in New Zealand. Minor physical disorders of pregnancy were shown to have for some women significant social and emotional outcomes. For some women this was manifested in an earlier than desired resignation from work, for others it shaped the nature of their relationship with their male partner. For all women pregnancy in some way imposed constraints on their 'normal' non-pregnant way of life.

That pregnancy changes women's lives was also seen in the fact that being pregnant was not always a welcome event. The social context in which pregnancy occurred helped shape women's responses to pregnancy. That young unmarried women feared the
response of their families when it was found they were pregnant, suggests that Samoans living in New Zealand continue to value virginity in the unmarried woman. Women do not view being pregnant as their only status but one which competes with other statuses the woman occupies. For some married women this pregnancy competed with their status as paid worker. While women generally welcomed the fact that they were going to have a baby, they did not always welcome the process involved even when a woman had explicitly planned to get pregnant.

In making sense of being pregnant Samoan women drew both on Samoan and obstetric understandings to explain what was happening to their bodies. Women varied in the extent to which they drew primarily on Samoan understandings and explanations in constructing their experience of pregnancy. This variation was in part explained by where a woman fitted in my classification categories of cultural orientation. The experiences of all the Samoan women were however in some way shaped by the beliefs and practices of Samoan culture.
279

ENDNOTES

1. There was one exception to this view. Writing of Samoan women in American Samoa and mainland United States of America, Clark concluded that pregnancy was viewed by Samoans as a part of life and not a sickness (Clark 1978, 165).

2. Samoans believe that ma'i aitu are caused by a variety of spirit beings (Lazar 1985, 168). However, named aitu such as Telesa, are not considered to be active outside Samoa (Goodman 1971, 463). Studies in the United States and New Zealand suggest that ma'i aitu is considered most likely to be associated with the spirits of deceased relatives (Kinloch 1980; Lazar T 1985).

3. Screening of pregnant women and assignment of level of risk involves the use of standardised systems. For a description of such systems see (Chamberlain and Turnbull 1989, 230)

4. The lecture was attended by clinicians, academics and students at the 'grand round' (an institutionalised weekly forum for the exchange and validation of medical knowledge) at the Wellington School of Medicine during August 1991.

5. During the discussion, it became obvious that though the presentation was of a clinical nature in a clinical environment, there were at least two political agendas operating among the clinicians present. The first was to emphasise the desirability of hospital births as 'safer' and to discourage or limit the numbers of home births which might occur, following the recent legislative moves to provide more liberal birthing alternatives for women in the region. The second, was to build a case for an 'obstetric flying squad' composed of at least one obstetrician and anaesthetist, which would be able to respond to emergency calls from domiciliary midwives. Obstetricians in the audience, recalled their experiences in the United Kingdom where they got tired of being called out to resuscitate 'exsanguinating women' in the front room of tenement flats and implied that current directions could lead in that direction. Belief in the inherent correctness of the obstetric paradigm was obvious, in that at no stage, did the presenter or clinicians present question the standardised responses to the presenting situation. The discussion which followed the clinical presentation was rather than being 'clinical' in orientation, was essentially 'political'.

6. Although the term 'morning sickness' is commonly used, not all women get sick in the morning. One of the texts noted that such sickness occurs at any time of the day, with upwards of 30% of women in one study reporting
their sickness occurred in the afternoon or evening (Turnbull and Chamberlain 1989, 219).

7. As was explained in Chapter Two, although an attempt was made to cover similar topics in each interview, the way in which the interview was conducted meant that some differences existed. Women who were interviewed after birth only, tended to talk more about their birth rather than their pregnancy experiences.

8. A question always asked of us, was how many children we had. That Sene had only one and I had none was usually greeted with surprise. When it was realised that mine was an involuntary childlessness, a great deal of sympathy was extended to me by the women. Women may have found it more difficult to relate to my situation, if I had chosen voluntary childlessness since this would seem to conflict with basic Samoan values.

9. Differences were also felt to exist between the way Samoan women brought up in New Zealand perceived changes in their body shape (negatively) to Samoan born women (Neich, personal communication).

10. In fact 5% of the Samoan women were recorded as having hyperemesis gravidarum during the current pregnancy.

11. Animal similes were also used by some of the women interviewed by Oakley (1980) to describe the sensation of fetal movement.
INTRODUCTION

In all cultures the commonest emotions and responses to pregnancy are said to be feelings of responsibility and accountability on the part of the parents and feelings of solicitude for the pregnant woman by the social group (Mead and Newton 1967, 164). These emotions and responses are however shaped by the social context in which conception occurred. Particular beliefs and practices about the proper way to do pregnancy exist in all cultures. Chapter Six revealed the diverse ways in which Samoan women expressed their emotions and responses to being pregnant and to the nature of pregnancy. Analysis of Samoan and obstetric understandings revealed that pregnancy was considered akin to a sickness and pregnant women to be in a vulnerable condition. But the women's own views were more diverse and to a large extent shaped by their own experiences of 'good or bad' pregnancies.

In this chapter Samoan and obstetric beliefs and practices designed to ensure a successful outcome to pregnancy are as in the previous chapters, juxtaposed and similarities and differences identified. The way in which Samoan women drew from and reinterpreted Samoan and obstetric knowledge about pregnancy, in demonstrating their feelings of responsibility and accountability for the growing life inside them is examined. There are three sections to this chapter. The first explores the Samoan 'rules' of pregnancy, designed to guide a woman's everyday life. These include 'rules' related to food and its consumption; avoidance of conditions thought to precipitate sickness such as extremes of heat and cold; and certain activities thought to explain the cause of congenital defects. These 'rules' are largely self enforced, given that women do not want to take the risk of being 'blamed' for an unsuccessful outcome to pregnancy. The use of massage in pregnancy and the practice of turning the baby or external cephalic version is commonly practised by Samoan fofo. The criticism of some Western practitioners that traditional massage is potentially hazardous to the fetus is
compared with descriptions made by Samoan fofo of the technique involved including the experiences of Samoan women.

The features of the obstetric way of doing pregnancy are identified. In contrast to the Samoan way of doing pregnancy, obstetrics places less emphasis on rules controlling a woman's lifestyle and rather more emphasis on obstetric monitoring of pregnancy. Obstetric 'rules' are institutionalised in a system of antenatal care, which defines when a woman should attend for her first antenatal medical check and how frequently she should return during pregnancy. As in the Samoan way, such 'rules' are self enforced as women get blamed if problems occur. For example prematurity might be attributed to the fact that the mother smoked, or she did not eat well enough, or she attended the doctor too late in pregnancy or not frequently enough.

The third section explores the way in which Samoan women drew from Samoan understandings of the self management of pregnancy. Pregnancy is shown to provide an opportunity for some Samoan women to have a greater degree of social control over their sexual relationship with their husband. This control is facilitated and legitimated by Samoan beliefs about sex in pregnancy. Samoan women drew on both Samoan and obstetric forms of antenatal care. Going to the fofo for massage was a common practice among the women who were interviewed. Some women chose Samoan treatment of 'turning' the baby to avoid the possibility of a Caesarean section. While all Samoan women attended clinical antenatal care during pregnancy, very few women attended antenatal education classes. The conclusions draw together the themes which have emerged from the analysis of material in the three sections.

PREGNANCY THE SAMOAN WAY

The majority of Samoan pregnancy rules concerned with natural phenomena relate to food and drink. Restrictions on dietary intake in pregnancy have been found in many traditional cultures1. There is considerable variation as to what foods are forbidden and what allowed or encouraged in pregnancy. In some
cultures it is reported that the amount of food is controlled, either by limiting intake such as in American Indian culture, or in Egyptian and Japanese cultures encouraging the mother to 'eat for two' (Kay 1982, 11). Samoans recognise a relationship between what the woman eats during pregnancy and the size of the baby at birth. It is reported in the literature that during pregnancy a Samoan woman is advised not to eat too much or the baby will be too big (Neich and Neich 1974, 462). This precaution is likely to relate to an understanding that more complicated births are associated with very big babies.

The number of rules in the Samoan culture related to food are fewer than some other cultures. Very few foods are forbidden. Foods which are forbidden are protein foods (fish and shellfish). Studies of primitive cultures have also shown that meat and fish predominate among the forbidden foods. It has been suggested that animals rather than plants are more likely to be perceived as containing bad qualities, which could affect the baby (Mead and Newton 1967, 198). Given the central role that seafood plays in the traditional Samoan diet, it is not surprising that various seafoods rather than meat are the foods to be avoided. Pregnant women in Samoa are warned not to eat octopus as this can result in the baby being born with 'mumu' (red rash) and lead to problems in childhood. Raw fish and shell fish which are also considered to be too strong for nursing mothers are said to be forbidden to pregnant women for the same reasons (Clark 1983, 166).

Although there is no specific discussion in the Samoan ethnographic literature about the contribution of particular foods to the wellbeing of the developing baby or the mother, there is considerable evidence that Samoans do recognise the relationship of food and health. The central idea which Laing encountered in her work on contemporary Samoan health and healing practices was that "we are what we eat" (Laing 1992, 102). In their discussions with Samoan healers the Macphersons found a consistent recognition that the introduction of imported foods to Samoa had contributed to a decline in the general health status of the people. These introductions are said to have
disrupted the balance which had existed in olden times between man and his environment. Some healers considered that all 'mea'ai mai fafo' (imported foods) were the problem, while others considered only, 'mea'ai papalagi' (European food) were to blame. When the topic of food in pregnancy was discussed with Samoan fofo in Wellington, they emphasised that pregnant women should eat 'good food', although they did not specify what this entailed. It is probable that the 'good food' they referred to was' mea'ai Samoa' (Samoan food). The Macphersons conclude that imported food, drink and methods of preparation are not of themselves the issues concerning healers, but rather that these were symbols of "the acceptance of elements of palagi lifestyle and a simultaneous rejection of elements of the traditional and natural lifestyle" (Macpherson and Macpherson 1990, 152-154).

A woman's nutritional status before she becomes pregnant is increasingly recognised by Western scientific medicine to influence the birth weight of the baby. In traditional Samoan culture, the young women of the family in their role as sisters are accorded high status which may have ensured that their dietary intake was of a high nutritional order. Conversely a woman's peak reproductive years may be associated with a dietary intake of a less high nutritional order. The status of the woman as wife is both defined in her relationship as the 'outsider' and relative to her husband's position in the family. Thus Schoeffel concludes, "the lowest status category in a Samoan household, other than young children, is the wives of untitled men" (Schoeffel 1979, 241).

The social context in which eating or drinking occurs is also important. This reflects the centrality of social relationships and the elaborate character of Samoan social etiquette. Neich and Neich state that, "a pregnant woman should not eat without sharing her food with others. She must not hide it. If she does, the baby will be born with signs of that food. For example, unshared pork will produce marks like those of a pig on the baby's chest, or the baby will be born with fur on the body like a pig's coat" (Neich and Neich 1974, 462). Others report that eating of meat from the head or leg of the pig, may bring about
a deformity on those parts of the baby's body (Clark 1983, 166). An old rule which has a modern version concerns the proper ways a pregnant woman should drink from a coconut. "Drinking from the eye of the coconut may result in a child's being born with a small mouth, gutu mo'o, while drinking from the large end of a cracked coconut may lead to a child born with a large mouth, gutu tele". A version of this is that, "a pregnant woman should not drink from a bottle. If she does, the baby will be born with a crooked, large or damaged mouth" (Neich and Neich 1974, 461). Another eating rule is that, "holding food in the teeth while tearing or cutting it may result in a child born with lips torn at either the centre or corners of the mouth, gutu tipia" (Macpherson 1990, 186).

Cold and Heat

A number of pregnancy rules relate to avoidance of extremes of heat or cold. These beliefs would seem to stem from a general set of Samoan beliefs about the cause of illness. This set of beliefs which is thought to be ancient in origin is discussed in some detail by the Macphersons (1990, 150-151). In olden times 'aso anamua' Samoans are said to have had little illness because they lived in harmony with their physical, social and supernatural environment. In those days, only three things made Samoans ill; heat, cold and spirits. The outdoor life of Samoans of both sexes in their everyday activities of fishing, planting and household chores made them vulnerable to illnesses stemming from over exposure to the heat of the tropical sun. Likewise a sudden drop in the temperature of the body as a result of cool winds or rain or prolonged exposure through washing clothes in rivers was also a cause of illness. Samoans thus organised their social and economic lives and their physical environment to protect themselves from illness from these known natural causes.

As was discussed in Chapter Six, pregnancy is considered to be a time of great vulnerability for the pregnant woman, one which requires special care. One pregnancy rule reported in a study of pregnancy and birth practices in American Samoa, was that a pregnant woman is warned not to walk in water lest she miscarry
(Clark 1983, 165). It is likely that this rule stems from beliefs related to cold as a cause of sickness. A typical daily activity for young Samoan women was said to involve reef fishing to contribute to the family fare and sitting in the shallow water near the beach to do the family washing (Holmes 1980, 82). At the other extreme, a pregnant woman is also warned to avoid thermal heat in the form of hot foods or hot drinks or the heat of a fire or oven otherwise the baby's skin will peel at birth (Neich and Neich 1974, 462).

Activity

As was discussed in an earlier chapter the meaning given to pregnancy is dependent on the social context in which it has occurred. While a married woman living with her kin may be relieved of most of her normal domestic duties, the unmarried woman or girl may be expected to continue her normal duties or work even harder because of the shame she has brought on her family. Alofa's mother contrasted the life of the married woman with that of the pregnant single woman in Samoa.

A married woman is not expected to do much hard work and really takes things easy. However the single pregnant woman is not made a fuss of by the family and she would continue to be working hard, sometimes because of her own guilt, as well as being thankful that she had been accepted and not ejected from the family. Also some families insist the young woman works hard during her pregnancy, to teach her a lesson and ensure she doesn't let the family down again.

Likewise a young married woman living with her untitled husband's kin occupies as was noted in Pua's story in Chapter Six, the lowest status in the family hierarchy as an in-marrying woman. In traditional Samoan households, she rather than the unmarried daughters/sisters of the household is responsible for carrying out the heavier and dirtier domestic chores. Pregnancy particularly late pregnancy however, usually gave her some respite from her normal duties, the husband's family saying 'she's mamafa, let her have a rest'.
The fofo who were interviewed in Wellington considered it necessary for a woman to balance rest during pregnancy with gentle activity such as walking in order to have an easier birth. Alofa's mother considered that one of the reasons her daughter had a difficult birth was that she had not listened to her advice to go for a daily walk. Activity during pregnancy should be of a more restrained nature. It is said that a pregnant woman should not dance the siva (Samoan dance) (Clark 1983, 165). Whether this relates to the belief that dancing might be harmful to the baby or reflects the changed social status of the woman is unclear.

A pregnant woman is also differentiated from other women in the way in which she should sit. She must not sit with her legs folded together towards one side, a common way for women to sit, but with them straight forward, (normally a breach of Samoan etiquette), or crossed properly. To sit with the legs to one side will cause the baby to be born with crooked legs (Neich and Neich 1974, 461).

Other practices common to women such as wearing a flower in the ear or a floral lei around the neck must be avoided during pregnancy. In the case of the former, as it will cause ear deformities in the baby and in the latter lead to the baby's cord being wrapped around it's neck (Macpherson and Macpherson 1990, 186; Clark 1983, 166).

Congenital abnormalities such as congenital dislocation of the hip, harelip, birth marks of varying kinds, as well as such complications as the cord around the neck at birth, a cord prolapse or peeling skin is explained by Samoans as failure on the part of the mother to obey the necessary rules. In effect the mother gets the blame. This acts as a strong constraint on a woman to take account of the advice she will receive when she is pregnant. The woman's social group play a central role in monitoring her activities to ensure that she does not knowingly or unknowingly do anything which would harm the fetus. In this sense the group takes a responsibility even an advocacy for the wellbeing of the unborn baby. The Samoan rules of pregnancy are
framed in an understanding of the symbiotic relationship of mother and fetus.

It is probable that Samoans advocate some regulation of sexual activity in pregnancy. But it is unclear whether regulation involves complete abstinence once pregnancy is confirmed or relates to early or late pregnancy. Ethnographic studies have shown that restrictions on sexual intercourse are common and consistent with beliefs about conception and fetal growth (McClain 1982, 30).

Massage in Pregnancy

Massage is considered likely to be the oldest form of medical treatment used by Samoans and remains an important part of diagnostic and healing practices (Macpherson and Macpherson 1990, 227). Given the important part which massage plays in Samoan culture, it is not surprising that it is also commonly used in pregnancy. Pregnant women are said to go to the fofo:

1. For relief of specific ailments such as morning sickness.

2. For relief of lower abdominal discomfort later in pregnancy due to the weight of the fetus (Clark 1983, 165).

3. To determine the position of the fetus and change it if necessary (Kinloch 1985, 205).

There is very little written description available as to the nature of the massage practised in pregnancy. However those reports which do exist, would suggest that of the four styles of massage described by the Macphersons, the form used during pregnancy is known as 'mili' or 'milimili' (Maiai 1985, 251).
This is described by the Macphersons as

the most gentle of all the styles of massage and usually involves either the tips of the fingers or the palms of the hands. Very little pressure is applied and refined coconut oil, suau'u is used to reduce the friction. One or both hands are used and typically move over the affected area in circular motions, remaining longer in areas in which a complaint is localised (Macpherson and Macpherson 1990, 229).

Description of massage in pregnancy emphasise the gentle character of the massage. Clark reports that "the treatment consists of gentle kneading, in a circular manner, around the abdomen. The soothing effect of the massage is believed to relieve the discomfort, but the danger of abruptio placentae must not be overlooked". Clark's caution about the possibility that massage might cause the placenta to dislodge, reflects the general view of scientific obstetrics that massage given by traditional healers to fix the fetus in a position favourable for delivery is dangerous (Kay 1982, 12).

The gentle form of massage identified by Clark is also reported by others. Kinloch reports that "the antenatal massage I observed was always very gentle, and the fa'atosaga constantly asked the woman whether she felt any pain". Kinloch reports that a woman will go to a fa'atosaga many times during pregnancy for massage of her abdomen and lower back (Kinloch 1985, 204-205).

An account of massage given by a Samoan trained nurse and experienced midwife, reinforced the view that fa'atosaga are aware of the potential hazards of massage.

The fa'atosaga can help relieve a woman's pain and discomfort by massage. They do not give a strong massage. It can be dangerous you know, to the placenta. It can dislodge it, so the fa'atosaga massage gently around all your body low down. It helps a lot. Fa'atosaga can soften the muscles and lessen contractions, and turn the baby even after labour has started (Umaga 1983, 9).
Introduction

The obstetric 'rules' of pregnancy are institutionalised in modern antenatal care. For more than sixty years antenatal care has been an established part of the obstetric management of pregnancy. Its genesis was an attempt to reduce the high maternal and fetal mortality rates prevalent at the time (Oakley 1984; Smith 1986). At the outset education and clinical observation were integrated facets of antenatal care. In New Zealand, antenatal care was available as early as 1909, through midwife run clinics for women booked to have their baby at one of the St Helens Hospitals (Smith 1986, 26). Antenatal care was made more widely available from 1924, by a joint venture between the Department of Health, who ran St Helens hospitals and the Plunket Society. Care was provided by Plunket trained nurses under the direction of a specialist obstetrician. Segmentation of antenatal care in New Zealand seems to have begun in about the 1930's. It has been suggested, that this segmentation developed about the time when general practitioners began to provide a more comprehensive antenatal service. Doctors considered that they alone had the appropriate expertise to manage the new technologies developing. This view is reflected in this statement made by Dr T. Corkill, President of the Obstetrical Society in 1937, in response to a statement equating Plunket nurse advice with antenatal care.

That is not what we mean by antenatal care, that is mothercraft advice, which is by no means the technical antenatal supervision that modern maternity work demands (Smith, 1986, 97)

In New Zealand, as in Britain, obstetricians were slow to accept the significance of antenatal care, largely because prior to the 1930's there was little that they could do in diagnosing, monitoring or intervening in pregnancy (Oakley 1982, 669). This changed with technological innovations such as laboratory based tests able to diagnose maternal or fetal disorders and methods
of imaging the fetus such as X-ray and later ultrasound. The nature of obstetric control of pregnancy it has been argued changed from one of intervention when a problem arose, to one capable of ongoing surveillance and adjustment (Arney 1982). The medical monitoring of pregnancy is an integral part of the contemporary system of maternity care in New Zealand.

In order to identify the features of the obstetric management of pregnancy, the content of Chapters on Antenatal Care in the obstetric texts listed in Chapter Two were analysed (Reid, Ryan and Benirschke 1972; Niswander 1981; Green 1983; Williams 1985; Beischer and Mackay 1986; Llewellyn-Jones 1986; Turnbull and Chamberlain 1989).

What is modern antenatal care?
Antenatal care is defined by the American College of Obstetricians and Gynaecologists as,

> a planned programme of observation, education and medical management of pregnant women directed towards making pregnancy and delivery a safe and satisfying experience (Beischer and Mackay 1986, 47).

While the goal of a safe pregnancy and delivery is not dissimilar to that embodied in other systems of pregnancy care, as seen in the Samoan paradigm, the way in which obstetrics achieves that goal is considerably different. In New Zealand, clinical management, which commences with the first visit following medical confirmation of pregnancy, has for the past sixty years been largely provided by doctors, supported by midwives. In contrast, the bulk of antenatal classes have been traditionally provided by midwives working in hospital antenatal clinics, with doctors playing a more limited role. Not all antenatal education occurs in a hospital context. Lay run organisations such as Parents Centre in New Zealand and The National Childbirth in Britain provide education in a community context. There is however considerable professional input in the running of the classes. Not all women feel comfortable or are interested in attending antenatal classes. Staff at the antenatal clinics at Kenepuru and Wellington Womens' hospitals expressed concern at the small numbers of Pacific Island women who came to antenatal
classes. Attempts to develop classes considered to be more appropriate to the needs of Pacific Island women, have tended to focus on changing the context in which the classes are held. One such class was being run at Porirua by the Plunket nurse in the local Community Centre, at the time the research for this study was being undertaken. Discussion in the medical literature about the low antenatal attendance rate of Pacific Island women, does not take account of the existence of an alternative knowledge base from which women may draw, nor the difference in Samoan and Western ways of learning.

The segmentation of antenatal care is also reflected in the obstetric texts analysed. All the obstetric texts give greater emphasis to the clinical management of pregnancy provided by doctors than to learning about pregnancy and birth. A much smaller proportion of all chapters on antenatal care were devoted to the information needs of the woman. This is reflected in one text in which in a chapter entitled 'Antenatal Care. Education of the Patient', only one out of the twelve pages, referred to patient education while the remaining eleven pages described the clinical management of pregnancy (Beischer & Mackay 1985).

What does clinical antenatal care achieve?
In most of the obstetric texts reviewed, antenatal care was considered to be closely associated with improvements in maternal and fetal health in industrialised societies. Few texts explicitly recognised the contribution made by broader socio-economic and political changes. In one text, antenatal care rather than newer obstetrical techniques was considered to be, "the greatest single factor in the marked lowering of maternal and perinatal mortality rates of the last 30 years" (Green 1983, 57). While another painted a dramatic picture of the contribution of modern antenatal care to the reduction in maternal and fetal mortality rates.
Before the rise of modern obstetrics, the pregnant woman usually had but a single antepartum interview with a physician. At that interview, often not much more was accomplished than an attempt to anticipate the date of delivery. When next seen by the physician, the woman might be in the throes of an eclamptic convulsion, or suffering severe chills and high fever from pyelonephritis, or struggling to expel a very large but dead fetus (Williams 1985, 245).

Claims for or against the effectiveness of antenatal care in correcting, preventing or altering maternal and fetal morbidity are largely based on observational studies. Randomized controlled trials have not been a feature of studies evaluating the effectiveness of antenatal care.

From its inception antenatal care was invested in a moral imperative to women. Ballantyne, an English obstetrician who has been called the 'father' of modern antenatal care, likened the birth of antenatal care to the invention of the motor car. Just as cars meant new laws needed to be promulgated to ensure safety on the road, Ballantyne considered that the improvement of maternal health and thus that of the fetus, required the drawing up of new sets of laws which pregnant women needed to obey (Oakley 1984a). For women to ignore those laws, was as in the Samoan context, to put the health and wellbeing of their babies in jeopardy.

Many obstetricians advocate that the first antenatal visit should occur early in the first three months. "Ideally, the initial assessment should be conducted during the first trimester, the optimum time for establishing objectively the duration of pregnancy clinically" (Turnbull and Chamberlain 1989, 236). The traditional pattern of antenatal visits which a New Zealand woman made were, monthly until 28-30 weeks, fortnightly until 36 weeks and then weekly after that. This pattern followed the British model introduced in 1929. Some British studies have suggested that the number of antenatal visits should reflect the nature of the pregnancy. Women with low risk pregnancies making fewer visits than women with high risk pregnancies (Turnbull and Chamberlain 1989, 239).
A strong belief in the efficacy of early antenatal care was a feature of the obstetric texts reviewed. This was accompanied by a perception of some women as reluctant early attenders of antenatal care. Few women in New Zealand today give birth without having received some sort of antenatal care. In Britain, it is said the phenomenon of the 'true' non-attender has been a rarity for close on thirty years. However an ongoing theme in the medical literature is that, "women are reluctant antenatal patients and they must be persuaded to see their doctors more" (Oakley 1982, 668-669).

Medical concern with non-attendance has shifted to late or irregular attendance. Concerns with the late and/or irregular attender were also a feature of the obstetric texts reviewed. Some examples of these are:

Unfortunately at present some women do not seek antenatal care until after the 20th week. If the doctor, and his medical associates, working in the community, could induce all pregnant women, whether single or married, to visit a doctor, or a clinic, in the first quarter of pregnancy, many subsequent potential problems would be avoided (Llewellyn-Jones 1986, 70).

If the patient has been unduly late in seeking antenatal care, the reason should be ascertained (for example, working, low health care interest, cultural, pregnancy unrecognised, fear etc), and the value of the early initial visit for future pregnancies emphasized (Beischer and Mackay 1986, 51).

Every word and every act by all who come in contact with the pregnant woman should impress upon her both the importance and the availability of prenatal care for her fetus and herself (Williams 1985, 246).

Until quite recently, obstetricians accepted that antenatal care, was unquestionably of benefit to mothers and their unborn babies and that there should be more of it. In particular there was a strongly held belief that early and frequent visits were associated with lower rates of perinatal mortality. More recently it has been suggested in the medical literature, that the practice of antenatal care may not of itself be sufficient
faulty premises (Llewellyn-Jones 1986, 64). Excessive weight gain was considered to be a cause of pre-eclampsia and eclampsia, conditions which have a serious impact on the mother and the fetus. Some obstetricians therefore advised caloric restrictions during pregnancy (Green 1983, 58). It is now accepted that weight gain was the result of oedema, that is the result of not a cause of eclampsia.

Most of the texts considered that it was not normally necessary for a pregnant woman to limit exercise, the main restraint being that she did not become unduly fatigued. There was less agreement however as to whether work (that is paid work outside the home) is detrimental to maternal and fetal health. There was general agreement that pregnant women should avoid heavy work. Williams (1985, 257) concluded that any occupation that subjected the pregnant woman to severe physical strain should be avoided. While Turnbull and Chamberlain (1989, 245), considered that "women who have sedentary jobs may continue to work throughout the pregnancy. Those whose employment requires heavy physical exertion should take leave of absence or seek less vigorous work". None of the texts referred to the physical work which women are involved in on a daily basis ie doing housework and caring for other children, or suggested that there be some restraints on such work.

In general, sexual activity is not proscribed in pregnancy though some regulation is advised at certain times or if abnormalities are observed. Review of the obstetric texts showed that there is a good deal of variation in obstetric understandings of the effect on the fetus. On the one hand is the view that there is no evidence that sex with or without orgasm, has any detrimental effect on the fetus or is likely to bring on premature labour (Llewellyn-Jones 1986, 70; Turnbull and Chamberlain 1989, 245)). In contrast another view identified is that sex in late pregnancy should be avoided as orgasm may induce premature labour. Orgasm it is claimed has been shown to cause the uterus to contract (Niswander 1981, 67). While an earlier view now discarded, held that sex in the last month of pregnancy was hazardous, because of the possibility of intrauterine infection should the membranes
rupture or the patient go into premature labour (Reid 1972, 422).

A major difference between the way in which obstetric and Samoan practitioners provide care during pregnancy relates to the tools on which each practitioner relies. For the fa'atosaga, her hands and her powers of observation, are her tools. In contrast, the modern obstetric practitioner tends to place less reliance on clinical expertise and more reliance on the technological tools increasingly available.

Antenatal Education

The overt function of antenatal education is to provide the mother with information about pregnancy and to prepare her and her partner for childbirth and childrearing. A feature of the obstetric texts reviewed was to ensure that medical views of pregnancy and birth are transmitted to pregnant women. This is exemplified in this quote from one of the texts.

Since one of the purposes of antenatal care is to prepare the mother for labour, and for the care of her newborn baby, the attendants of the pregnant women have a unique opportunity to inform, instruct and educate women in elements of hygiene, in baby care and to demolish the accumulated racial myths related to parturition (Llewellyn-Jones 1986, 60).

It was also considered that women should be informed about potential complications.

Criticism of some antenatal education courses is that they are too idealized - that is, the couple are unprepared for major complications. When things do go wrong, there is a greater sense of disappointment and perhaps anger, and the latter may be projected onto the medical attendant (Beischer and Mackay 1985, 61).

The role of education in the advantages of medical technology is illustrated in the conclusions drawn from a New Zealand study which compared different labour outcomes for two groups of adolescent mothers. The control group received standard antenatal care at a general clinic and the option of attending normal
antenatal classes, the treatment group attended a special adolescent clinic which integrated clinical and educational care. One outcome was that the treatment group had a significantly higher rate of epidurals in labour. The authors concluded that this, "may have been due to better medical attention or to better education of the patients who could therefore make an informed choice about analgesia" (Clark et al 1986).

It would seem that more women attend clinical antenatal care than formal educational classes. Studies in Britain have shown that half or less of pregnant women attend antenatal classes and that disadvantaged women are concentrated among the non-attenders. defaulters (Oakley 1989). A similar picture has been shown in New Zealand, in that young women, unmarried women, Maori or Pacific Island women and women of low socioeconomic status or educational achievement were disproportionately represented amongst non-attenders of antenatal classes (Hutton et al 1982). A goal of most studies reporting these findings was to develop programmes which would be more attractive to vulnerable women.

DOING PREGNANCY - WOMENS' CONSTRUCTIONS

Introduction

In this section the way in which Samoan women drew from a variety of sources of knowledge in constructing the way they did pregnancy is discussed. Women acted to protect their own health and to ensure the satisfactory growth of the baby inside them. While visits to the fofo and/or doctor formed a part of care in pregnancy, of equal importance was the way woman managed their everyday lives. This also involved adjustments in their sexual relations with their partner.

Women were asked whether they had been given any advice by other Samoans during this or previous pregnancies, whether this advice was given in Samoa or New Zealand, and what their attitude and response had been. Thirty three of the women said they had been given advice by members of their family. For all but nine women, this advice was given in the context of pregnancy in New Zealand.
Eating and Drinking

Most of the advice related to food that should be avoided. As was described earlier seafood such as octopus and shellfish was considered to be harmful to the baby and thus to be avoided. Self enforcement was encouraged by such warnings as that if a pregnant woman ate raw mussels in pregnancy her baby would look like a mussel, be born with a rash or be a 'ulu vale' (hard case or difficult to manage child). Two of the women were told that pork was to be avoided as this was considered likely to give a woman the 'stomach ache'.

Samoan women were also advised of the mode and context in which eating and drinking should occur. A number of different beliefs, some of which were described earlier were mentioned by women. These included that:

1. A pregnant woman should not eat food secretly.
2. A pregnant woman should not eat directly from the pot.
3. A pregnant woman should not cut food from her mouth with a knife. This causes harelip in a baby.
4. A pregnant woman should not drink from a bottle or a can.
5. A pregnant woman should not cut the eye from the coconut to drink from otherwise the baby will have a big mouth.

'Good Food' and Pregnancy

As has been indicated, Samoan beliefs are mostly concerned with food that must not be eaten, while obstetrics gives greater prominence to foods that should be eaten. In both cases the objective is to promote the healthy development of the baby.

Women considered that 'good food' was Samoan food and that this was preferred by pregnant women. Women were divided in terms of what they considered to be 'good food in pregnancy'. One group of women, considered fruit and vegetables were the best food for the pregnant woman. The other group considered some mix of fish, meat, eggs, vegetables or fruit was best for the pregnant women.

More than two thirds of the women interviewed indicated the foods they preferred to eat during pregnancy. Most women wanted some form of Samoan food. Uila who was having her second child said she had this craving for Samoan food, especially 'ulutunu' (roasted breadfruit) and 'fa'alifu ta'amu' (yam cooked in coconut cream). While Amataga who was having her fourth child, felt that during pregnancy, "I think that most Samoan ladies find they want to keep to Samoan food at that time.

This preference for Samoan food also seemed to be associated with women who suffered from sickness in pregnancy. Rosa, who was having her fourth child when she was very sick, craved for "raw fish, with the very soft tip of the taro when it's boiled. It usually takes about one hour to stay in my stomach, then all comes out again, but a bit longer than other food, even milk".

While Lemapu, a twenty three year old having her first baby, even when she was very sick, craved for Samoan food during her pregnancy, particularly to drink from the 'niu'(young coconut).
Fruit was mentioned by fifteen of the thirty two women as a food either craved for (that is, a woman felt she had to have), or favoured more during pregnancy. (The craving for fruit which women spoke of was usually for the tropical fruits of Samoa rather than the temperate fruits of New Zealand). A number of women said that this craving for fruit was said to be associated by Samoans with early pregnancy. When a woman was seen to be eating a lot of fruit, older women would suggest that she might be pregnant.

Cold and Heat

Samoan beliefs about the causal links between extremes of heat and cold and sickness events were interpreted within the everyday life of the woman. The need to avoid the cold was mostly associated with pregnant women and failele (newly delivered mother) not doing the washing. This was the most common household chore which others, usually husbands did during pregnancy. Lagi said that her husband was reluctant for her to do the washing "as it's too cold now". However Lagi says she does not take any notice of his instructions and has done it by the time he comes home from work. Rosa said that the main domestic chore her husband helped with, was doing the washing. Again the reason given was because of the cold. "I am not doing any more washing, because of the cold. My husband is doing it all".

Other women were advised or instructed primarily by their husbands to avoid extremes of heat. Olana said, "my husband he will never take me close to the oven. I never go to the back to prepare the food. Even when I like to go and fry the cocoa beans, he say, 'oh, you keep away from that, it's too hot... He says it's no good for the baby's skin. He said the skin of the baby when they are born peels".

While women were advised to avoid certain activities during pregnancy this advice sometimes conflicted with other beliefs held by the woman. An example of this is the way in which Sose coped with conflict between Samoan and Western understandings of the causes of peeling skin in newborn babies. Sose's husband and
his relatives tried to stop her from doing the cooking when she was pregnant, saying it would blister the baby's skin. "They say don't do this, stop doing that, I don't want to listen. And because my husband believes in those things, so we sometimes got argument". Sose had trained as a nurse in Samoa. The meaning which she gave to babies born with a 'blistered skin' was that they were 'overdue' when they were born. This explanation was drawn from the medical model and her own experience with her first baby who was 'overdue' and born with a peeling skin. This explanation did not however fit when her second baby who was not 'overdue,' also had a badly peeling skin. Her husband and his relatives explained the condition by recalling that Sose had ignored their advice to keep away from the heat of the stove. In re-constructing her understanding of the condition (at least her public expression of it) Sose sought a further explanation in familial or genetic factors saying, "must be something in our families".

Movement, Activity and Rest

Activities which involved reaching up, such as hanging out the washing or tying a lavalava around the neck were to be avoided. These were seen as potential causes of the baby being born with the umbilical cord around its neck. A condition which was recognised as potentially hazardous. Sitting properly with the legs folded, not turned to one side was necessary. Otherwise the baby would be born with a 'vaesape' (clubfoot) Pregnancy, particularly a first pregnancy was described as a time when a woman should rest more, avoid vigorous activity and heavy lifting. It is one thing to be advised to rest during pregnancy and another to be able or want to do so. The stereotypical role of the married woman in Samoan as in most other societies, is that her major if not her sole role is as a homeworker and primary care provider to other children. Advice to rest during pregnancy can only be achieved if others in the woman's social group her male partner or other kin, take up functions normally performed by her.
Fifteen of the twenty five women interviewed during pregnancy spoke about the impact of pregnancy on their normal domestic responsibilities. For most women pregnancy brought some changes, with husbands or other family members relieving them of their responsibilities. Three women received little or no help with their domestic work. One was a woman living on her own, while the other two women rejected help offered by their husbands. The extent to which husbands rather than other family members assisted with those functions usually performed by the wife, was influenced by whether the household was a nuclear or extended one. Husbands seemed to give more help in the house where a couple was living in a nuclear family household. Some husbands gave their wives considerable assistance. Fisaga described her husband as being very helpful. "Just like a woman. Cook, washing, wash the kids, clean the house. Oh, I'm lucky". While Alice's husband said, "Oh, we sort of share everything. I do the washing... if I don't do it who's going to do it? I'm not like those guys who just go to the pub and all that, I like to do things in the house".

These comments would suggest that sharing domestic chores was not considered a normal characteristic of Samoan conjugal relationships. Studies of the lifestyle of Samoan migrants in New Zealand have not explored gender-related issues such as the economic division of labour and the care of children. There have also been few studies which have examined gender-based issues in Samoa. One major study conducted in the 1970s, suggested that though the traditional divisions of labour were primarily gender-defined, with masculine labour emphasising outdoor, heavy, dirty work and feminine labour inside, light, clean work. These were modified by factors of status and age. Thus old men or those incapacitated in some way can do women's work without shame, while ali'i (chief) of high rank are expected to refrain from very heavy men's work (Schoeffel 1979, 465). That Samoan men in New Zealand do help their wives when they are pregnant with women's work, such as washing, was evident in the stories told by the women. This was particularly so when couples were living in a household without the daily support of other family members.
This would seem to be a change in the traditional gender-based division of labour in Samoa.

Sexual Relations in Pregnancy

Women's feelings about sex in pregnancy were discussed with twenty three of the fifty women interviewed. Women were less diffident in expressing their feelings than had been expected. Some researchers reported that Samoans were reluctant to talk about sexual matters with outsiders (Freeman 1983, 290). It may be as other women researchers have found that factors such as shared gender facilitated a rapport (Roberts 1984). However the topic of sex in pregnancy was discussed with a higher proportion of women classified as biculturally and less Samoan oriented (57% and 45%) in comparison to women who fitted my category of more Samoan oriented (37%). While this might suggest that women who adhered to more traditional Samoan values are more reticent than other women to speak about sex in pregnancy, other factors such as their more limited facility with English language might also have contributed.

Women who were interviewed twice, were over represented among the women with whom the topic of sexual relations in pregnancy was discussed. While only 46% of women in the total interview group were interviewed twice, 56% of women who spoke about sex in pregnancy were interviewed during pregnancy and after birth. Again this suggests a greater focus on pregnancy related topics during the pregnancy interview. It also suggests that for those women with whom the topic was not discussed during the pregnancy interview, greater familiarity with the interviewers enabled women to feel more comfortable in expressing their feelings on a culturally delicate topic during the second interview.

Women shared a common belief that there should be some constraints on sexual relations during pregnancy. There was however a trend for women having their first baby to consider that there should be no sex in pregnancy. Women were evenly divided between those who thought there should be no sex at all once a woman knew she was pregnant and those who thought that a
couple should abstain from sex at certain times in pregnancy. Where a woman fitted in my classification of cultural orientation did not explain this difference in women's attitudes to sex in pregnancy. However rather more women having their first baby considered that there should be no sex in pregnancy. The two reasons which women gave for feeling as they did, were similar in both groups. Women either said they lost interest in having sex in pregnancy or that they or their partner was afraid of harming the baby.

The meaning which women gave to refraining from sex in pregnancy because of the effect it might have on the baby was largely drawn from Samoan sources of knowledge. Olana recalled that in Samoa older women would say to a pregnant woman, 'you're not still sleeping with your husband now you're pregnant are you?' Implicit in this was the understanding, that this was not appropriate behaviour for a pregnant woman. Other women recalled being told in Samoa by fa'atosaga that a husband should not have sex with his wife in early pregnancy.

Josie drew comparisons in attitudes to sex in pregnancy in Samoa and New Zealand. "I remember when I was pregnant in Samoa, oh, they don't want the husband to come near me in that time. But in here, up to the person". Clare compared the view of her doctor when she asked him about the effects of sex on the baby, with how her women friends felt. While her doctor asked her to "give me one reason why not", her friends told her "that they just don't like their husbands till they are five or six months pregnant and then they start sleeping together".

Women who felt that a couple should refrain from sex in early pregnancy did so, because they believed it was a delicate time in the development of the baby. As one woman put it a husband should be very careful, because it is like a "house of glass that the baby lives in". In deciding whether to continue a sex life or not in early pregnancy, women were influenced by their own previous experiences as well as the knowledge they obtained from experts. Sose was having her second baby in New Zealand. She was aware of both Samoan and obstetric attitudes to sex in early
pregnancy. When asked whether she felt there was any time when she was pregnant that she should not have sex Sose hesitated and then replied, "my doctor told me, 'cause I ask her and she told me, that you keep having a relationship when you feel comfortable... But you know, there's another old belief that you shouldn't keep on having sex or you might bleed again". In evaluating these contradictory sets of advice Sose, a Samoan trained nurse, drew also on her own experience. In her first pregnancy she had a threatened miscarriage at six weeks. She associated the bleeding with the fact she had continued to have sex in early pregnancy. This pregnancy she was not keen to have sex because she was afraid of miscarrying.

All but one of the women said that their husbands were sympathetic and understanding of their disinterest in sex. Men and women seemed to share a culturally constructed understanding that there should be some restraints on sex during pregnancy. A number of the husbands were also fearful of the harmful consequences of sex in pregnancy. When Lagi was asked whether she felt it was all right to have sex in pregnancy she laughed and said, "I don't know. My husband too scared to do it, when he know I'm pregnant". While Fisaga when asked whether she thought it was all right to have sex in pregnancy replied. "I don't think so, it's not really good for the baby... And my husband care for me and for the baby. He said something if you do these things, something wrong with the baby". Fisaga says her husband puts no demands on her when she is pregnant.

In contrast to the way many of the women described negotiating with their husbands so they could use contraception, women did not have to work at not having sex in pregnancy. A husband's willingness to restrain his sexual feelings, gave women greater control over the conduct of their sexual relations during pregnancy. As Telesia said although her husband had 'urges' at times during pregnancy "as soon as I found out I was pregnant, there was no sex throughout my pregnancy. I thought you're not getting on me. You'll squash the baby and things like that".
As Lagi's comments indicated, the initiative to refrain from sex in pregnancy did not always come from the wife. Sose recalled how her husband's initiative taking led her to suspect he was having an affair. When she accused him of this, he was astonished and asked her what made her think such a thing. Sose said,

we didn't have sex for about three months. I'm thinking you're enjoying yourself with another lady, 'cause you never come near me. Then my husband explains clearly to me, that I'm carrying and he doesn't want what happened with our first one, bleeding. And then everything was all right.

Most women indicated that attitudes to sex later in pregnancy when as Olana said, "the baby inside is strong", were more permissive. However, some women considered that a couple should not have 'too much sex' otherwise a baby will be born with 'a lot of grease on it'. Another woman was told by her mother-in-law, a fa'atosaga, that jaundice in the new born was the result of too much sex in late pregnancy.

Pregnancy and the early period after birth seem to be periods when Samoan women had greater control over the nature of their sexual relationship with their husband. That relationship changes when a woman resumes her normal non-pregnant state. This change is illustrated in Ropeka's story.

When I got out of the hospital, it was seven days, and he was teasing me and asking me, and I says 'no, you have to wait for six weeks'. And he did wait and then after that, he said to me, if I'm feeling alright and I said, 'yea, I feel alright' and he asked me and I agreed because he was complaining he was waiting for nine months... I feel sorry for him... but now, he doesn't care, he doesn't have to say... back to normal again.
A Problem of Smell

Some Samoan women described a phenomenon which had sexual implications which was not reported of other women in the literature. Eight of the thirty two women told how during pregnancy their husband's smell brought on bouts of nausea and vomiting. For some women this aversion was so strong that it amounted to a banishment of the husband for a large part of pregnancy. While women varied in the extent to which they explicitly linked this aversion with a dislike of sex during pregnancy, the nature of the phenomenon resulted in an absence of sex. For a number of the women, their aversion to their husband's smell was so severe that contact during pregnancy was strictly limited. Lila recalled her first pregnancy "I hate him when he come home... I used to put the blanket over my head and hide my face. I didn't want to see him. That was hard, but I can feel he's ready to come home and then I start vomiting and all that. I really hate my husband. I don't want him to come near me. I hate the smell."

Olana was sick for a large part of her second pregnancy. This was made worse by her husband's smell.

Even if I am fast asleep, I know he was coming inside the room, because I can smell him... Even if he cook the food and he come and give the food to me in the room, I will never eat. He only cooks and give to my daughter to give the food to me. He will never come with the food to me, 'cause I will never eat. And at the night time, even the smelling of the soap, shampoo, perfume, will be none in my house.

Similar accounts were given by other women including one of the fofo interviewed. Mrs B was sick for most of her seven pregnancies. A factor which triggered feelings of sickness was her husband's smell. That she did not consider this was an uncommon occurrence for Samoan women is implicit in her comment that, "you seem to acquire a special smell for your husband".
Feelings of aversion to a husband's smell did not appear to be related to my classification of the cultural orientation of the woman. A common thread linking the accounts was that women had existing feelings of nausea. Thus their husband's smell was not the primary cause of their nausea, but a secondary stimulus. Among the women who reported that their husband's smell made them sick, were some of the women who were very unhappy during pregnancy, which given their prolonged feelings of nausea is not surprising! Feelings of aversion to a husband's smell were more commonly associated with a first pregnancy, but were also a feature of the pregnancies of some women who already had children. For some women these feelings seemed to reflect their lack of close family members in Wellington. Alice and Lemapa who became pregnant during their first year in New Zealand, spoke of how they missed their own mothers at that time. As Alice said, "I cried every night". Her feelings of nausea disappeared when she returned to Samoa on a visit during her pregnancy.

Most of the eight women said that they did not want sex during pregnancy. This banishment of the husband during pregnancy can be understood as a social control mechanism used by the woman, perhaps to legitimate a woman's dislike of sex in pregnancy or as a psychological response to the man responsible for the pregnancy. It could be argued that if men make women pregnant and pregnancy makes women sick, then men make women sick. For Olana, all the things associated with her husband; his smell, and the toiletries he uses, brings on a physical rejection of him. That most husbands were said to be accepting of their wives rejection of them during pregnancy, suggests that being pregnant, like being sick are states in which the normal social mores are lifted.

Samoan Massage in Pregnancy

Whether a woman went to a fofo during this or a previous pregnancy was discussed with thirty nine of the fifty women. Differences existed between those women with whom the topic was discussed and those with whom it was not. Women who were interviewed only after birth were over represented among women
with whom the topic was not discussed (64% 7/11). Women who were classified as less Samoan oriented were also over represented among this group (40% 8/20), in comparison to 12% 2/16 of women classified as more Samoan oriented and 7% 1/14 of biculturally oriented women. The topic was also not discussed with the three young women who had been brought up in New Zealand.

Going to the fofo was however a common practice among women with whom it was discussed, in that 84% 32/39 had gone to a fofo during this or a previous pregnancy. Women who had never gone to a fofo during pregnancy were not necessarily opposed to the practice. Four women, all classified as less Samoan oriented, did not go because they were not particularly interested in Samoan ways of healing. Two other women, also classified as less Samoan oriented thought that the fofo could be helpful but they personally did not feel the need for her treatment. One woman would have liked to have gone to the fofo in late pregnancy to relieve her discomforts, but there was no-one she knew in close enough proximity. Only one woman expressed awareness of medical concern about the practice of Samoan massage in pregnancy. She had heard on the Samoan news that "some babies had died in Auckland", because of Samoan massage. The news item was based on the conclusions of a study which hypothesised a link existed between the higher rate of stillbirth among Pacific Island infants and the practice of traditional massage (Becroft and Gunn 1985).

<table>
<thead>
<tr>
<th>Orientation by Category of Cultural Orientation</th>
<th>Users</th>
<th>Bicultural</th>
<th>&lt;Samoan</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;Samoan</td>
<td>81%</td>
<td>64%</td>
<td>40%</td>
</tr>
<tr>
<td>(13)</td>
<td></td>
<td>(9)</td>
<td>(8)</td>
</tr>
<tr>
<td>Non-users</td>
<td>6%</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td>(1)</td>
<td></td>
<td>(4)</td>
<td>(4)</td>
</tr>
</tbody>
</table>

It was expected that a higher proportion of women classified as more Samoan oriented would go to the fofo during pregnancy. This
was largely confirmed by the findings as is shown in Table 7.1. All but one of the women classified as more Samoan oriented had been to a fofo during the current or a previous pregnancy.

Going to the fofo was also more common among experienced mothers (Table 7.2) of whom a higher proportion went to the fofo during the current pregnancy. Going to the fofo however was a common characteristic of the pregnancy care of the majority of the Samoan women.

Table 7.2
Use of Fofo by Parity

<table>
<thead>
<tr>
<th></th>
<th>P0</th>
<th>P1+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>6</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Non-users</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

Frequency and Timing of Fofo Visits

When women went to the fofo and how often, was influenced by the reasons women gave for their visits. The largest number of women (16) went to the fofo mid to late pregnancy, to relieve discomfort and to ensure the baby was in the correct position. A small group of women (4) went to the fofo only in early pregnancy, for relief of morning sickness. Four women were massaged throughout their pregnancy. Most women went for fofo (ie massage) on more than one occasion, with more frequent visits occurring in mid to late pregnancy.

Reasons for Going to the Fofo

The majority of women went to the fofo for relief of specific symptoms. In early pregnancy these visits were generally related to morning sickness which women had failed to successfully self treat. To cure their nausea and vomiting Samoan women drew on the alternative knowledges available. As others have shown Samoans adopt a serial approach to the treatment of sickness. When treatment from one practitioner is unsuccessful they will seek
help from another practitioner (Kinloch 1980). This pattern of help seeking behaviour is illustrated by Rosa's and Lemapu's stories. Both women sought help at different times from Samoan fofo and Western medical practitioners.

Rosa suffered from severe morning sickness with all her pregnancies. "With my first pregnancy, I was taken to the hospital to have injections and so on, so that I could eat. Then I went to Porirua to be massaged, but it did not help". Rosa returned to the doctor and was re-admitted to hospital for further intravenous therapy. This treatment she said helped her to recover.

Lemapu also went to the doctor first for relief of severe morning sickness. The doctor gave her some tablets which failed to give her any relief. She then went to the fofo. The diagnosis as was made for other women, was that the 'to'ala' was not sitting properly. It had been displaced by the baby and was causing an obstruction. The fofo told Lemapu that until the 'to'ala' returned to it's position in the lower part of the stomach, the vomiting would not stop. After a week of treatment Lemapu was not feeling any better. She returned to her doctor and was subsequently admitted to hospital for treatment which involved intravenous therapy.

Other women such as Olana and Lila went only to the fofo for treatment of morning sickness. Olana was full of praise for the skills of the fofo she went to saying, "all the pregnant Samoan women go to see her. Even the women who'go to the hospital and their food always comes out of their mouths".

Problems of Later Pregnancy

Discomfort in later pregnancy, backache, heaviness, lower abdominal pressure and leg pain were some of the symptoms women sought relief from in visiting the fofo. These physical complaints of pregnancy were similar to those given by the women Graham interviewed (Graham 1977). Samoan women did not consider
these were untreatable consequences of pregnancy but rather ones which Samoan fofo knew how to treat.

Faasau had problems with her back for which she went to the fofo for treatment.

When I bend down to do my work, I could not stand up straightaway. I have to slow down and get up very slowly. I going to massage by the lady and she said something is in my leg and I said, 'what is that?' and she said that thing is 'to'ala', and she just massages my back, not hard, but now it is alright.

A number of women went to the fofo to get relief from symptoms of lower abdominal pressure. Nana, who was having her first baby, went to the fofo in her eighth month.

I felt a bit painful down in my lower abdomen. When I got to her, she said that the baby was very low. So she just put her hands down in the bottom (abdomen) and gently push it back. As soon as the baby was right, the pain went and then the fofo said there is no point in carrying on. So I stopped going, by then the pain is gone.

Other women who went to other fofo also spoke of the fofo diagnosing the problem as 'the baby being too low' and the cause of the problem being that the woman had been working too hard. For some women such as Lila, the problem had a more acute onset.

I remember one day, I was sick when I was six months pregnant and I feel I nearly had it early. So I was rushing out to see my husband's cousin to see if she knows anybody around here doing the massage and all that. So then my husband's cousin told me about the aunty. She's just got here from Samoa not long ago. She's a midwife back home. So I went there to her, and she said 'yeah I nearly lose the baby, because it was really down'. So she tried and push it up.

Lila was very careful after that and did not carry the washing or any heavy work.

It would seem that Samoan fofo consider it abnormal if the baby is in a low lying position too early in pregnancy. Women go to
the fofo with symptoms which are interpreted as those of an abnormal condition. The diagnosis of abnormality would seem to be sustained when women get relief from the symptoms when treated by the fofo for a 'low lying baby'. This procedure of lifting the baby is done to relieve lower abdominal pressure. It is different to the practice of 'turning the baby' or as it is described in the medical literature, external cephalic version.

Positioning the Baby

Samoans place a good deal of emphasis on the correct positioning of the baby before labour commences. Eighteen of the thirty two women who had been to the fofo during this or a previous pregnancy said that during the course of massage the fofo assessed the position of the baby. If the baby was not in the 'right position', the fofo would try to 'turn the baby'. Ropeka compared the difference in labour between her first and this baby. She carried both babies very high. With her first pregnancy she did not go to the fofo. Labour was difficult and long and ended in a forceps delivery. However this time she was fofo late in pregnancy by her husband's aunty, who was visiting from Auckland. Ropeka considered that she had this baby on time and an easy labour because her aunty "fofo her down and turn her around".

Sometimes women went to the fofo after being told by a doctor that the baby was in a breech or transverse position and that the probable outcome would be a caesarean section. Women actively chose to avoid having a caesarean by going to the fofo to 'turn the baby'. Olana told of the experience of one of her neighbours who had been told by the doctors she would need to have a Caesarean section, because of the lie of the baby.

After she came back from Kenepuru Hospital, she went straight to see the woman (fofo) and went back the next day to see the doctor and the baby was on the normal way. The doctors over here, can't do anything about the baby, if the baby is on sideways of your stomach. Even in Samoa, fa'atosaga woman can do that easy. They can turn the baby around.
Josie had personal experience of the skills of the fa'atosaga.

My last appointment, when I been to see the doctor and he said, 'he's on the breech way', the head's up the top. So he said to me, my next appointment if it's still the same way, he's going to take me to Wellington... So on that day, when I came home, my husband came home and then we went to see the fofo. So you know, it's good... she turned the baby, it's not sore or anything that you feel. It's good to listen to what they doing. It's not like the doctor, because when the doctor touches and you know try to listen to the baby, you can feel sometimes it's sore eh or pain. But when the fofo does it, it's very gentle.

Uila also sought the help of a fofo after the doctor had diagnosed that the baby was in an abnormal lie.

From my internal check, we found that the baby lay across my stomach. The doctor made an appointment for me at the main hospital, because he was worried about my baby's position. He said that if by my next visit he was still in that position, I would have to be operated on before the ninth month. So I went to a Samoan fofo. When I went for the next appointment, he had moved to the natural position.

While there are few written descriptions of Samoan massage in pregnancy, those that do exist, report that this is a 'gentle procedure' (Kinloch 1985; Umaga 1983; Maiai 1985). There are some medical researchers however who argue that the practice of Samoan massage in pregnancy is hazardous to the fetus and should be discouraged. For a discussion of how this illustrates the construction of knowledge within the biomedical paradigm see Appendix F.

When the language which Samoan women used to describe their experience of being fofo was examined, particularly when this involved 'turning the baby' again the dominant theme was that the nature of traditional massage is essentially gentle. None of the women spoke of discomfort or pain which might have been associated with forceful attempts to position the baby. Some women described the technique involved, while others spoke of the sensation of being fofo. An important aspect of going to the fofo
which should not be ignored, is the extent to which the treatment enhanced a woman's feelings of wellbeing. Though a woman might have gone to the fofo for relief of specific symptoms, afterwards what was emphasised was the feeling of wellbeing, not just the removal of the original complaint. As has been suggested earlier for women with other young children there were few opportunities to rest. Going to the fofo enabled hard working women to recharge their energies. As Pua who was having her fourth child and who worked as a cleaner until late pregnancy said, "you really like to feel the movement, she keeps on talking and it really makes you want to lie there while she keeps on with what she was doing. It's very soothing and relaxing. It is very nice and make me sleep good at night".

Kuini emphasised the gentleness of the technique her aunty (a fofo) used. "She massages around my stomach and around the soft of my behind, just gently rub around the leg joint with the stomach".

Nana who was having her first baby, went to the fofo once, when she was eight months, for relief of lower abdominal pressure. She said that the massage felt "very cool and comfortable, only when she pushed up the baby that was a bit uncomfortable, but the rest was nice and cool".

Fisaga went about three times to the fofo, for massage in late pregnancy, to ensure the baby was in the right position. Fisaga was concerned as the fofo told her the baby was small. (This worried her so much that she asked her doctor if she could have a scan. Though smaller than her other babies, the baby was normal weight at term). She said the massage "feel alright. I want her to massage my tummy (feels good) and I just feel my baby moving... when she touch one side the baby moves to the other side".

Leuma in describing the massage she received 'to make the baby straight' said that though she felt the baby moving, it was never sore when she was being massaged.
Alisa said that she felt no pain or discomfort when the fofo was turning the baby.

All she does is just rub your tummy and then she puts it right and then you feel baby going back to where it was... and you can see it moving... and then she (baby) sort of says, 'oh I don't want to be like this (new position) and it's quite good, because it's like baby's having a competition with the fofo.

When Alisa was discharged from hospital because her labour pains had stopped and she was not therefore considered to be in labour, she promptly went to the fofo. Alisa said that she, "massaged me, then she put the baby in the right position and then she told me in the next morning I will be having baby". When Alisa was asked what the sensation of being fofo was like she replied, "it's good. It's totally different from doctor's massage. Doctor's don't massage, they poke you".

One woman described her experience of having the baby turned from a transverse into a cephalic (head first) position. Uila said that the fofo "was gentle and I didn't find it at all uncomfortable. It didn't hurt at all". After the fofo successfully turned the baby Uila said, "I felt relieved, especially after worrying about it so much". The baby remained in the cephalic position and Uila did not require an 'elective caesarean'.

As was suggested earlier, if the 'norm' for massage is gentle and soft rather than hard, a fofo who was regularly deviating from the norm, would be likely to become known to Samoan women. Knowledge about Samoan healers is only available through informal social networks.

Finding a Fofo in Wellington

That a considerable number of Samoan fofo were working in Wellington in the mid 1980's is seen from the findings of the study. Thirteen different fofo, all women, were identified in the interviews with the fifty Samoan women. All but two of the fofo
lived in Porirua. One fofo who was named by three women, was also one of the three fofo interviewed during the course of the study.

Women made contact with a fofo through their informal social networks, in particular their female kin networks. Of those women for whom there was information about the source of contact, the majority (12/22) said that the fofo was either a member of their extended family or they were referred to her by a member of the family. Another five women went to the fofo because she was a member of their church. The role of the migrant church in New Zealand, in maintaining and strengthening Samoan institutions and cultural values has been examined by other writers (Pitt and Macpherson 1974). All of the women who made the connection through their church, attended churches with separate Samoan congregations. Another five women made contact with a fofo through other social networks such as neighbours and work related friends.

There has been little research into the work of the Samoan fofo in New Zealand, despite the fact that she remains a central figure in the treatment of sickness among the Samoan community (Kinloch 1980; Kinloch 1980). The limited research which has been done contrasts with the exploration of other Samoan institutions such as the kinship and matai systems (Pitt and Macpherson 1974; Macpherson 1972; Macpherson 1975).

Samoan Women and Antenatal Care

During the mid 1980's antenatal care was provided in Wellington primarily by general practitioners and to a lesser extent by hospital antenatal clinics. Two hundred of the Samoan women in the total study population (80%) attended their general practitioner for antenatal care. Forty eight women (20%) attended antenatal clinics. When women had a choice of doctor, they said that gender was the main factor which influence their choice. At the time of the study there were only a small number of female general practitioners in Wellington, most of whom delivered babies. Two of these women doctors provided care to a substantial
number of the Samoan women. There was little doubt that most of the Samoan women preferred to have a woman doctor. Such feelings were common to women regardless of age, parity or where a woman fitted in my classification of cultural orientation. Some women who shifted during their pregnancy or shortly after the birth, continued to come into Wellington from Porirua to attend one woman doctor.

Melaia, who was having her first baby and went to a woman doctor said, "I'd have been embarrassed if it had been a man. I don't know if I would have let him examine me. I'd have probably taken off". Even with a woman doctor, Melaia found her first experience of a vaginal examination very difficult. "The first examination she gave me, I was ashamed (said with feeling)... but she told me not to be shy, just to relax. But I wasn't relaxing!".

Olana, who was having her second child and who also went to a woman doctor, said,

I am a very shy woman to see my body. I think it's good for the woman to see the woman rather than a man. If it's a man, it's good to go and see the man. To me, I like to go and see the woman doctor, because you can tell everything to her and look at your body. She can see your breasts, but the man (long emphasis).

Kuini, who was having her third baby, recalled that her first vaginal examination in Samoa was done by a male doctor.

I was not scared, but I felt embarrassed being checked out by a man and he was a very young doctor too. It was funny with the older women there, they used to say to him, 'why him? Why didn't they send an older man or a woman to check them'. Even though it was a young doctor, it was alright, because there was a nurse with him all the time.

Here the nurse as the chaperon desexualizes the encounter and enables the construction of the gynaecological examination (Emerson 1970). In New Zealand, Kuini chose to go to a woman doctor to deliver her baby.
A smaller group of women attended either the antenatal clinic held at Wellington Women's Hospital or the Wellington Women's clinic held at Kenepuru Maternity Hospital. There were two main reasons why women attended hospital clinics rather than a general practitioner. For a few women it was because their doctor did not deliver babies. The majority of women who attended hospital clinics did so because they were considered to be in a 'high risk' category. Women who lived in Porirua and were not considered to be in a 'high risk' category were cared for by their general practitioner and birth was anticipated to occur at Kenepuru Maternity Hospital. However, women who were considered to be 'high risk', attended a special clinic held at Kenepuru Maternity Hospital for those Porirua women who were going to give birth at Wellington Women's Hospital. Women who had a previous caesarean section, were more likely to be 'clinic patients'. Only 5% of women ten out of two hundred who attended a general practitioner had previously had a caesarean section, in contrast to 21% of 'clinic patients' ten out of forty eight. That women who have had previous caesareans are more likely to be 'clinic patients' was also found in a Christchurch study of the same period (Timmins and Duff 1985).

Timing of First Antenatal Visit

As was discussed earlier in this chapter, obstetric practitioners continue to express concern about some women's apparent reluctance to use antenatal care in the way considered necessary by health professionals. In particular they express concern about the under attendance of the socially disadvantaged such as migrant women and young single mothers. Their concerns are largely framed by a perception of women as 'reluctant patients'. One expression of reluctance is defined as being a 'late booker'. There was a belief among some of the obstetric practitioners in Wellington with whom informal interviews were conducted, that Samoan women tend to be 'late' in making their first antenatal visit. There was a general consensus that a 'late attender' was a woman who made her first antenatal visit after sixteen weeks. As is noted in a review article on antenatal care in one of the obstetric texts reviewed, there is considerable variation in what is considered to constitute 'lateness'. The range being sixteen
to twenty weeks (Hall 1989, 227; Turnbull and Chamberlain 1989). As can be seen from Table 7.3 55% of the Samoan women (128/219) made their first antenatal visit before twelve weeks. If the upper obstetric limit of twenty weeks is used before the category 'late attender' is applied then it can be seen that 72% of Samoan women (164/219) had made their first antenatal visit to the doctor. None of the women could be defined as a true 'non-attender'.

Table 7.3

<table>
<thead>
<tr>
<th>Weeks pregnant</th>
<th>First Visit</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>&lt;12 weeks</td>
<td>35</td>
<td>78</td>
</tr>
<tr>
<td>13-16 weeks</td>
<td>20</td>
<td>44</td>
</tr>
<tr>
<td>17-20 weeks</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>21-24 weeks</td>
<td>13</td>
<td>29</td>
</tr>
<tr>
<td>25-28 weeks</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>29+ weeks</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>219</td>
</tr>
</tbody>
</table>

Samoan women in the study were shown to have a different pattern of antenatal attendance to other women in Wellington. A survey of Wellington women, predominantly Pakeha, found that 83% of participants made their first antenatal visit before twelve weeks. In contrast, only 35% of Samoan women as is shown in Table 7.3 had made their first visit by that time (Durham 1988). The high rate of early attenders in the Wellington survey reflects the characteristics of the participants. It also reflects an internalisation of the medical norm that 'going to the doctor' for confirmation of pregnancy is the proper thing to do. That the majority of Samoan women made their first antenatal visit after
twelve weeks, exemplifies the theme which emerged from the interviews that most women did not need to go to the doctor to be told that they were pregnant. Samoan women with previous pregnancy complications went to the doctor on average two weeks earlier (14.8) weeks than women without previous complications (16.9) weeks. A previous negative experience, as Graham showed, heightened a woman's concerns about the current pregnancy (Graham 1977).

Differences were also found in the timing of the first antenatal visit between women who gave birth at Kenepuru Maternity Hospital and those who gave birth at Wellington Women’s Hospital. The mean for first attendance for antenatal care for women giving birth at Kenepuru Maternity Hospital was two weeks later than for women at Wellington Women's Hospital (see Table 7.4). This difference was not explained by differences in characteristics of women who lived in Wellington in comparison to Porirua. A greater proportion of women, single women (74%), younger women 14-19 years (77%), and very new migrants <1 year (61%), lived in Porirua. However, neither length of residence, age or parity were shown to be influential factors in timing of the first antenatal visit. What is more likely to have influenced a later timing of women who were to deliver at Kenepuru Maternity Hospital is their recognition of the normality of their pregnancy. Women who gave birth at Kenepuru Maternity Hospital, had a medically defined 'normal' pregnancy and subsequently a 'normal' birth. While not all Samoan women who delivered at Wellington Women's Hospital had an abnormal pregnancy or labour, all women with complications received care at that hospital.
Table 7.4
First Antenatal Attendance

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>219</td>
<td>16.5</td>
</tr>
<tr>
<td>Wellington Women's</td>
<td>141</td>
<td>15.7</td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenepuru Maternity</td>
<td>78</td>
<td>17.9</td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Frequency of Visits

Obstetric practitioners not only advocate that women attend early but that they do so frequently. It is more difficult however to establish what if any is the obstetric gold standard of frequency. Considerable variation exists between societies which are likely to have similar standards of obstetric care. In England it has been suggested the obstetric norm in the mid to late 1980's was 10 visits (Turnbull and Chamberlain 1989, 230), while others gave a range of from 12-14 visits in the late 1970's (Comaroff 1977, 117).

On the basis of discussions with Wellington doctors and health administrators it was concluded that during the average pregnancy it was expected a woman would make around 12 antenatal visits to the doctor. This was calculated on the basis of monthly visits until 28-30 weeks, fortnightly until 36 weeks, then weekly until delivery. This pattern followed the British model of clinical care which was introduced in 1929. It's introduction, as Oakley showed, was not on the basis of a systematic assessment of the number of visits related to relative risks at any particular time in gestation, but rather a validation of what doctors were already doing (Oakley 1982). Like much of obstetric practice, what is currently considered the optimum number of visits was based on clinical judgements and experience rather than scientific evaluation.
Information on the number of antenatal visits made to the general practitioner and hospital antenatal clinic, was available for 80% of the women in the total study. Of these women as can be seen in Table 7.5, 60% of women made between 75-100% (7-12) of the expected number of antenatal visits. While over a quarter of the women (27%) made more than twelve visits during pregnancy.

<table>
<thead>
<tr>
<th>Expected Visits</th>
<th>Actual Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1-3</td>
<td>2</td>
</tr>
<tr>
<td>4-6</td>
<td>8</td>
</tr>
<tr>
<td>7-9</td>
<td>27</td>
</tr>
<tr>
<td>10-12</td>
<td>33</td>
</tr>
<tr>
<td>13-16</td>
<td>27</td>
</tr>
</tbody>
</table>

The number of antenatal visits which a woman made during pregnancy was influenced by the presence or absence of pregnancy complications. There was a progressive relationship between current pregnancy complications and number of antenatal visits made (see Table 7.6). Women with complications have a higher rate of antenatal visits. The difference was statistically significant.
Table 7.6
Number of Antenatal Visits by Pregnancy Complications

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>25.5</td>
<td>43.6</td>
</tr>
<tr>
<td>Average</td>
<td>31.9</td>
<td>33.5</td>
</tr>
<tr>
<td>Over</td>
<td>42.5</td>
<td>22.9</td>
</tr>
</tbody>
</table>

The Antenatal Encounter

Though the antenatal encounter is often considered by health professionals to be a medium where information and reassurance to the women can be imparted, observational studies and interviews with women reveal that this happens less than professionals estimate (Hall 1989, 229). From the descriptions Samoan women gave of their routine antenatal visits to the doctor, whether their general practitioner or at the hospital clinic, it was evident that the encounter was rather one sided. It was often limited to general questions as to her physical health. There was little evidence that the antenatal visit was used as an opportunity for health education by the health professional.

A theme which emerged from the comments of women attending hospital antenatal clinic, particularly the Wellington Women' Hospital clinics held at Kenepuru Maternity Hospital was a wish for continuity of medical care. Never seeing the same doctor was the biggest complaint which women had. When Faasau was asked who was checking her at her visits, she said "It's a different doctor, I can't remember each time which doctor, each time is different". The paradox is that a prime reason that women are attending a hospital antenatal clinic rather than being cared for by their general practitioner is that they are considered obstetrically or medically high risk patients. Yet continuity of clinical care was not commonly experienced by the women. A common
theme which Graham and Oakley found in their studies was a wish for continuity of care giver (Graham and Oakley 1981).

Alice went to the hospital clinic with her second child as their doctor was not able to provide maternity care. When we interviewed her during pregnancy, she said that each visit she had a different doctor. Though she felt they are 'nice doctors', she would prefer to see the same doctor on each visit.

The limited nature of the interaction between a Samoan woman and her doctor was not restricted to women who attended antenatal clinic, or who had a male doctor. It was evident also in the stories of women who chose to attend female doctors. Kuini who went to a doctor in Porirua, said,

When I go there, there is another girl that you come to first. You get weighed there and give your sample... Then you wait in the waiting room and wait till your name is called. Then you just hop onto the bed. Then the doctor will come and feel around your stomach. Then she gets her listening instrument to your stomach and that's all.

Manatua also described a limited exchange with the woman doctor she attended during pregnancy. She liked her doctor and showed her loyalty in continuing the relationship, despite having moved to Porirua, she commented on how the doctor rushed from one woman to another in the surgery. Manatua said that she never asked her any questions, because the doctor always seemed in such a hurry. Manatua noted however that the doctor spent longish periods up to half an hour with some women, but not with others.

Very few women openly criticised or complained about the care they received from their doctor, though more were willing to complain about encounters with nurses during pregnancy or birth. A comment made by one Samoan women about the uncritical attitude of Samoan pregnant women was that this was a reflection of deference and was not restricted to pregnant women. "Samoans take what is given to them, regardless of the way it is done. It is the right of doctors and nurses to tell them off. It is not an equal relationship". Uncritical acceptance of medical care is not
restricted to Samoan women. A study of pregnant women in Aberdeen designed to evaluate the introduction of new schedules of care found that the majority of women reported being satisfied with their care regardless of source (Porter and Macintyre 1984). The authors conclude that the uncritical acceptance of the system of care received, reflects a belief by the recipients that whatever the system of care they are receiving it has been well thought out and is probably the best one. Women accepted what was and preferred the known to an unknown alternative. This conservatism or deference is not restricted to pregnant women but has also been demonstrated in male patients in England (Porter and Macintyre 1984).

**DIFFERENT FRAMES OF REFERENCE**

That doctors and mothers, bring different understandings to the meaning of and doing of pregnancy has been shown in many areas of reproduction. While the potential for conflict between mothers and doctors exists, in reality as has been discussed above, pregnant women are largely uncritical of the care they receive. Sometimes however latent conflict becomes manifest. The accounts which follow both involve attempts by women to control and limit medical control over their pregnancy. They illustrate two different situations, one involving a young inexperienced eighteen year old, the other an experienced forty year old. In both situations, women's and doctors perspectives were in conflict.

Melaia, an eighteen year old woman having her first baby, was admitted to hospital in late pregnancy with an elevated blood pressure and suspected toxaemia of pregnancy. Melaia was classified as less Samoan oriented. The diagnosis was made on the basis of 'objective' assessment by the doctor in the form of a routine antenatal visit and discovery of an elevated blood pressure. This diagnosis did not fit with the 'subjective' assessment of her health made by Melaia, who was at that time still feeling quite well. She tells the story. "On Tuesday I went to see the doctor, that was my doctor's appointment and Dr X said to me to come back the next day, because my blood pressure
was going up. And I came home". Q. "Did you feel funny or anything like that?"

No, I just feel normal. I didn't know my blood pressure was going up though. Then I went there the next morning and she says to me, 'oh, you've got to take this letter to Wellington Hospital. You have to go and stay there till your blood pressure goes down. And that was about two weeks before I was due.

Then I came home. Oh, the nurse was going to send an ambulance and I said, 'oh, I'll just go home and go by car [brother-in-law had a car]. She must have been waiting for me for a long time. I was fast asleep. So she went and rang the ambulance to come over here. And there was a knock on the door and it was the ambulance driver, eh. And he says, 'Alright, which one of you's the high blood pressure? (a pregnant relation of Melaia was also in the house at the time) I ran back in the room and he says, 'oh, you have to go to Wellington'. So I went, and I was really crying, 'cause I was really scared eh. While I was packing my stuff, I thought oh, this was it. I thought I was going to have the baby next day. And when I got there, they told me I still got to wait till I was due, eh.

All that week, they were taking my blood pressure, every morning. And it was going up and up, it wouldn't go down. Then I spent a whole week there. And the following weekend I said to the doctors, 'I'm getting sick of waiting. I want my baby now'. He says to me, they've got to check my cervix to see if it's soft enough. And the doctors came to me and said they were going to induce me. And I ask what it was. And they says they were going to give me some tablets to start me in labour. I didn't want them to do that, but then again I wanted them to, because I wanted to get rid of it, eh.

From the point of the diagnosis of elevated blood pressure, Melaia's control over her pregnancy and ability to make her own decisions based on her assessment was dramatically weakened. From the perspective of the medical paradigm, Melaia was defined as 'sick' and requiring medical treatment. However the 'sickness' the high blood pressure, is only visible at that time to the doctor. The sending of the ambulance can be seen as an extension
of medical surveillance, ensuring that the pregnant woman now diagnosed as sick and in need of medical treatment, takes advantage of that treatment and does not attempt to choose non-treatment. Melaia's powerlessness is revealed in her expressions of fear of the unknown, which lies in wait at the end of the ambulance trip from Porirua to Wellington, fear of hospital, fear of the rapid onset of labour.

Lagi was admitted to hospital with hypertension and oedema. She was critical of the actions of the health professionals involved, as is evident from her story.

When I went to my appointment and the doctor told me the specialist want me to go to hospital, that time it was too hard for me... Because the doctor who look after me, he never explain me what's happened and what's going on. Because they just make a blood test and feel my tummy and he went off. He went off to the other doctor, I think it was the specialist. But he supposed to tell me what's happened. I got a high blood pressure or something like that... But he just walk away and same with the nurses, they never told me what's happened. And then he come and said 'ah, surprise to you, you go to the hospital'. And I said, 'why, what's happened to me? Anything wrong?' And he just told me that the specialist want me to go up to the hospital to have a rest.

Lagi tries to negotiate with the doctors as to the timing of her admission.

They send me straight away and I told him, 'can you give me a chance. I 'talk with my husband, because he's at work'. They told me 'ok you can go tomorrow morning'. But it's no good to me. It's too hard for me, I've got young kids to look after. But they should tell me what's happened to me.

At this time, the only 'symptom' visible to Lagi is her swollen feet. She is not worried about the swelling attributing it to the baby being heavy, though she acknowledges that this symptom is taken seriously by the health professionals. When told that the reason she is to go into hospital is to rest, Lagi continues to negotiate for inclusion in the decision making. "I not feel sick
or anything like that. That's why I start asking them. If you want me to have a good rest, I can rest at home. But I want to look after my kids". Ironically, though Lagi slept well at home, when she was in hospital, "Some nights is nearly day time and I still awake. When I close my eyes, but my mind is still... [working]".

**SUMMARY**

The majority of the Samoan women having a baby in Wellington, went to general medical practitioners who provided a maternity service for their antenatal care. This pattern differs from that which women were used to in Samoa. It also suggests a change in the way Samoan migrants use health services in New Zealand. Earlier studies found that Samoan migrants used hospital based services as a primary rather than a secondary resource (Kinloch 1980). In this study, a greater proportion of women who went to public hospital clinics for antenatal care were referred by general practitioners as 'high risk' patients, rather than because they chose to attend a hospital antenatal clinic.

While Samoan women did not, in comparison to mainly Pakeha women in Wellington, make their first visit to the doctor particularly early in pregnancy, more than half the women had made their first visit by sixteen weeks. The timing of the first visit to the doctor, was not associated with maternal characteristics, but with pregnancy itself. Women who had previous pregnancy complications went to the doctor earlier than women who had previously had normal pregnancies. This finding suggests that Samoan women associate going to the doctor with being sick. For most women pregnancy was a normal condition which did not require seeking early medical care. None of the women had an amniocentesis which, as was discussed earlier, involves women in early contact with obstetrics.

Most Samoan women made the expected number of visits to the doctor during pregnancy, even although the encounter they had with the doctor would seem to have been brief and not particularly informative. Even though Samoan women as a group
were not particularly early attenders, 87% of the women made seven or more of an expected twelve visits to the doctor during pregnancy. Again the number of visits a woman made to the doctor, was not influenced by maternal characteristics, but by whether the woman was well or not during the current pregnancy.

INFORMATION NEEDS OF PREGNANT WOMEN

As has been shown earlier, during pregnancy Samoan women drew from a number of resources in constructing the way they did pregnancy. These included their own experience, family, friends Samoan fofo, and health professionals. The information needs of pregnant women was discussed with two thirds of the women interviewed. Most women who were having their first baby or who recalled what it was like to have a first baby said that while they were given a considerable amount of advice about the conduct of pregnancy while they were pregnant, they were given very little factual information about the conduct of labour and birth. This applied to both women who had their first baby in New Zealand (the majority) as well as women who had their first baby in Samoa. Women said they did not know what to expect their first-time around.

From the stories told by the Samoan women it would seem that the norm in Samoa is to discourage rather than encourage substantive preparation of the pregnant woman for labour. Doing it, rather than talking about it, seems to be the guiding rule. Thus cultural expectations of what is appropriate or necessary for a woman to know before birth may be greater influences on a woman's willingness to attend formal antenatal classes than other variables such as language competence or social class.

The opportunity for Samoan women to obtain information was constrained by reduction in their female social network following migration. Constraints included cultural differences which place a greater emphasis on verbal transfer of information and less on the printed word and a tradition of socialisation on the job. Learning in a Samoan context has a concrete rather than an abstract orientation.
Mareta, a more Samoan oriented woman had her first baby in Samoa. Though her mother gave her advice about pregnancy, Mareta said when she asked about birth her mother would just shrug her shoulders and say she would know when the baby comes. Mareta did receive some information about pregnancy and signs of labour from the district nurse at the Women's Committee meetings, but she felt she went into her first labour with very little knowledge of what lay ahead.

Matagi also said that when she had her first baby in Samoa, she knew very little about what was happening and would happen in labour. "I knew from Samoa, that your period stops. I didn't really talk to anyone about it. I wasn't aware of any procedures for when in labour. The only source was the doctor, but that was limited".

The main sources of information about birth for the Samoan women, were family and friends. While the ideal informant for Samoan women was her mother, for most woman the actual informant was someone else. Most Samoan women came to New Zealand as young unmarried women and most did not have their mother in New Zealand at the time of their first pregnancy. The importance of the woman's own mother as an information source reflects the traditional Samoan practice in which a Samoan woman returns to her own family at the time of birth particularly that of a first baby. Other studies show that its not just in Samoan society, that a woman's own mother remains an important information source and a support for her pregnant daughter (Durham 1988). The small group of women who had their first baby in Samoa said that their mother was their most important source of information.

For a dozen women the main single source of information was one of her or her husband's relations. In all cases the relation was female and in almost all cases the couple was living with them at the time. A greater proportion of women classified as more Samoan oriented, said that a relation with whom they were living at the time was their main source of information. This reflects the greater proportion of women classified as more Samoan
oriented who were living in extended family households. For some women who did not have accessible older relations or where there were some tensions between the woman and her or his family, then older women from work or church networks played a surrogate mother role.

Leafa stayed with her aunty when she first came to New Zealand, but she 'ran away' because the aunty 'really hates my husband'. Thus at the time of her first pregnancy Leafa had limited support from older female relations. However, she worked with an older Tokelauan woman whom she referred to as 'Mum'. This woman was her main source of knowledge during her first pregnancy. It was this same woman who advised Leafa to attend a fofo to help in getting pregnant, when she expressed anxiety about failure to conceive.

Though Pua's mother wrote to her with do's and don'ts during her first pregnancy, her main information sources in New Zealand were, "people in church. Because if there's a mother there in church, there is a lot of discussion about having babies. When they bring the babies to church, you don't even ask, you just listen". This suggests that a common method of Samoan learning is that of the apprentice who listens and watches in order to put the learning into practice.

Experienced mothers were also the main source of information for Uila during her first pregnancy. Uila came to New Zealand with her husband, who had been married before and she did not appear to have any close relations in Wellington. Her main source of information about pregnancy and birth, came from what she called 'gossip sessions', where she listened to other Samoan women talking about pregnancy and birth. Again the emphasis is on the indirect mode of learning.

Some of the younger, less Samoan oriented women who were having their first baby, also obtained information from their own peer group about pregnancy and birth. Sometimes information was conflicting and the pregnant woman had to make sense of the differences in constructing her own image of labour. This is demonstrated in Melaia's birth stories from two friends. "One
said that it wasn't that painful and the other one said it was painful. One said she was in labour 6 hours and the other one said she was in labour 45 minutes".

Two less Samoan oriented women identified recreational television programmes as a means of also learning about birth. Melaia when asked if she knew about breathing techniques in labour replied, "yes, I watched that on 'Days of Our Lives,' when Maggie had her baby'. Faasau also identified television as a source of information before the birth of her first baby. "Sometimes a picture of the pregnant woman comes on television. Sometimes they put a film of a woman having a baby straight on television". In both cases these were probably scenes from daytime 'soap operas' and likely to be highly distorted representations of labour. However, these comments reinforce the potential of television to be an effective medium in the transmission of health messages to migrant women.

Professional Sources

Doctors and nurses were identified by a small group of women as playing an important role both in Samoa and New Zealand in the provision of information about labour. More women who said they obtained significant information from professional sources in New Zealand were classified as being less Samoan oriented. Alice's family doctor was an important source of information in her first pregnancy. Both she and her husband felt that he was very supportive in the advice he gave them about birth during Alice's antenatal visits. Her doctor had advised her to do a lot of walking during pregnancy, as this would help her in labour. On his advice Alice went into Wellington Women's Hospital to have her first baby rather than delivering in the Hutt Hospital.

Sose trained as a nurse in Samoa and was hoping to get New Zealand registration. Though she felt she was quite well informed, she relied on her doctor a great deal during her first pregnancy.
When I was pregnant with my first one, just a small thing happened to me, (for example, vaginal discharge) I went straight away to see the doctor. I want to be sure what's happening. Although I know this should happen, but I want to be sure.

For Panesa, the context of her first pregnancy was such that she had very limited sources of information. She came to New Zealand to complete her schooling and at seventeen, got pregnant to an old boyfriend from Samoa. Her family's reaction to the pregnancy was similar to that reported by other unmarried women, but perhaps more extreme. "I didn't get much information. Like all through that pregnancy, my family was angry with me and I was just there because they knew I didn't have anybody else. I suppose it was my doctor". The tenor of this story is that the doctor replaced the family as the prime source of information and advice.

Antenatal Education Classes

Only a small group of Samoan women attended formal antenatal classes. Of the 200 women for whom some information was available on their hospital records, only ten women (5%) were recorded as having definitely attended a class, seventy (35%) as expressing an interest in attending while one hundred and twenty women (60%) were not interested in attending. Similar findings have been shown from other studies of Pacific Island women in New Zealand (Hutton et al 1982). However, from information obtained during the interviews, these figures would seem to under represent antenatal attendance rates among the Samoan women. Five out of eleven of the first-time mothers (45%) in the interview group, attended some antenatal classes, while twelve of the thirty nine experienced mothers (31%) said they had been to classes during previous pregnancies.

The Attenders Of Antenatal Classes

The main characteristic which women who attended classes had in common, was that it was their first pregnancy. Five of the six women who went to classes during the current pregnancy were
first-time mothers, while eleven of the women who attended classes with a previous pregnancy did so for their first baby. Only two of the seventeen women who attended classes were classified as more Samoan oriented. Kelemete went to classes with her first baby while living in Samoa, while Lemapu went to three classes at Wellington Women's Hospital.

There seemed to be three main reasons why women attended antenatal classes.

1. Some women attended classes because they lived in a nuclear family household with limited contact with close relatives. Other women for one reason or another, had difficulty asking relations questions about birth. Health professionals were seen by these women not only as a valid source of information, but also a neutral source in that they were not Samoan (Lynam 1985).

2. Some women such as Lila went to supplement information they already had. Lila was unusual in that she went to antenatal classes for all three of her pregnancies. Her motivation to attend seemed to be a desire to learn as much as she could about pregnancy birth and contraception and to maintain her body image of a slim, fit person. Lila was an active sportswoman who though she had two children still played softball and netball. The two young New Zealand born women Melaia and Isalei went to classes because of pressure or encouragement from other members of their family. Both went to one or two classes only and then ceased to attend.

Class Content

Though most of the women were positive about the helpfulness of exercise classes which taught breathing and relaxation techniques in labour, few of the women felt the necessity to attend mothercraft classes on baby care. Most Samoan women felt that their own experience of caring for younger siblings or other
young relatives had provided them with sufficient baby care skills.

Non Attenders

Of the fifteen women who had never attended antenatal classes, a much larger proportion were classified as more Samoan oriented. Of the five women who were having their first baby who did not attend classes, three were classified as more Samoan oriented women. There were two main reasons why women did not attend classes. One group of women said that they might have attended if they had been better informed as to the nature and purpose of classes while the other group said they did not attend because they considered that classes were either not of interest or not relevant to their needs. The question of relevance and appropriateness of class content and presentation has been noted in other studies in New Zealand. The authors of one study considered that the "experience, needs, expectations and values vary so greatly amongst groups within society that extensive modifications to the present methods of antenatal education may be required if benefit is to accrue" (Hutton 1982, 145).

Women's Recommendations

Women were reticent about making suggestions to improve the accessibility of antenatal information for Samoan women. Their reaction was similar to that reported of other women when asked to comment on antenatal services (Porter and Macintyre 1984). For Samoan women it also reflected Samoan respect for those of perceived higher status and thus an unwillingness to criticise a service provided by palagi health professionals. However, it can also be seen as exemplifying a basic difference between Samoan and Western learning paradigms. Antenatal classes are based on a premise that pregnant women can prepare for birth, a future event, by learning about it in the abstract. This preparation is believed both to improve the woman's ability to labour well and to enhance the quality of the birth experience for her. Samoan women however, seem to operate from a different premise, in that traditionally little factual information was
given to the pregnant woman before birth. Rather she did her apprenticeship by being initiated into the work of labour by other experienced and 'expert' women. Thus doing birth the Samoan way was essentially on the job learning. The question that faces health professionals who wish to encourage Samoan women to attend antenatal classes seems be not only 'how to make classes more attractive to their Samoan clientele', but more basically 'how to overcome a fundamental difference in Samoan and Western modes of learning'.

However some women did make suggestions to attract a larger number of Samoan women. The most common suggestion was to hold classes in Samoan, so that women with limited English would feel more comfortable in attending. As Clare said, "most of the Samoan mothers they don't understand the English well and they are very shy to face other people... I think they would go if they know that the classes would be in Samoan language and there would be a Samoan woman standing there".

Having material available in Samoan was felt would be very helpful for many pregnant women. Very little information existed in the mid 1980's and not much seems to have changed. As Lagi who was reasonably competent in English, said, "I think uh, Samoan mothers the main thing is hard for us to understand the English and I think myself maybe, same as myself too, some I not really understand what's being said... Because some mothers know how to speak, but too shy to say something".

Samoan women tend to be put off by a course which emphasises baby care. Most women, though there were a few exceptions, felt very confident in providing care for a new born baby. This confidence came from their involvement since they were quite young in the care of younger members of the family. In this Samoan women differed from some of the new mothers interviewed by Oakley (1980). Lagi recalled attending a couple of antenatal classes with her first baby. The classes mostly dealt with the physical care of the baby and Lagi laughingly said she did not learn anything new as she had been looking after babies for years. Lagi
felt that the classes were primarily designed to cater for the needs of palagi women who do not know much about baby care.

Using antenatal classes as a forum in which other topics related to parenting can be discussed was raised by Alice's husband. He was particularly concerned about the young inexperienced mother, who might have limited social support. He felt antenatal classes should not just be about physical care, but about broader aspects of child development for example, reading to young children. He also felt that young mothers should be made aware of the dangers of electric points, poisons, household cleaners and know what to do to make their home safer for their child.

CONCLUSION

Both Samoan and obstetric practices related to the conduct of pregnancy are expressions of the different ways in which cultures deal with the unpredictability of nature. Samoan practices draw on Samoan understandings of the causes of sickness in order to care for the pregnant woman. These include practices designed to provide protection from sickness from supernatural causes, as well as those practices related to daily living to ensure the proper conduct of social relationships. Physical care of the pregnant woman is provided throughout pregnancy by ensuring through massage that the organ which Samoans know as the to'ala is correctly located. The position of the fetus is also carefully monitored and corrective procedures carried out when and if the baby is found to be in the 'wrong' position. Obstetrics also seeks to limit the unpredictable in pregnancy. One way in which it attempts to do this is through the timetabling of antenatal visits. The obstetric management of pregnancy is primarily concerned with the formalised encounters which women have with obstetric practitioners.

Samoan women drew on Samoan and obstetric knowledge bases as well as their own and that of other women in their construction of pregnancy. Women varied in the extent to which they drew on Samoan practices in doing pregnancy. This variation was in part explained by where a woman fitted in my classification of
categories of cultural orientation. A woman's female social network was an important source of knowledge and support for a woman during pregnancy. On the other hand, Samoan women had limited and largely functional encounters with obstetric practitioners during pregnancy. Women's descriptions of the short and often largely uninformative clinical encounter with the doctor in pregnancy, contrasts sharply with the feeling of wellbeing and peace of mind which women expressed after visiting the fofo. While health professionals provided a more limited role as an information source for most women, for a small group of women they were the primary source of information about pregnancy.

Differences between medical and maternal frames of reference were illustrated in the stories told by Melaia and Lagi. These differences were manifest in conflict over expertise in and control of pregnancy. Women distinguish between 'good and bad' pregnancies on the basis of what they experience. A clinical diagnosis of hypertension in the absence of symptoms of sickness was not considered by the women to be sufficient evidence of their being sick. Neither of the women considered they had a 'bad' pregnancy, although from a medical perspective the pregnancy status of each woman had changed on the basis of the clinical evidence. Both women sought to retain control over the way they did pregnancy, by seeking to negotiate the point at which they entered hospital. Melaia did so by attempting to ignore the medical instructions given, while Lagi attempted to achieve and retain jurisdiction by direct negotiation.

Differences also exist between what Samoan women and doctors define as the appropriate entry point to medical management of pregnancy. While Samoan women were not as early attenders as other women in Wellington, the majority of women had made their first antenatal visit by the sixteenth week of pregnancy. Such differences are framed by the different understandings which doctors and women have of the nature of pregnancy. An early visit to the doctor was associated with a previous complication of pregnancy.
Pregnancy brings changes in the gendered relationships between men and women. Samoan men in New Zealand give their partners more assistance with domestic duties during pregnancy than at other times. This greater involvement of men in domestic chores is said to be greater in the migrant context, than was traditionally the pattern in Samoa. Samoan beliefs about the need for sexual constraint particularly in early pregnancy increases and legitimates a woman's control over her sexual life. A woman's aversion to the smell of her husband can also be understood as a way in which women use pregnancy as a mechanism of social control of men.

Obstetrics claims the superiority of its knowledge of reproduction vis a vis other sources of knowledge including that of women. It claims that obstetric knowledge unlike other forms of knowledge, is grounded in scientifically derived truths about reproduction. Analysis of the obstetric paradigm however suggests that while obstetrics frames its 'rules' of pregnancy in scientific authority they are not all based on scientifically verifiable evidence. Much obstetric knowledge about reproduction like Samoan knowledge, is derived from observation and clinical experience. Some examples of obstetric claims and practices for which there is limited empirical evidence, include claims that clinical antenatal care has been the single greatest contributing factor in the reduction of maternal and fetal mortality and morbidity. Other obstetric understandings such as the relationship of food intake to weight gain in pregnancy which had informed obstetric practice for some fifty years, have been shown to be based on faulty assumptions. One way in which obstetrics adjusts its understandings is to re-construct knowledge by a gradual shift to incorporate the alternative point of view. A process which was noted in the most recent obstetric text (Turnbull and Chamberlain 1989) which contrasted markedly in orientation to texts published a few years previously.

Construction of medical knowledge was also evaluated by examining the way in which explanation of the apparently higher stillbirth rate among Pacific Island infants in New Zealand was pursued by medical researchers. Knowledge generated within one cultural
context, that of Samoa, was reinterpreted to explain knowledge constructed in another cultural context, that of bio-medicine. Other explanations which did not fit the cultural frame of reference of the researchers was rejected or ignored.
1. In Ford's study (1945) reported in Mead and Newton (1967), thirty eight of the forty two cultures for which there was information had dietary restrictions during pregnancy.

2. In their review of the literature Mead and Newton (1967, 198) note that deprivation rather than supplementation during pregnancy is a more common pattern.

3. Personal communication Sene Neich.

4. A considerable literature on medical control of pregnancy through antenatal care exists. It is not possible or appropriate to address these issues in this thesis. For a discussion of these issues see (Oakley 1982; 1984; Arney 1982.)

5. This research was undertaken prior to the legislative changes which enabled midwives to provide a more autonomous service to pregnant women in Wellington.

6. In 1978 The Departments of Community Health and Obstetrics and Gynaecology of the Wellington School of Medicine developed a proposal for a randomized controlled trial of antenatal care in Wellington. The study was never carried out.

7. The study also revealed differences in the proportion of women at different hospitals in Auckland attending antenatal classes. At National Women's hospital where the study was done, 77% of the women had attended some antenatal classes, while only about 40% of women at St Helen's and Middlemore Hospitals had attended classes.

8. Such findings, though suggestive that the character of the conjugal relationship is shaped by the wider sets of relationships in which it is located, as argued in the seminal work by Bott (1971) were not able to be explored in the context of this research.

9. Obstetric attitudes to sex during pregnancy are currently more permissive than in earlier years. While restraint is usually advised for women with a history of previous miscarriage, this is not empirically substantiated.

10. The first antenatal visit was taken to be the visit to the general practitioner, although some women subsequently were referred to a hospital antenatal clinic.
11. Maori and Pacific Island women were under-represented in the survey. There were 12% (40) Maori women and 5% (11) Pacific Island women. The high early attendance rate reflected the fact that participants in the survey were better educated, more likely to be married or supported and to be European (Durham 1988, 4).

12. Other studies have shown that the average time for the first antenatal visit of women at Queen Charlotte's Hospital in London during 1977-78 was 16.2 weeks. This is not directly comparable as English women would have visited their family doctor before visiting the hospital clinic (Oakley 1982).

13. The total number of visits a woman made during pregnancy was influenced by the timing of her first antenatal visit. Women who visited early and regularly made more visits than women who started late and were irregular attenders.
INTRODUCTION

Labour marks the end of pregnancy and heralds the beginning of a new life. Human birth is a physiological process which is given human meaning through social and cultural processes. In this chapter Samoan and obstetric constructions of labour and birth are juxtaposed and similarities and differences identified. The labour and birth experiences of Samoan women as revealed in women's voices (narratives) and the voices of the obstetric practitioner (hospital records) are examined. The chapter opens with:

1. an overview of Samoan and obstetric understandings of the onset of labour. This is followed by an examination of the way in which Samoan women constructed and deconstructed their own explanatory models to fit their recognition that labour was beginning.

2. the location in which birth occurs is discussed next. Differences between birth in a Samoan and New Zealand context are highlighted, as are the implications for women of giving birth at Wellington Women's or Kenepuru Maternity Hospitals.

3. evidence of philosophies of intervention and laissez-faire in relation to Samoan and obstetric ways of doing birth are examined and the implications of medical intervention by induction and augmentation of labour is examined in relation to Samoan women's experiences. How induction alters the meaning of labour for women, is illustrated through the voice of one young woman.

4. Samoan and obstetric constructions of pain are compared and contrasted and Samoan women's experiences in Wellington are examined. The different social context
of birth in New Zealand is demonstrated in the different set of social relationships within which a woman does birth. The involvement of Samoan men in birth in New Zealand is recognised as a change in these social relationships.

points of potential and real conflict between women and doctors during labour as a result of the different maternal and medical frames of reference are identified and discussed.

differences and similarities in Samoan and obstetric approaches to the conduct of labour - nourishment, mobility, position in which birth occurs as well as the management of the perineum are outlined and Samoan womens' experiences in Wellington examined.

Samoan and obstetric ways of managing complications of labour are discussed in relation to breech births and the increasingly frequent obstetric practice of caesarean section for this and other perceived complications of labour. The implications of this obstetric approach for Samoan women in New Zealand is explored.

evidence of both intervention and laissez-faire approaches to Samoan and obstetric management of the delivery of the placenta are explored and differences in the attitude of each to the disposal of the placenta and cord are discussed. The attitudes and experiences of Samoan women to the disposal of the placenta and cord are examined in the context of migration.

The chapter closes with a brief discussion of the Samoan and obstetric management of the early period after birth and with Samoan womens' experiences of this period in the hospital context. A final section draws together the main themes which have been identified through the analysis of the material in relation to each of the stages of labour and birth.
THE ONSET OF LABOUR

Samoan and Obstetric Understandings

Interviews with fa'atosaga in Wellington revealed that a skilled fa'atosaga claims to know when a woman is likely to go into labour from calculation of the menstrual dates, abdominal palpation, and listening carefully to what the mother has to say. Samoan fa'atosaga did not cite any specific factors which they felt were responsible for labour commencing. There was however a general belief that a woman would go into labour 'when the baby is ready'. The baby therefore was seen as the trigger for labour. While labour is considered to be an inevitable and normal ending to pregnancy, Samoans are said to consider that there are occasions when the onset of labour may be delayed. This is said to occur "only in cases where a pregnant single woman has not named her child's father. In many cases the father is named to avoid the risk to mother and child and few are willing to test the proposition" (Macpherson and Macpherson 1990, 255). As has been discussed earlier Samoans attribute causes of sickness to physical, social and supernatural forces. Samoan understanding of the causes of sickness has its origins as much in disruptions to social relationships which define a person's position in the social order, as in the mind/body of the individual. For a child to be born without the acknowledgement of the father's family would seem to exemplify such a social disruption.

Obstetric practitioners also claim to know when labour is likely to commence by calculations of menstrual dates, abdominal palpation and increasingly by use of medical technology. As with Samoan understandings, labour is recognised as "an inevitable consequence of pregnancy" (Turnbull and Chamberlain 1989, 823). Obstetrics draws on a mechanistic model in its understanding of the onset of labour. "There has been much debate as to the cause of labour, but in a similar manner to ripe fruit falling from the tree, there is almost certainly a balance of forces involved. Labour ensues when the forces of retention are overcome by the forces of release" (Beischer and Mackay 1986, 334). In contrast
to a holistic Samoan approach, obstetrics explains the onset of labour as a physiological and biological process.

**WOMEN'S UNDERSTANDINGS**

Labour is a transitional period which marks the end of pregnancy and the beginning of motherhood. In recognising that labour had begun, women used a similar diagnostic and evaluation process to that which they used in recognising they were pregnant. This required the bringing together of disparate symptoms into a pattern which was understood by the women and by others as 'being in labour'. For some of the thirty women who spoke of the onset of labour, this was a gradual affair. For others recognition came more abruptly. The woman's tentative diagnosis was then put to others including husbands, mothers, friends, fofos and obstetric practitioners for evaluation and confirmation. Women varied in the meaning which they gave to the same physiological symptoms. Experienced mothers felt more confident of their self diagnosis if the patterning of symptoms was as previously experienced. When the order of symptoms varied from her previous experience, women were more ambivalent as to whether or not they were in labour.

Matagi, who was having her second baby, was confused when she started bleeding without any sign of the labour pains which characterised her first labour. "I remember I went to the toilet and found that I was bleeding, but there was no pain then. All that night I didn't sleep. I thought I should wait until I feel the pains then go to hospital".

Lila, who was having her third child, did not consider her waters breaking in the absence of labour pains to be a sufficient indication of labour. Thus when her waters broke in the absence of other symptoms, she took no action. "I had the water break on Sunday afternoon, after we came home from church. Then I had my food and all that". Another confusing symptom was that she was expecting from previous experience that labour pains would commence in her back. "But this time, it wasn't my back, but my stomach. I feel like I had a real pain in my stomach, so I went to the toilet, and then all I could see was blood. So I thought,
oh, I better contact the hospital straight away, because my water was break already, too long".

Women who had already had a child were less confident in their own capacity to recognise the onset of labour if there had been a substantial gap between children. This lack of confidence was compounded in Olana's case, as her first labour seven years previously had been induced, so she was unsure what going into labour normally would be like. Olana drew on the knowledge of others in developing her own diagnosis. "Three o'clock on Tuesday morning, I got a funny pain around my back. Is that the way for me to have a baby? 'cause the first one, I don't know. Then I rang the Samoa lady (fofo) to tell her what I got in my back and she said, 'yea, that's the one'. And she said, 'how often do they come?' And I said, 'oh, I don't know, they just start'. And she said, 'oh if you go to the toilet and you see a little bit of blood, then you know it's time for you to ring'".

Rosa was also having her fourth child after a considerable gap. She was confident during pregnancy that she would know when she was in labour, "when the water is broke, but mild pains that come and go that does not mean much". However, when it came to the time she was less sure. "It was a false alarm the first-time... I felt this liquid, but my stomach wasn't in much pain. Still I told my husband we better go, 'cause I can hardly remember you know all about (laughs). So we got to the hospital and spent the night there and Saturday we went home".

Prior to the onset of labour first-time mothers drew from the knowledge bases of others, including experienced mothers in constructing an explanatory model against which to evaluate their symptoms. When their experience did not match their expectations they re-constructed their model accordingly.

Susana who was having her first child, expected that the first sign of labour would be 'breaking of the waters' and that this would be followed by labour pains. Her experience however did not match her expectations. Susana described how she evaluated her
symptoms with an experienced mother and later with the hospital midwife in making her diagnosis.

The pains started about half past eleven... Just come and go, but not very painful... Then the pains came again, sort of just a minute and disappear and my friend said, 'oh, go ring the hospital, must be the baby coming'. And I said, 'oh, I don't think so, because the waters is not broken'. I rang up the hospital about three o'clock and they said, 'Is the pains very bad?' And I said, 'No'. So they said, 'Oh, ring back when the pains come worse'. So half past three I feel the pains coming less than five minutes, but doesn't hurt me at all. So I rang them again and they said, 'Oh, better come to the hospital'.

Nana, a young twenty two year old woman who was having her first baby, was also confused by the patterning of her symptoms. The onset of piercing pain in her lower abdomen about eight o'clock at night, made her think labour might have commenced. "As soon as the pain came I rang the hospital and they say for us to come in then. But I was waiting till the water broke. But it did not break by the time we got to the hospital, until about one o'clock in the morning".

During pregnancy Alisa identified pain as the main symptom of labour and planned to go into hospital, "when it's really painful". When in fact the first symptom she had was bleeding, she evaluated this symptom with her doctor and was advised to go into hospital. After a day in hospital she was declared by another doctor not to be in labour and was sent home. In reconstructing her understanding of what 'being in labour' meant, Alisa drew from Samoan sources of knowledge. She went directly from the hospital to visit the Samoan fofo she attended during pregnancy. The fofo massaged her and told Alisa she would have the baby by the next day. Twenty four hours later her daughter was born.

That labour is a socially constructed as well as a physiological phenomenon is illustrated in the different meanings which women gave to the same physical symptoms. This is illustrated here by
two experienced mothers responses to the 'breaking of the waters'.

Gagau, a mother of three children, was very alarmed when her waters broke before the onset of labour pains. This was the first-time she had experienced this pattern. She interpreted the rupture of the membranes as an indication that birth was imminent.

On Wednesday, I went for a shower and the water broke. I never seen it before, it's like soapy water. So I felt that I could have baby soon. I was so scared that baby might drop in any minute. I screamed. I rung my husband, and I rung the taxi the same time. I went straight to the hospital because I couldn't get through to my husband.

In contrast Pua, who was also having her fourth baby, was more relaxed about the membranes rupturing in the absence of other labour like symptoms.

We went to church that day. I was feeling a bit sore on my left side and I said to my husband, 'I feel funny today' and I wasn't thinking of having the baby. I was sitting there and then suddenly my water broke and I was right in the middle of the church... When the water broke, the dizziness and everything was gone, so I just waited at the mother's room till my husband came out of church. One of the lady's at church told my husband that we should go to the hospital. But I said, 'why?, it's just the waters broken'. So we stayed there.

LOCATION OF BIRTH

Samoan Approach

Where birth occurs influences not only who will be present, but will also in part define the nature of the social relationships between the woman and her attendants. Doing birth in contemporary Samoa is both similar to and different from New Zealand. Women give birth both at home and in hospital. Women who live in or close to Apia are more likely to give birth in the obstetric context of the National hospital in Apia1. Women who live in the rural areas also give birth in a district hospital. A substantial
proportion of women in the early 80's continued to give birth at home particularly but not exclusively in the rural areas of Upolu and Savaii. In 1981, 46% of all births were reported to have been delivered at home by Traditional Birth Attendants (TBAs) and fa'atosaga (Western Samoa Department of Health 1981, 3). Home births it seems were not the sole prerogative of fa'atosaga and TBA's. District nurses also delivered babies at home.

In Samoa, in the early 1980's, a woman who gave birth at home or in the fale of the Women's Committee was attended by her female relations. Her husband, though likely to be close by, was not involved in the actual birth. Specialist care was provided by the fa'atosaga, who remained with the woman throughout labour. In contrast women who gave birth in hospital in Samoa did so in a different technological and social context. In the early 1980's the way in which women laboured at the National hospital was reminiscent of a New Zealand hospital a decade or so previously. Women were cared for by the hospital midwives and laboured without the constant support of their family. In particular a woman's mother was discouraged from being present, as the hospital midwives considered she was likely to interfere with hospital routine and carry out Samoan practices such as massage which the midwives did not approve of. Similarly a study of hospital birth in American Samoa in the 1970's, found that a woman was separated from her family with whom she had very little contact during labour (Clark 1974b, 701).

Obstetric Approach

That obstetrics strongly endorses the belief that all births should occur in hospital or a hospital like environment was evident from a review of the obstetric texts. The obstetric argument that technological supports and professional personnel are essential for the safe conduct of labour, reflect obstetric understandings of birth as a potentially pathological process. Obstetricians argue that, "it is much easier to make a hospital birth homely than to make a home birth safe" (Beischer and Mackay 1986, 341). The belief that hospital birth is physically safer
for mother and baby, are the primary reasons which obstetrics gives for its continued advocacy of universal hospital birthing.

The obstetric belief that home births pose an intrinsically greater risk to mother and baby than hospital birth has been critically analysed from a number of perspectives. Some critics suggest that claims that hospital birth is safer are based on studies which have not taken account of such factors as the planned or unplanned nature of the home birth. They argue that when this is controlled for, "the perinatal mortality among births booked to occur at home is low, especially for parous women" (Campbell et al 1984).

Obstetric response to opposition to the increasing medicalisation and depersonalisation of obstetric controlled birth has been while continuing to oppose home birth on the grounds of safety, to construct alternatives for women within an obstetric context. One such alternative is the provision of a 'birthing centre', within the hospital. A birthing centre attempts to create a homely atmosphere, with such features as a double bed instead of a single hospital issue bed. Birth remains however obstetrically controlled and directed. Because the birthing centre is within the obstetric context any complications can be dealt with by bringing the woman to the equipment or the equipment to the woman.

Birth in Wellington

All the two hundred and forty eight Samoan women in the Wellington study gave birth in hospital to healthy babies. Planned home births, at least in the 1980's, were not a practice among Samoan women living in Wellington. Most of the Samoan women interviewed had never heard of having a baby at home in New Zealand. Their expectation was that in New Zealand, the baby would be delivered by a doctor in hospital. While a few women
were aware that a home birth was possible, all favoured a hospital birth primarily on the grounds that it was safer.

Women explained their understanding that the hospital was the proper place to have a baby in New Zealand by drawing on the beliefs of the obstetric model. Safety was expressed as enabling access to doctors and nurses, the medical experts, and obstetric technology, none of which were seen as available to the home birther. The contrast of hospital and home context in New Zealand and Samoa is evident in Panesa's story. She speaks of her memories of the family-centred nature of the birth of brothers and sisters in Samoa.

I was sitting there when three of my mother's kids were born, and sit in bed waiting, listening to what was going on with the midwife. You weren't allowed to go in. All we know is you're the one whose going to be looking after this little baby. Hearing the baby, the whole family around.

That Panesa recognises that the medical model of birth is the norm in New Zealand is also evident in her story. While she accepts the medical rationale for a hospital birth, she does so with some ambivalence.

That's another thing I've heard from lots of people you know, that they think that the hospital is safer. I mean, I feel the same way too. Then I've got this feeling in my head about how neat... I've seen babies born at home and I thought wouldn't it be a neat idea if I had my own kid at home, my own bed with my family around.

Safety was not the only factor which influenced women's preference for birth in a hospital rather than a home context. Social factors also contributed. As has been noted elsewhere, migrant women have greatly curtailed social networks. Many women simply do not have female relatives who can provide the live in domestic support required during and after birth. This is reflected in Ropeka's response, when asked whether she would like
to have a home birth she replied, "Oh no! I wouldn't mind home delivery if my Mum's here. I know if my Mum's here, she can help me afterwards. But you know in hospital, you've got nurses to sort of depend on". For Ropeka, it was lack of social support after birth that was portrayed as a deterrent to home birth in New Zealand, rather than factors of 'safety'.

One hundred and sixty three of the women in the study (66%), gave birth at Wellington Women's Hospital. Although 56% of the women in the study, (139/248) lived in Porirua only 34% gave birth at Kenepuru, the nearest maternity hospital. The criteria for delivering at Kenepuru Maternity Hospital under the care of a general practitioner is that during pregnancy women are considered on the basis of their past and present history to be expected to have a normal labour. All other women from Porirua are referred to antenatal clinic and specialist care to give birth at Wellington Women's Hospital. A woman whose doctor does not provide a maternity service is also booked to deliver at Wellington Women's Hospital.

Though it was not possible to establish from the hospital records the reason for the large proportion of Porirua women who gave birth at Wellington Women's Hospital, some indications can be gained from what women said during the interviews. Of the women interviewed who lived in Porirua, 40% (17/42) gave birth at Wellington Women's Hospital. Of these, two thirds were planned admissions for elective caesareans or where complications of labour were considered likely and a third were emergency transfers in labour.

During the mid 1980's changes were occurring in the way birth was being managed in Wellington. Among these changes was the option for women to give birth in the room they had been labouring in, rather than transferring to the delivery theatre. Another change in management was the provision of a 'family room' on the lines of a birthing centre at Wellington Women's Hospital. However,
none of the Samoan women interviewed who were booked to give birth at Wellington Women's Hospital had been informed of these options. There thus seemed to be a gate-keeping function performed by the midwife at the booking in clinic. Though the family room is theoretically available for all women who are likely to have a normal birth, it would seem that not all women are informed of this option. Samoan women, like most women in New Zealand in the mid 1980's and today, accept the obstetric thesis that birth should occur in hospital. Few Samoan women were aware that other birth alternatives, such as having a home birth or giving birth in other than the delivery theatre, were available to them in New Zealand.

PHILOSOPHIES OF LAISSEZ-FAIRE AND/OR INTERVENTION

"Birth is pathological and it is not; men should intervene and they should not".

Samoan Understandings and Practices

The Samoan understanding of labour is of a natural process which ebbs and flows and in which there is considerable individual variation. Some women may start slowly, others more quickly. There are no precise divisions between phases of labour, though a woman's desire to bear down is recognised as marking the last phase. Recognition of change in the tempo of labour is based primarily on what the woman says and what the midwife observes. This understanding of labour as a natural process, means that a Samoan fa'atosaga is quite comfortable with labour patterns, which in an obstetric context would be more likely to be responded to with intervention. Observations of Samoan women in labour in hospital in American Samoa, led one nurse-researcher to conclude that the first stage of labour was
quite often punctuated by periods of uterine inactivity, at which time the woman seemed to rest and nap. Then without stimulation, she awakens, the uterus resumes contracting and dilatation and effacement proceed. Stateside physicians have remarked upon the labour response (Clark 1978, 168).

Clark considered that the obstetric response in the United States to such a pattern would be to augment the labour or do a caesarean section.

Two philosophies, assistance and laissez-faire, have been shown to exist or co-exist in the patterning of birth practices in many cultures (Mead and Newton 1967, 216). Samoan practices suggest that these philosophies co-exist, in that while a largely non-interventionist approach is taken to the onset of labour, there is greater willingness to intervene when labour has commenced. While the fa'atosaga interviewed in Wellington, said they advised a woman in late pregnancy to do a lot of walking to encourage the onset of labour, they did not report using invasive methods of induction.

Different fa'atosaga hold different views as to whether augmentation of labour by the artificial rupture of membranes characterises normal or abnormal birth. A more interventionist approach is illustrated in this description which Kinloch gives of the delivery practices of one fa'atosaga. The fa'atosaga waited until late in the second stage to intervene. "When the woman is in real pain I put in my hand and feel the baby's head. Then I draw the bag (lago) and pinch it, to break it" (Kinloch 1985, 207). An even more interventionist practice of another midwife which is also described by Kinloch was to massage the cervix to make it bigger if it was tight.

However, a different understanding of what was normal and abnormal was expressed in an interview in Wellington with Mrs A who was still practising as a fa'atosaga in Samoa. She considered that, 'you never go inside in normal birth'. All examinations of
Active intervention in labour is not confined to rupturing the membranes. Intervention can also have a social dimension. Discussions with Samoan women during the interviews suggests that a commonly used intervention is the use of scolding or 'birth talk,' to encourage the woman to rise above the pain she is experiencing and concentrate her energies on birthing the baby. The use of social and physical interventions particularly when a woman was in prolonged or advanced labour to goad the woman into giving birth, have been observed in other Pacific Island cultures. Observations made in 1938 by the Beagleholes of prolonged labour in a Pukapuka woman reported demonstrations of impatience on the part of the birth attendants". At times there were at least ten persons all pushing parts of her body and calling her to push the child out. She was accused of being afraid to press down and was continually scolded for not telling her attendants when the pains came on" (Mead and Newton 1967, 216).

Obstetric Understandings and Practices

Unlike the Samoan approach to labour, obstetrics divides labour into 'objectively' defined stages and phases within stages, with distinct beginnings and endings for each. In other words, labour is timetabled. The partograph (a graphical representation of labour) forms the basis of obstetric timetabling. It represents the statistically derived norm of a number of 'normal' labours. By use of the partograph the obstetric practitioner can establish at a glance whether the labour of any woman is progressing normally. This focus on cervical time tabling is an important
feature of the obstetric paradigm. Obstetric control over the conduct of labour is facilitated and legitimated in that the partograph enables doctors to gain knowledge about a particular birth independent of the labouring woman. Conversely the partograph places demands on the labouring woman to perform to schedule, which it is argued can act to slow the progress of labour (Rothman 1982, 260).

Obstetric practices both prior to and during labour are largely characterised by a philosophy of assistance or intervention. Obstetric understandings are however also characterised by a considerable amount of ambivalence. Like Samoan fa'atosaga, the commonest intervention obstetric practitioners use is digital rupture of the membranes (amniotomy). Obstetric practitioners commonly describe their practices to women as 'sweeping the membranes' or 'giving things a good stirring up'. Obstetrics makes a qualitative distinction between induction, intervention before labour begins, and augmentation, intervention after it begins. In both cases amniotomy is commonly involved. The distinction which is made is which side of the normal/abnormal divide each intervention is located. From a review of the obstetric texts, induction was primarily discussed in the context of abnormality for example in chapters on "Obstetric Operations" or "Complications of Pregnancy" while augmentation was normally discussed within a chapter on the "Conduct of normal labour and delivery". That induction is perceived by some obstetricians as an abnormal act is exemplified in these warnings to practitioners given in two of the texts reviewed.

"Induction of labour is interference in a normal process and the indications for expediting delivery must therefore be sound" (Green 1983, 202).

"Induction of labour represents such a profound interference with natural laws that the clinician must be prepared to justify it
This view of induction as interference in 'natural laws' does not seem to be taken note of when inductions are performed for non-medical or non-pathological reasons. The marked increase in the induction rate in most developed countries in the 1970's was largely due to an increase in inductions for non-pathological reasons, primarily the social convenience of the doctor and less frequently the woman. It was estimated that, "in many hospitals in the United States of America, over 50% of labours were induced electively, whilst in Britain and Australia the proportion was between 30 and 45%" (Llewellyn-Jones 1986, 399). While the rates of induction have declined since the 1970's, elective induction at forty weeks without medical or pathological reason continues to be practised. This is demonstrated in that the authors of one text though not recommending the practice, felt obliged to list elective induction, "because it has become established practice" (Beischer and Mackay 1986, 391). That elective induction is still practised by some medical practitioners in New Zealand is reflected in the reported statement of one medical practitioner.

I know that if someone is due and I'm going to be away for the weekend and the patient is quite happy to be induced then occasionally there might be a bit of convenience obstetrics when you might induce them on the Thursday instead of them missing out, because they like to be delivered by us (Stirling 1990, 14).

Factors other than clinical indications have also been shown to influence whether a woman has an induction or not. A 1985 study of women in Dunedin who were all considered to be low risk at the beginning of labour showed that women who were the patients of private specialists were shown to have the highest rate (34%) of induction (Tilyard et al 1989, 523). Such patients are likely to be women from a similar social class and background as the doctors. Other studies have also shown that social factors such
as a pregnant woman's social class influence the nature of obstetric decision making, regardless of the clinical needs of the patient (Oakley 1980, 33).

While the decline in overall induction rates can be partly attributed to changes in obstetric attitudes as a result of consumer opposition, it is probable that it is also attributable to the introduction of more sophisticated technology. The advent of more sophisticated obstetric technology to measure gestational age, on the one hand may have contributed to the reduction in the overall induction rate by discouraging inductions when there was 'evidence' of immaturity of gestational age. But on the other hand, such technology provided justification for the construction of a new pathological reason for induction that of postmaturity that is, pregnancy calculated to be over forty two weeks. This is defined by some obstetricians as a potentially pathological state which is amenable to medical treatment. Samoans also seem to consider delay in the expected onset of labour in some circumstances as a potential sickness or pathology. Samoan and obstetric understandings differ however in that the former attributes the cause of the pathology to aitu induced sickness through the disruption of social relationships, while the latter attributes delay in onset to largely physiological factors.

Again a review of the obstetric texts showed the co-existence of philosophies of laissez-faire and intervention within the obstetric paradigm. On the one hand some obstetricians hold the view that in itself, prolonged pregnancy is not a pathological state. "In the vast majority of patients with uncomplicated prolonged pregnancy (42 weeks or beyond) the fetus will come to no harm" (Beischer and Mackay 1986, 391). However, other obstetricians have different understandings as is demonstrated in this extract from another text. "There is increasing evidence that prolongation of pregnancy in a woman with a normal menstrual cycle beyond 294 days (42 completed weeks) adds a significant hazard to the fetus" (Llewellyn-Jones 1986, 399).
These differences in obstetric understandings, exemplify the obstetric dilemma so elegantly portrayed by Arney as, 'residual normalcy and pathological potential' (Arney 1982, 51). This dilemma is further demonstrated by the editors of another text who concluded that, "there remains little doubt that, even in the absence of any recognisable maternal complication, some fetuses who stay in utero much beyond 42 weeks are in progressively greater danger of suffering serious morbidity or even dying in utero or soon after birth" (Williams 1985, 762). However, they went on to conclude that a universal policy of induction after 42 weeks was unacceptable, given that the majority of fetuses 'fare rather well'.

While there is likely to be more agreement among doctors and among women and their doctors, that operative intervention is justified when the risk of intervening is less than the risk of continuation of the pregnancy, there is less agreement about what constitutes acceptable risks, who decides what these are and what should be done about it. Though a more conservative approach to induction is currently taken by obstetricians than in the recent past, it is clear that obstetrics does not question the validity of the practice itself. On the contrary, the profession strongly upholds its rights to decide whether or not an induction is required, as this extract from one of the obstetric texts demonstrates.

There is as yet no evidence that yearning for natural childbirth is an effective protection against antepartum haemorrhage, gestational diabetes, placental insufficiency and such disorders. In consequence, it may often be necessary to insist that some mothers subordinate their aspirations for a fulfilling birth experience to the more pressing interests of their offspring (Turnbull and Chamberlain 1989, 823).

The growth of modern technology enabled the obstetric practitioner to directly intervene in the fetal environment and in so doing to claim the fetus as another patient. This obstetric
dilemma of having two patients, the mother and the fetus, results in tensions and ambivalence in medical and maternal relationships. This is evident in the quotations above in which doctors claim to represent the interests of the fetus, vis à vis the interests of the mother. The obstetric paradigm understands the relationship of mother and fetus as one in which the interests of the fetus and that of the mother are potentially in conflict. This contrasts to Samoan understandings in which there is a symbiotic relationship between mother and fetus. The interests of the mother and that of the fetus are considered to be one and the same.

While the main pathological indications given for induction in the interest of the fetus are said to have remained fairly constant it is considered that, "it is rare nowadays to have to consider labour induction purely in the maternal interest" (Turnbull and Chamberlain 1989, 825). Obstetrics considers that the position of the doctor is that of decision maker. These decisions include those of a moral and ethical character, which are presented as clinical imperatives. The question is whose interests are doctors representing - the mother's, the fetus, or their own? Women frequently feel that doctors are not representing women's interests, nor indeed the interests of the fetus for whom they claim advocacy. Many women, Oakley argues, do not consider that induction of labour is a purely clinical matter, but one in which women's voices should be heard (Oakley 1989, 683).

Analysis of the obstetric understandings and practices related to induction also raise questions about the way in which obstetric knowledge itself is constructed. One of the arguments which obstetrics uses to distinguish its way of doing birth from other birthing systems, is that its beliefs and practices are grounded in scientific, rationalist principles. Yet, as has been shown, there is considerable variation among obstetricians as to when labour should be induced. Such variation suggests that
obstetric beliefs and practices rather than being embedded in scientific understandings evolve from clinical interpretations and understandings and are shaped by social and cultural forces. This variation among obstetricians, found in reviewing collective obstetric knowledge as found in obstetric texts, is not so different from the variation which was found among Samoan fofo in Samoa (Macpherson and Macpherson 1990). This suggests that obstetric knowledge may be less coherent and more internally contradictory than would have been expected to have been the case.

The Active Management Of Labour

The partograph is the standard tool used in obstetric units to monitor the progress of labour. It is an essential feature of the obstetric practice of the active management of labour. A basic objective of the active management of labour (that is labour actively managed by the obstetrician and not to be confused with active labour which facilitates the active doing of labour by women) is to avoid what is obstetrically described as prolonged labour. This is defined as labour in a nulliparous woman (one who has had no children) of more than 12 hours following admission to hospital. This obstetric approach favours shorter labours and is often justified to women on the basis, that "the resulting shorter labour is more enjoyable to the patient and the baby is less likely to be distressed" (Beischer and Mackay 1986, 347). However, there is little evidence that women would prefer a shorter and probably more painful labour to a longer and possibly less painful one and little evidence that they would not. When obstetric texts describing the active management of labour are analysed, the imagery of labour which is found is that in which the woman's body is portrayed as the machine and the doctor as the mechanic (Martin 1987, 57). Obstetric intervention in labour is thus justified on the grounds that it will improve the 'efficiency' of the uterine contractions and thus increase the productivity of labour.
Should dilatation of the cervix, as plotted on the partogram, lag behind expected dilatation by more than two hours then the progress of labour is probably abnormal, the causes of which must be ascertained and the appropriate treatment instituted (Green 1983, 91).

Obstetric measures as to what constitutes a successful birth outcome have been narrowly focused on the prevention of avoidable death in mother and baby. Measures of physical or psycho-social morbidity resulting from the intervention have been underestimated or ignored (Oakley 1984b). The focus on mortality and selected morbidity were features also identified in the texts reviewed. While potentially life threatening hazards associated with induction or augmentation of labour were noted, other factors associated with intervention such as the fact that women who are induced have higher rates of pain relief, routine fetal monitoring, and instrumental deliveries were largely ignored.

**INDUCTION AND AUGMENTATION OF LABOUR AMONG SAMOAN WOMEN**

Only 6% of the Samoan women in the total study group, (16/248) had their labour induced. The most common reasons given for an induction, were elevated blood pressure or suspected post maturity. Similarly, only 10% of women (25/248) had their labour augmented with an intravenous infusion. The main reason given for augmenting the labour (71%) was a diagnosis of slow progress in labour (18/25) with a further 28% of women (7/25) having labour augmented because of slow or poor contractions. Induction of labour as has been shown in other studies was closely associated with the use of analgesia and anaesthesia among the women interviewed (Cartwright 1979; Oakley 1984; Tilyard 1989). All four of the women who had an induction, (all first-time mothers) had either pethidine, an epidural or both.

One hundred and twenty seven women (55%) excluding those who had an elective caesarean, had their membranes artificially ruptured in labour. There was no difference in the practice of rupturing
the membranes in labour between Wellington Women's Hospital and Kenepuru Maternity Hospital. The reason for rupturing the membranes was recorded on the hospital records of two thirds of the women (84/127). More than half (44/84) were recorded as having been done accidently during the performance of a vaginal examination, while 23% were recorded as done to assess fetal condition (19/84) and only 13% (11/84) specifically to augment labour. In one third of the cases meconium was reported as being present on membrane rupture suggesting an element of fetal distress. Given that rupture of the membranes has been described in the obstetric literature as the most commonly used method of augmenting labour, it is likely that a considerable proportion of the 'accidental ruptures' may have been done in reality to 'assist the progress of labour'.

A Samoan Woman's Account Of Induction

Melaia's story of her induction and subsequent need for pain relief graphically illustrates the finding of other research that induced labours are frequently painful experiences. It also illustrates how Samoan women attempted to control the way in which they did labour by seeking to make sense of the physiological process, as well as what was being done to their bodies. To do so required drawing on and reinterpreting the knowledge of the experts who controlled the technology and who had the power to control the way she would experience labour.

Then after they gave me the tablet [induce labour], I was sitting there thinking oh... and I couldn't feel a thing eh! I still felt normal. I says to them, 'oh I think your tablets aren't working'. And they said, 'oh, you've got to wait, it will work. Wait for three hours'. And I was waiting and waiting and it still didn't work. And I said, 'your doctors don't know what they are doing eh'. And they (midwives) all laughed and said, 'oh, don't look forward to it too much'.
The commencement of labour was medically defined for Melaia when

On Saturday night about five o'clock, I started feeling funny. Went to the toilet and blood came eh. I told the nurses and they said, 'Oh, you're in the early stages of labour now'.

Melaia goes on to describe the progress of labour and her attempts to maintain control.

And then I couldn't feel any pain. I could just feel funny, couldn't walk properly. I think it was the head getting engaged. I just really felt that was it, you know, labour. I thought that was all to it. And I thought, oh not so bad, just a piece of cake eh. Then at six o'clock at night I could feel it going worse. And I went to bed and thought oh, just go to sleep, maybe it will go away. And I went to sleep and all that night it wasn't painful and all I could feel was wanting to go to the toilet all the time. But it wasn't painful. And I thought oh if this is labour, then I'm alright. I went to the toilet and the nurse comes and says 'oh don't go to the toilet, you might just have it there! And then about five o'clock in the morning, I could feel it coming eh. And I thought oh I could still hack it. And I thought I heard some people were easy, so I must be one of them eh. Then by eleven o'clock in the morning, it was getting worse and so they says to me they were taking me to theatre (transfer from antenatal ward to delivery theatre). And I says to them, 'How long will it take for me to have my baby?' And the doctor says, 'Oh, you'll have your baby by three o'clock in the afternoon'. And I thought, oh that's alright.
Melaia graphically describes how a change in the level of technological intervention moved her from being able to tolerate the pain, to a point she could no longer cope.

I was just sitting there, reading my magazine, as if nothing was happening. I was trying to forget the pain and just concentrate on my reading. And about two hours later I couldn't stand it and I just chuck the magazine out. I just couldn't hack it, 'cause they gave me some fluid, they gave me the drip. And there's this thing with numbers on eh, say it goes up from one to ten. They put it up, it's like a 'pain machine'. They gave me that. And when they put it up to four, I could feel it was getting worse and they put it up to five and six and it was getting worse.

Shortly after this, Melaia starts to negotiate again with the professionals, this time for pain relief as the strength of the syntocinon infusion is increased. Before she went into labour, Melaia had been told by the doctor that an epidural was the best form of pain relief.

So the worst pain I got, I says to them, 'Oh, can you give me that epidural'. And they says to me, 'Oh, you've got more coming than this'. And I said, 'Yea, I still want it'. And they gave it to me and the first-time it didn't work. And they inject me the second time. Then it started working.

Once Melaia perceived that the epidural was considered to be the 'best pain relief', she negotiated with the medical managers of her labour to get access to it.

Statistical findings in other studies that an induced labour is frequently associated with a high degree of pain and subsequent introduction of analgesia or anaesthesia was illustrated by Melaia's story. Her story vividly demonstrates that a woman's loss of control over the management of her pain, is closely associated with acceleration of the pace and intensity of labour. Although the incidence of induction of labour was low amongst the
Samoan women, this was not the case with explicit or implicit augmentation of labour in the form of artificial rupture of membranes in labour. There was no difference in the obstetric culture at Kenepuru Maternity Hospital or Wellington Women's Hospital with regard to the practice of artificial rupture of membranes in labour.

PAIN AND THE MEANING OF LABOUR

Samoan Understandings and Practices

Learning about doing birth in traditional Samoan culture occurred on the job. However while Samoan women might not have had access to detailed knowledge of birth before going into labour a Samoan woman knew what was socially expected of her during labour, which was to show considerable self control. This included making the best use of her own efforts to birth the baby, at the same time limiting overt verbal expressions of pain. This is not to say that Samoan women did not or do not experience pain. Observations by one nurse-researcher of the body language of Samoan women in labour revealed that though not complaining of pain, such indications as "skeletal muscle reactions, tossing and turning, and fixed body positions indicated that they were experiencing pain" (Clark 1983, 701).

A Samoan woman giving birth demonstrated her 'inner strength', the quality of her moral standing, by her stoical acceptance of the inevitable pain of birth. In a similar way a young Samoan man who was undergoing tattooing also demonstrated the quality of his moral standing by remaining silent even in the face of obvious pain. Samoan understanding of pain in labour is characteristic of what Arney described as that stage in the location and meaning of pain which predates the rise of modern obstetrics when, "birth was a revelatory experience; a woman's pain in childbirth was to be read for what it revealed about her life" (Arney and Neill 1982, 2).
That Samoans recognise that labour is painful, is demonstrated in that the literal meaning of 'fa'atiga' (being in labour) is to make pain. Samoans use physical and social mechanisms to assist a woman maintain self control during labour. Samoan women receive a great deal of physical support to relieve pain during labour by the use of massage techniques. The massage is said to be gentle and concentrated around the lower part of the body (Umaga 1983, 9). Traditionally, Samoan women are physically supported by other women throughout labour and birth. This sensory stimulation from skin contact and pressure to the lower body designed to provide physical relief and emotional support to the woman is reported in a number of traditional cultures (Mead and Newton 1967, 205-207).

Samoan beliefs and practices associated with pregnancy (if complied with) for example avoidance of certain foods and observance of certain behaviours can be understood as a way of reassuring the woman and reducing her anxiety. Conversely it could increase her anxiety if she had failed to observe the 'rules' of pregnancy. The practice of giving birth to her first child in her mother's home, with the support of her female kin, would also have contributed to a sense of security. A Samoan woman knows also that the product of her labour, the baby, will be socially valued by her family and the society of which she is part.

Social support from the fa'atosaga and a woman's female kin are however the key to a Samoan woman being able to maintain her inner strength and 'do pain' with dignity. This support includes both sympathetic encouragement and sometimes impatient scolding of the woman, the birth talk described earlier. Cries of pain were said to be commonly responded to with admonitions such as, 'you got yourself into this, now you get yourself out of it'\(^\text{15}\). Women are challenged to meet their own expectations and those of the group.
Even in a medical setting, this Samoan way of supporting the labouring woman has been reported as in this description of the delivery of a woman in an American Samoan hospital.

"In the delivery room, the patient is showered with comforts and positive reinforcements - facial sponges, teaching, touching, coaching, compliments. The atmosphere resembles the cheering section at a football game. Patients are praised loudly for their efforts and encouraged to continue. It was fascinating to see a patient 'wait for the commands' and follow through with whatever she was asked to do. For example in the bearing down period, patients would lie quietly with the caput distending the perineum and would not move or push until the command was given to do so"! (Clark 1978, 701).

Obstetric Understandings and Practices

Obstetrics also considers labour to be a painful process. The editors of one obstetric text considered that, "labour is a painful process that for the nulliparous woman may be the most painful event that she has ever experienced" (Williams 1985, 435). Obstetric and Samoan approaches differ however in the meaning ascribed pain and the way in which a woman is facilitated to do pain. A feature of the obstetric texts reviewed was the belief that the main emotion women experience during labour is that of fear. Obstetrics understands this fear as expressing fear of the pain of labour (Williams 1985, 405). The source of a women's fear was often attributed by obstetric writers to the 'stories' of other women. This is illustrated in this quotations as fear engendered by, "the tales she may have heard of the horrific experiences of her relatives, friends and neighbours, as well as possible untoward memories of a previous pregnancy" (Turnbull and Chamberlain 1989, 713). However none of the texts reviewed considered that the obstetric way of doing birth might itself contribute to a woman's fear.
In the obstetric texts reviewed, the provision of pain relief in labour was usually expressed as the humane duty of the obstetrician. This view is evident in the following extracts from the texts. "When physiological methods fail to control discomfort, pharmacological analgesia must be considered" (Green 1983, 85). "It is not good obstetrics to allow a woman to suffer when adequate relief is available" (Llewellyn-Jones 1986, 150). The relief of pain thus becomes an obstetrical imperative. Obstetric understanding of pain as a sensation to be suppressed, contrasts sharply with the Samoan approach in which intensive physical and social support mechanisms make it possible for the woman to 'do pain' with dignity.

Pharmacological methods of pain relief also provide a social control function, by limiting the demands the woman will place on obstetric practitioners. Thus in justifying the use of pharmacological methods of pain relief in labour Williams argues that, "pain relief forestalls the importunities of the parturient and her family for premature operative interference" (Williams 1985, 436). Obstetrics thus acts to distance itself from the labouring woman. This distancing is in marked contrast to the Samoan approach which acts to work with and discipline the woman as she does her pain.

The Samoan and obstetric paradigms differ in the value they place on labour pain. The former values a woman who demonstrates self control over her pain - a control she is assisted to achieve by the character of the social support she receives. The latter values the external suppression or obliteration of the pain a woman experiences, considering this is more effectively achieved by pharmacological means.

Samoan Women's Expressions Of The Emotions and Sensations of Labour
Fear of pain in labour is one of the emotions which women experience. Although there is a substantive medical and non-medical literature describing the character, location and causes of labour pain there is as Oakley notes, "surprisingly little research directly tapping the views of labouring women about pain" (Oakley 1989, 680). A dominant feature of Samoan women's talk about labour, was its painful nature.

Labour and birth was spoken of as an intensely painful process, which was often difficult to describe. Uila who had her second child, though eloquent in her description of the intensity of labour pain, felt unable to define its character. "It is indescribable. In early labour the pains aren't so bad, but when it's near birth time, it is hell. The actual birth pain is agonising". Clare, also an experienced mother, when asked what the pain in her back was like, said emphatically "oh, a pain that you never want to think back about it". While Lemapu, who was having her first baby, said that the thing that most surprised her, was the nature and intensity of the pain. "It was like someone pierce your back with a very sharp poker or something".

A way in which some women gave meaning to the pain, was to relate it to menstrual pains, the other woman specific pain they had experienced. Telesia who was having her second baby said, "oh, I don't want to experience those again. It's like a hundred period pains at once. As the hours passed, they got worse and worse". While Melaia who was having her first baby said, "it felt like your period pain. I felt as if my stomach would drop off. The way I would describe it, is just a period pain, but stronger".

That women experience intense emotions in labour and that some women felt very vulnerable is evident in the stories of those women who said they were afraid of dying while in labour. Though more first-time mothers were 'afraid for their lives', this theme was also found in the stories of experienced women who were
having a difficult or long labour. This fear was shaped not only by what their bodies were doing to them, that is the pain they were experiencing, but also by the context in which they were labouring, that is what was being or might be done to them. Samoan women were not alone in feeling this way. Such fears are also reported by Graham (1977, 94). That women's fear of dying was shaped at least in part, by the obstetric context in which women gave birth, is illustrated in the stories women told. Part of that fear was associated with a woman's feeling that she had no control over what was happening to her.

Melaia, whose account of an induced labour was given earlier in this chapter said,

I wanted to give up, especially the time they wheeled me into the theatre. I thought... this it, dead... I was anxious to have her out, but I was thinking of myself too. 'She comes out and I'm dead'. Sort of all weird things that time. I really thought that I wouldn't make it.

Though Nana did not let on to her partner or to the midwives, recalling her labour she said, "I was scared in case something happened to the baby or myself".

Leuma described her feelings during the time she was in delivery theatre.

I was scared of what's happening and that time the doctor coming and I try to push him. So I heard the doctor say something's going to be wrong eh, 'cause the baby must be coming out, but it's too long for me to push him out eh. So when I heard he was coming out, oh I don't know where the pain went.

Even experienced mothers expressed fear induced by the obstetric context of birth. Mareta who gave birth without the support of partner or family, said she was scared when she went into the delivery theatre largely because of 'the lights' and "the sound of the instruments". When asked whether the nurses were aware of
how she was feeling, Mareta replied they were not, because she
did not tell them.

For other women fear was induced partly by the pain of a first
birth and/or a long and difficult labour and partly fear of the
outcome. Saua a first-time mother said that labour pains were
like nothing she had ever experienced before. "The pain was so
bad, "that I thought I was going to die. Didn't think I'd make
it through the night".

Experienced mothers having a difficult labour also experienced
feelings of fear. Gagau who was having her fourth baby, had an
emergency Caesarean. "I couldn't do anything... I couldn't sleep,
just wait and scream... I hoping for the safety of my baby and
myself". While Tasi who was also having her fourth child had a
lot of back pain, which made her feel "better to die".

Samoan women expected labour to be a painful experience which
would and did test their innermost resources. It was a time when
women particularly those women having a first baby, felt not only
vulnerable, but in fear for their lives. Though women who were
having a second or subsequent baby expressed less fear about the
unknown factors of birth, they also expressed feelings of anxiety
which were shaped not only by a previous difficult and painful
birth but by the clinical context in which birth was conducted.

HOW WOMEN DID PAIN

As has been discussed earlier, the Samoan and obstetric responses
to pain in labour are markedly different. In the Samoan paradigm,
pain of labour as a rite of passage, is socially valued. The
woman who bears her pain without complaint, shows evidence of her
'inner strength'. A Samoan woman was helped to bear her pain by
the social support of her family and by physiological means such
as mobility and by massage particularly of her abdomen and back.
Samoan stoicism in the face of pain was reinforced with the
introduction of Christianity, by the biblical belief, that it is the lot of women to give birth in pain. The Samoan woman who labours quietly, not externalising pain felt, is considered in Samoan terms, to have laboured well and gains psychological benefit from the social approval of others.

The obstetric paradigm on the other hand values the suppression of pain in labour, which it controls through the use of analgesics and anaesthetics. Other methods such as physiological or psychoprophylactic techniques are considered by obstetrics insufficient on their own and thus supplementary to a pharmacological approach. "The greatest value of psychoprophylaxis is in the early stages of labour when it can be most beneficial, but it is seldom satisfactory for the whole of labour" (Turnbull and Chamberlain 1989, 734).

Pain Relief and the Medical Context of Labour

In the early 1980's the management of pain in an obstetric context in Samoa, differed from that in New Zealand hospitals. While pethidine was sometimes given to a first-time mother, epidural anaesthetic was not used. Though these differences reflect the less technologically sophisticated resources available in Samoa they may also reflect an attitude to pain on the part of obstetric practitioners in Samoa which is shaped by traditional Samoan values. Samoan women in Wellington however, were giving birth in a cultural context where the social relationships in which pain is managed in Samoa were not available.

The obstetric context in which women gave birth in Wellington was not homogeneous. A woman who gave birth at Kenepuru Maternity Hospital was cared for by hospital midwives and by her own general practitioner. Some women who gave birth at Wellington Women's Hospital were also cared for by hospital midwives and their own general practitioner. The medical care for other women
however was provided by the resident medical staff, under the
direction of a specialist obstetrician. In contrast to Wellington
Women's Hospital, all women who were booked to give birth at
Kenepuru Maternity Hospital were assessed as low risk that is,
they were generally expected to have a 'normal birth'. The major
difference in pain technology between the two hospitals was that
epidural anaesthesia was not available at Kenepuru.

Pethidine was one form of technology available in both hospitals.
Two thirds of the women in the total study population (157/248)
had some form of pharmacological pain relief during labour, with
86% of pain relief being from pethidine. The majority of women
giving birth at Kenepuru Maternity Hospital (55% - 47/85) had at
least one pethidine injection in labour as did women who gave
birth at Wellington Women's Hospital (54% - 88/163). This
suggests that there is considerable homogeneity of practice among
obstetric practitioners in Wellington despite differences in
obstetric populations of the two hospitals and the availability
of epidurals at Wellington Women's Hospital.

Having a first baby was shown to be the most significant factor
associated with pethidine in labour among the total study
population. First-time mothers had a significantly higher
pethidine rate as can be seen in Table 8.1, in comparison to
other women.

Table 8.1
Pethidine by Parity

<table>
<thead>
<tr>
<th>Pethidine</th>
<th>P0</th>
<th>P1+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77%</td>
<td>46%</td>
</tr>
<tr>
<td>No</td>
<td>23%</td>
<td>54%</td>
</tr>
</tbody>
</table>

chi-squared=19.30 df=1 p<0.001
Augmentation and Pain

Induced and augmented labours have been shown to be more painful (Cartwright 1979; Tilyard 1989). A similar finding was made in the study of Samoan women in Wellington. There was a significant relationship between artificial rupture of membranes in labour and pethidine rates, as seen in Table 8.2 among women who gave birth at Wellington Women’s Hospital. However this relationship was not found for women at Kenepuru Maternity Hospital. As there was no difference in pethidine rate or artificial rupture of membrane rate in labour between the two hospitals, this suggests that some difference in practice existed between the two hospitals. Statistical tests showed that this difference was not a matter of chance (chi-squared=4.44 df=1 p=0.04 Breslow-Day test for homogeneity.)

Table 8.2
Artificial Rupture of Membranes (ARM) in Labour by Pethidine use at Wellington Women’s Hospital

<table>
<thead>
<tr>
<th>ARM</th>
<th>Pethidine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>No</td>
<td>39%</td>
<td>61%</td>
</tr>
</tbody>
</table>

p=0.008
chi-squared=7.09 df=1

Samoan women appeared to have a lower overall rate of pharmacological pain relief than other women in Wellington in the late 1970’s (Crowthers and Allen 1985). However when the epidural rate for Samoan women was compared with that of other women at
Wellington Women's Hospital there was little difference. The epidural rate for the Samoan women giving birth at Wellington Women's Hospital in 1985/86, at 23% (37/163) was little different from the general rate of 27% in 1984\textsuperscript{17}.

The availability of an epidural did not, however, dramatically increase the numbers of women at Wellington Women's Hospital who had pain relief, in that more than two thirds of the women who had an epidural for pain relief had previously had pethidine. For the remaining third, the epidural was their sole source of pharmacological pain relief. Thus the availability of epidurals at Wellington Women's Hospital did not so much extend the pool of medicalised births, but rather increased the technological character of the experience of some of the women already in the pool.

<table>
<thead>
<tr>
<th>Epidural</th>
<th>P0</th>
<th>P1+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>46%</td>
<td>11%</td>
</tr>
<tr>
<td>No</td>
<td>54%</td>
<td>89%</td>
</tr>
</tbody>
</table>

$\text{p}<0.0001$

Epidural rate, as shown in Table 8.3, is closely associated with parity. This close association of parity with epidural rate was also found in a review of epidurals conducted in 1990 at Wellington Women's Hospital. Pacific Island women having a first baby had a comparable epidural rate (50%) to that of Maori and Pakeha women (52%)\textsuperscript{18}. (Given the general increase in the epidural rate at Wellington Women's Hospital, the epidural rate for first-time Samoan mothers in 1990 would likely have been higher than
the 46% found in 1984). The close association of epidural for pain relief with a first birth, is shown in Table 8.4.

Table 8.4
Epidural for Pain Relief by Parity

<table>
<thead>
<tr>
<th>Epidural</th>
<th>P0</th>
<th>P1+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>46%</td>
<td>6%</td>
</tr>
<tr>
<td>No</td>
<td>54%</td>
<td>93%</td>
</tr>
</tbody>
</table>

p<0.0001

Despite differences in the technological sophistication of Kenepuru Maternity Hospital and Wellington Women's Hospital, a similar obstetric culture regarding the use of pethidine in labour was found to operate in both contexts. The majority of Samoan women had pharmacologically managed labours regardless of whether they gave birth at Wellington Women's Hospital or Kenepuru Maternity Hospital. Samoan women and other Pacific Island women having their first baby at Wellington Women's Hospital, were shown to have similar rates of epidural anaesthesia.

SAMOAN WOMEN AND PHARMACOLOGICAL PAIN RELIEF

Among the women who were interviewed, (46% - 23/50) had a pethidine injection during labour. The relationship of pain relief with parity was also demonstrated, in that all but one of the eleven first-time mothers interviewed had some form of pain relief in labour. All of the women who had an epidural for pain relief were having a first baby, while all other women interviewed who had an epidural did so for a caesarean section.

It was expected that women who were classified as more Samoan oriented would have less pharmacologically managed labours than
other Samoan women because they would more strongly uphold traditional Samoan values of stoicism in the face of pain. In fact as can be seen from Table 8.5 there was little difference between the proportion of women classified as more Samoan oriented who had a pethidine injection for relief of pain and other women. Whether or not a woman had pain relief in labour, was not able to be explained by use of my classification of cultural orientation.

<table>
<thead>
<tr>
<th></th>
<th>&gt;Samoan</th>
<th>&lt;Samoan</th>
<th>Bicultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44%</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td>No</td>
<td>56%</td>
<td>54%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Women rejected pain relief for a number of reasons. Some women recalled the unpleasant effects of analgesia from a previous labour. Matagi, who was classified as more Samoan oriented, was having her third child. She explained why she turned down an offer of pethidine during labour. "I was asked if I wanted an injection when I was in extreme pain. From experience I denied it. The injection that I got in Samoa wasn't effective. It just made me more tired and sick. I prefer to go without these medical things. However painful, I have to be patient and endure it all. So I'd rather suffer it out alone, than to have to go through another different kind of hell after birth."

Other women explained their choice not to have analgesia in terms of a wish to maintain control over the management of their own pain. Women who were classified as more Samoan oriented as well as those classified as less Samoan or biculturally oriented, drew from Samoan understandings of the proper way to do pain. For example, during pregnancy Clare who was having her fourth baby, said, "I wouldn't like that to happen to me (epidural). I wish
if I could have the pain as a normal pain and then I'll have to help myself". My classification of Clare was that her attitudes and lifestyle suggested a more bicultural orientation.

Alisa, who was classified as less Samoan oriented explained her decision not to use pharmacological means of pain relief during her first labour. She said it was, "because I didn't want anything to happen with the baby. 'cause I find out, that they have to go through pain back home and they didn't have any of the equipment like what New Zealand has. So I was prepared to go through it".

Nana was classified as more Samoan oriented. Her approach to managing her pain was to, "just grin and bear it". However Nana was given a pethidine injection just before she went into the delivery theatre.

Feeling Prepared For Labour - Samoan Womens' Experiences

The majority of Samoan women having their first baby in Wellington had pharmacologically managed births, with 77% of women having pethidine and 46% of women at Wellington Women's Hospital having an epidural. Interviews with Samoan women suggested that young women having their first baby in New Zealand began labour with a disadvantage. The vast majority of the women felt under prepared for the experience of labour. Even if they had attended a few antenatal classes they entered labour with little factual information and with limited familiarity with Western developed psychoprophylactic techniques to manage pain in labour. Some of the women felt their partners would have been more help if they had been better prepared. Women expressed considerable ambivalence about the best way to learn how to do birth. Although women wished they had been better prepared they considered that 'experience is the best teacher'. In this the women reflected a Samoan approach to learning.
However the social relationships which characterise a Samoan way of doing pain were mostly not available to these young women. Their primary support in labour tended to be their equally inexperienced male partner. These young women did not have available the kind of intensive social support characteristic of birth in Samoa as described by one Samoan woman. "The way that Samoan people sort of encourage you to do things, sort of goad you. They don't believe in praising you, and saying 'oh, you're a very good girl, you're doing well', but they goad you into doing things. Sort of tease you... they do encourage, but not so openly as the palagi. They may be telling you that [scolding], but at the same time, they'll rub you up and down. In a way, it's making the girl sort of angry. You know, scolding you to get angry, not give in to the pains".

Melaia, a first-time mother, attended a couple of antenatal classes and we spent some time during our visits with her talking about what happens in labour. Melaia, whose only social support was her sister, spent a considerable amount of time in early labour without family support. Recalling her labour, which was induced, she said she started using the relaxation techniques she had learnt at classes and found this helped in early labour. "But then when it got worse, I thought oh, this breathing's not working... I just forgot you know". Melaia blamed her 'forgetting' on not knowing enough about the technique to make it work.

Isalei also entered labour with very little factual information. During labour she was primarily supported by her husband. "Well, I didn't know anything... I didn't know what the pains were like". Isalei had only limited information from obstetric sources, attending one antenatal class and reading nothing. Her aunties told her about their experiences of labour pain, but she found that these proved to be different to her own. Though Isalei was unsure whether greater prior knowledge would have made the
birth easier for her, she did feel that if her partner had been better informed he might have been better able to help her.

Lemapu felt only partially prepared for her first experience of labour. "I knew some, but I did not know others. Doctor explain a lot of things. When I was very sore, I remember some of the things you told me. It help a lot, the things you two told me"^{20}. During labour, Lemapu was supported by her sister, however she also echoed the sentiment that experience is the best teacher. "You know the explanations and all the tales about labour pains just does not explain it enough. You have to experience it to know the extreme of the pain".

Experience also brings confidence for doing labour better in the future. As Matagi, classified as more Samoan oriented, said, "From experience I can say that I will be more in control and less worried if I have another baby".

Other women having their first baby as well as those who recalled their first experience of labour expressed similar ambivalence. On the one hand wishing they had been better prepared to cope with labour and on the other believing that experience is the only real teacher.

Social Support During Labour

One of the major differences between birth in an obstetric context in New Zealand and Samoa in the 1980's was the active involvement of a woman's partner and/or family and friends. In contemporary New Zealand it is expected that a woman will be supported by her male partner, throughout labour and the delivery and/or by close family or friends.

Womens's stories about labour revealed that women valued being supported during labour by persons close to them such as partners, family or friends and considered that such support
influenced the way they managed their pain. Only two out of the thirty eight women who spoke about the person or persons who supported them during labour and birth chose to labour alone, though they were having their first baby. Both women were classified by me as being less Samoan oriented. The situations of these two women differed from the other women. Neither women had close family in Wellington. While one woman was a single mother, she was older than the other unmarried women and was living independently of family.

When Moliga went into labour with her first baby, she went into hospital on her own as her partner was at work. Though he came in during early labour, she sent him back to work saying that the nurses and doctors were looking after her satisfactorily. Moliga admitted she was lonely during her labour but preferred not to have people who knew her helping her during labour. Giving birth she felt was something she felt she had to do on her own. Susana who was a first-time mother, also chose to be on her own and had indicated this was her intention when pregnant. Though she had friends who would have supported her, she said she just felt she wanted to go through labour by herself. However later Susana reveals that this choice had its costs. "It was hard for me to have the baby by myself. Though there is always someone around in hospital, like the nurses, it's not the same as having your own family. I was a bit down for the first day and after that I was quite good."

That many Samoan women sought to manage their pain without pharmacological support was a theme which was evident in many of the narratives. Women were helped to manage their pain by the kind of social support they received from husbands, family and friends. The powerful nature of such social support is illustrated in the following story by the impact on the woman when it was abruptly withdrawn.
Panesa had really strong support from two female friends and her husband throughout labour. Despite being in pain she turned down offers of injections from the midwife until at a vulnerable moment, her social support was withdrawn.

I just couldn't handle the pain. They had got really bad when I got down to there (theatre), but I just didn't want to take anything and the nurse said to me, 'are you sure you don't want to take the injection, or whatever it's called?' And I said, 'no, no'. And she just stood there and said, 'are you sure?' And I said, 'no, no'. She said, 'ok, just yell out to me if you want it'. So my friend and my husband went to have a quick smoke before I went into the theatre. So they had just walked out the door when I yelled, 'hey come back here, get the nurse, I want the injection'. So I just couldn't you know. I had to scream because it was really painful. I wanted to punch somebody too at that point. So I just gave up at the last moment.

Panesa blamed herself for failing but also blamed her supporters for leaving her at that vulnerable moment. She felt she could have coped if her supporters had not left her at that moment.

See I was lying on a bed and when there's a contraction I would try and sit up and S. would hold my hand, helping my breathing, while my husband rubs my back. So that was really good. They would be teasing me and saying stupid things, reminding me of crazy things I used to do. And I'd just laugh and forget about the pain. But when they walked out....

Samoan Men And Birth

A major difference in the way in which Samoan women in Wellington laboured in comparison to Samoa, was the active participation of the woman's male partner during labour and at the birth of the baby. Twenty women said that their husbands were their primary support during labour, while another seven women reported that they were supported by their partner as well as by family or
friends. That women valued the presence of their husbands during labour and that men generally wanted to be present suggests that among Samoan migrants birth is not seen as just 'women's work'. Kelemete welcomed having her husband present during labour and contrasted her latest birth with that of her experience in Samoa a few years previously. "Having my husband there with me really helped a great deal". During her previous labours in Samoa, Kelemete said "he wasn't allowed in. So I was with the nurse most of the time".

Where a woman fitted in my cultural orientation classification, did not appear to be related to whether a woman's husband was present during labour or the value which she placed on his presence. The parity of the woman also did not appear to be related to the husband's presence during labour. Both first-time and experienced mothers, spoke of the comfort and strength they received from having their husband with them. However, the marital status of the woman was a major influence on whether a husband was present at birth. Three of the four women who were supported in labour only by members of their family were single at the time of the birth. For married women, household structure appeared to be the major factor which influenced whether or not the husband was the primary support during labour. Where the couple was living in a nuclear family household, the husband tended to be the woman's primary support. Conversely where the couple lived in an extended family household, the women was more likely to do birth with the support of other members of his/her family in addition to her husband.

The major theme which emerged from the stories which women told was that their husbands enabled them to maintain their inner strength. This theme suggests that despite changes in the gendered character of the social relationships within which women did birth, both women and their husbands continued to draw on a Samoan model of pain management. A model in which the ideal/typical image is for a woman to demonstrate her strength
of moral character. Social support from husbands was described both as moral support and physical support. While all husbands provided the moral support, some husbands, particularly those who had previous experience also provided massage and other physical care for their wives.

Rosa who was having her fourth baby had a lot of back pain in labour. She said, "luckily I had my husband at hand to massage it for me and hold my hand throughout. He was always by my side and remember one time when he was urging and encouraging me to push and not to give up as it's almost over".

Ropeka's husband was also experienced as this was their third baby and he had been present during her previous labour. She said, "I want him there and you know, he knows what to do. He massages my back and my stomach, because he always asks me where the pain is".

This mix of moral and physical support was also evident in Fisaga's story. She said with a laugh,

> When my pains coming, he stands near me and I just hold onto the front of his jacket and pull down... He cuddled me and he said to me, 'keep your mind strong and don't worry. Let God help us. And he just hold me when I sang out and he takes me to the toilet. He was always near me. He tried to lift me out of bed. Oh I'm lucky to have him.' He's very helpful to me.

Alice's husband expressed admiration for her refusal to have analgesia in labour, considering it demonstrated her inner strength. At the same time while valuing the way she was doing her pain, he expressed distress at the pain she was enduring. "She could handle it, she was strong really. She said, 'oh, I can do it by myself'. She was screaming and I said to her 'oh, scream if you want to'. She scratched my arms, she keeps on scratching me and pull my arms and I don't mind. You know I just wish I could do it for her".
Women also recognised the explicitly sexual nature of birth. Woman's pain was seen to be a powerful weapon of sexual control in their relationship with their husband. Some women considered that the presence of their husband during labour gave men an understanding of the meaning of women's pain which otherwise they would not have.

Amataga's husband was unable to be present because she was in hospital for pregnancy complications when she went into labour. She would have liked him to be present for this birth, to see how painful it is, so you don't have to do it again. That's why I want him to be there, because he still wants some more, like another boy eh. But I don't want it. So I want him to come and see with my last one, to see how painful it is. So he'll say, 'ok, that's enough'. I think that's the best way to show husbands eh.

Leuma was very unhappy during pregnancy. She had been uninterested in sex and feeling very nauseated. Her relationship with her husband had been strained and she suspected he had been having affairs with other women. His aunty had told him that Leuma would have a hard time because he was 'mucking around' with other women. Leuma said her husband was shocked at the pain she went through in labour. After the baby was born, he was crying and said, "Oh, I can't believe it, so next time I don't want you to have another baby, you might be dying". Her reaction was, "I was happy he was there, 'cause he can see the hard time for the woman eh".

The support which a woman received during her labour did not necessarily work to empower her in her interaction with obstetric practitioners. Her husband and family were less likely to act as advocates for the labouring woman, given Samoan attitudes of deference to those who are recognised as having authority. Some of the women's stories suggested that sometimes the focus of control shifted from the woman to the combination of the doctor
and the woman's husband. Rosa described how her husband reinforced the doctor's instructions not to push, when the baby's head was being born. "So I had to do it, but he's right... So I can listen to him and the doctor too. Not only him, both of them".

When Morina was asked why she did not want pain relief during labour, she replied, "Oh, my husband doesn't want to. He says to me, that injection might affect the baby's health. But I want to, because I can't help the pain".

MEDICAL AND MATERNAL FRAMES OF REFERENCE

The obstetric context within which Samoan women gave birth in Wellington, constrained a woman's jurisdiction over her own labour. Women however sought to regain jurisdiction over those areas where they felt that women derived expertise was superior to medically derived expertise. A number of points of conflicts between doctor-as-expert and woman-as-expert have been demonstrated in this thesis at many points in the pathway from conception to birth, such as the dating of pregnancy. During labour other points of tension have been illustrated such as the way in which women negotiated with midwives and doctors as to when to come into hospital, or rating of pain experienced. In the latter stages of labour, points of conflict existed in terms of the position the woman wished to adopt, vis a vis the position the doctor or midwife wished her to adopt; and whether or not a woman could respond to her natural urge to push.

That birth can be either a time of conflict between a woman and the health professional or one of co-operation is graphically illustrated in Clare's story. An experienced mother she was having her fifth child at Wellington Women's Hospital. Because of her medical condition her labour was closely monitored. This resulted in conflict between what the doctor thought was medically necessary and what Clare felt was the most comfortable
and effective way of giving birth. She contrasted this with her experience for her previous child.

I went to the hospital [previous birth] and then a midwife was there and really helps me. She was really good. But then this doctor (aggrieved tones), he's just a boy (emphasis). He made me sit up straight while I was going to have the baby. I was so tired I thought I wasn't going to make it. I told him 'oh, please let me lie down' and he said, 'no, you have to sit up'. And I told him I had my last baby and I had to lie down and the midwife did it so well... [Clare ignored the doctor's instructions]... So I just lay back, while my husband put the bed down. As soon as he put the bed down, the baby comes out (laughs). I thought I wasn't going to make it. If I hadn't made my own decision to lie down, I don't... Because I told them she is ready to come out, but they just... I think he didn't know anything. He's the doctor, but I'm a woman (emphasis) who had the babies. Five babies and I know what I feel as a woman. They should have listened to the woman. Because I know that mothers know when the baby's ready to come. It's so sad, it's so bad.

Lemapu, who was having her first baby, had a labour which had been heavily characterised by interventions and professional control. However when it came to birthing the baby she ignored the professional's instructions and responded to her own body.

Some other time when the nurse said to push I pushed and I felt the baby going down. But then the nurse told me to hold again. Sometimes when the nurse said to stop, I did not listen, I kept on pushing, because that was what I wanted to do. All that pain and all I wanted and wished for is baby to be alive and healthy, all there. No matter how much pain, I can endure as long as baby is alright.
While Ropeka, who like Carol, was an experienced mother said that,

And after the water break, I was having it every two minutes and that, and she told me to stop, to wait for the doctor. And I said to my husband, 'No, I'm not going to wait for anybody'. So I start pushing inside the waiting room. And when the doctor got there, the head was already out.

This theme in which women asserted at the climax of birth itself the superiority of their expertise over others, was expressed by a number of women, particularly those women who had previous experience of birth. Willingness to assert her superiority did not appear to be related to my classification of the general cultural orientation of the woman in that a similar proportion of women in each category reported challenging the authority of the obstetric experts.

**MANAGEMENT OF NORMAL LABOUR**

Samoan Paradigm

Giving birth at home rather than in hospital was the experience of a substantial proportion of women who gave birth in Samoa in the early 1980's. The nature of labour for those women who had home births was significantly different to women who gave birth in a hospital context, whether in Samoa or New Zealand. While obstetric practice prohibits or restricts oral food or drink in labour, Samoans it is said, "feel that it is important to 'keep up their strength' through the intake of food during labour, and they may become concerned or even disturbed when food is denied them" (Clark 1978, 168). Given that a long labour is only known retrospectively, two of the fa'atosaga interviewed in Wellington considered that a mother should have a good feed at the onset of labour.
Doing labour is considered by Samoan fa'atosaga to be hard work for the mother. Keeping active in early labour is encouraged to help the woman cope with her pains and to hasten the birth. During the latter part of labour and during the birthing of the baby, a number of positions were described by two of the fa'atosaga who were interviewed in Wellington. Others have also identified similar positions (Kinloch 1985; Umaga 1983). Mrs A reported that women she has cared for have given birth lying down, crouching, squatting and sitting. She herself found the sitting position to be the most effective, when she gave birth to her own children. The position adopted, she emphasised, depended on the comfort and wishes of the labouring woman.

During the birth of the baby the fa'atosaga uses the heel of her hand to exert pressure on the perineum and assist the mother to push the baby out. A successful birth is also marked by maintenance of an intact perineum. A tear is a mark of the midwife's failure, not that of the woman giving birth. As Mrs A said, "a tear is caused because the midwife makes the woman push too hard. The key thing is to be patient with the woman and help her in her pain". The fa'atosaga actively works to ensure that the perineum is kept intact as can be seen in this description by Mrs C, one of the fa'atosaga interviewed.

The place where the baby comes out has to be lubricated. You have to keep lubricating so that the passage will be smoother and more slippery. From when the 'hole' is small to when it starts expanding, keep applying oil until the baby's head emerges. Even then you need to apply more oil. Once the baby's head touches your hand or palm you slowly let go of your hold and let the baby come out.
Most midwives considered that a tear was due either to the inexperience of the midwife or to her incompetence. However, Mrs A suggested that size of the baby might play a part.

A baby has to be exceptionally big for a mother to have a tear and then it's a very small one that a few dips in the sea water clears up fine. The turmeric mixed with oil to make a paste is the usual medicine for the mother's wound. Apply this for a couple of days, then the mother can go to the sea and bathe in it. This will soon clear the wound up.

Obstetric Paradigm

Obstetrics differentiates between the way in which a woman contributes to the first and second stages of labour. Early labour is portrayed as one in which the woman plays an essentially passive role. "Since the patient cannot help actively in this stage of labour, she must be given reassurance and encouragement from friendly unhurried attendants" (Llewellyn-Jones 1986, 122). Labour is portrayed as a physiological process. The uterus rather than the woman is considered to do the labouring. While psychological factors are acknowledged by some obstetricians as possibly contributing to progress of labour, there is little evidence that awareness of these factors influences the subsequent management of labour. This is exemplified in one text which considered that "uterine contractions are involuntary". However, it was recognised that "fear may exert a deleterious effect on the quality of uterine contractions and on cervical dilatation" (Williams 1985, 405).

In other words a woman may stop contracting her uterus, because she is afraid. Recognition that fear may slow down labour was not however reflected in the recommended approach for dealing with slow progress in the first stage of labour. Pharmacological or surgical intervention were the only approaches recommended.
Images of a woman as a passive participant in her own labour, are also evident in obstetric descriptions of other stages of labour. This imagery is reflected in these examples from the texts reviewed.

"With the second stage, the patient is moved to the case room....She is prepared and draped for delivery (Reid 1972, 516).

"At this time,...the women and her fetus are formally prepared for delivery (Pritchard 1985, 416).

The patient is now ready for delivery (Beischer and Mackay 1986, 348)

The caption of a photo in one text in which the male partner was assisting the midwife to deliver the baby read, "the patient is witnessing her delivery and is receiving the support and encouragement of her female friends" (Beischer and Mackay 1986, 365). In this photo, the male partner, the father of the baby, displaces the male doctor as the main actor, while the woman herself remains in the supporting role.

"Birth is pathological and it is not; men should intervene and they should not" (Arney 1982, 56) The dilemma which obstetrics faces is how to manage the tension between the normal and the abnormal labour. Many of the obstetric features of normal labour reflect this 'what if' approach. To eat or not to eat in labour is an example of this. All but one obstetric text reviewed advocated regulation of food and fluids in the active stages of labour. (Pritchard 1985, 414; Beischer and Mackay 1986, 347; Llewellyn-Jones 1986, 122; Green 1983, 89). The obstetric rationale for this practice is that during labour a physiological mechanism operates to slow down the absorption of food and fluids. This normal mechanism poses a hazard if during labour an inhalational anaesthetic is used. There is a danger "the patient may then regurgitate and inhale the stomach contents" (Llewellyn-Jones 1986, 122). To avoid such a danger, obstetrics treats all labours as essentially unpredictable and potentially
abnormal. Nourishment of the woman in labour becomes medicalised. Eating, something the woman does, is replaced by intravenous feeding, something which is done to her.

All obstetric texts considered that there were advantages in a woman being ambulatory during early labour and that women should be free to walk about and take up whatever position gives her the greatest comfort. It is argued that "contractions are usually more efficient, the labour shorter and labour augmentation and fetal distress less common in such cases (Beischer and Mackay 1986, 346). Such a view however conflicts with the active obstetric management of labour, which often involves the insertion of an IV line, augmentation of labour, epidural anaesthesia and fetal monitoring.

Standing, squatting, kneeling, sitting, and lying, are all positions in which women in different cultures and in different periods of time have chosen to give birth (Mead and Newton 1967; Oakley 1980; Kitzinger 1979). The two positions which obstetric texts favoured, were modifications of the dorsal position (lying on the back) and the lithotomy (dorsal position with feet in stirrups). The first position was favoured more by texts influenced by British style obstetrics. It was suggested that in New Zealand, the dorsal position was favoured for normal births and the lithotomy position for breech and operative deliveries (Green 1983, 94). The lithotomy position was favoured more by texts influenced by American style obstetrics. In such a position the obstetric focus is on the woman's external reproductive organs. The invisibility of the woman who was about to give birth to the obstetrician, was evident in photos in both the earlier and later American texts of women. In one photo a closeup of a woman's shaved vulva had the caption, "patient draped for delivery. Vertex beginning to crown" (Reid 1972, 514). In another text, before and after photos of the draping of the 'birth field' of a woman in the lithotomy position are shown.
The legs, vulva and perineum of the woman are the only parts visible (Pritchard 1985, 1990).

Despite the great range of positions in which women are known to give birth, only two texts reviewed identified the vertical position as an alternative to more traditional horizontal obstetric positions (Beischer and Mackay 1986; Turnbull and Chamberlain 1989).

Changes are occurring in obstetric practices in New Zealand. A number of doctors and midwives allow and facilitate the birthing woman to adopt a position or positions of their choice. Birth chairs and bean bags have found their way into most if not all obstetric units. They are not however uniformly available to all mothers. Not all obstetric practitioners favour the adoption of alternatives to traditional obstetric positions. One obstetrician was reported as saying, "we don't go in for all-fours or squatting or standing because I think this is all gimmicky stuff... it's silly" (Stirling 1990). It may not have been the doing of birth in those positions which was 'silly', given that womankind has been delivering in those positions for thousands of years, but rather that he as an obstetrician felt 'silly'.

Some 40% of the women interviewed spoke specifically about the position they were in when they gave birth. All of the women said they gave birth in typical obstetric positions, either in lying down or in a semi-recumbent position. Women felt they had little choice in the position in which they gave birth. Though a number of women were familiar with other positions used in Samoa, they were unaware that these were positions they might be able to adopt in doing birth in New Zealand. Many of the women, particularly those whose first experience of birth occurred in New Zealand, were unfamiliar with alternative options.
The high value which Samoan fa'atosaga place on ensuring that the woman's perineum remains intact, contrasts to the common practice of episiotomy and the relative frequency of lacerations in obstetrically managed birth. Though episiotomy is known to be sometimes practised in other cultures, none have routinised it, in the manner of the obstetric paradigm. It is performed by midwives trained in the obstetric tradition, as well as doctors. Next to cutting the umbilical cord, it is the most common obstetric operation done. In many hospitals it has become a routine procedure, particularly on women giving birth for the first-time. The normalisation of this technique can be seen in that in all but one of the texts reviewed, episiotomy was discussed within a chapter on the conduct of normal labour and delivery. Obstetric understanding of the normal nature of episiotomy is illustrated in one text by advocating that "normal delivery in the dorsal or lithotomy position has the advantage that the patient does not need to be moved for the repair of an episiotomy" (Beischer and Mackay 1986, 372).

The imagery which emerges from obstetric explanations of the need to perform an episiotomy is the medical belief in the adverserial relationship of mother and fetus. On the one hand the baby must be stopped from ripping the mother apart and thus a surgical incision is considered preferable to a ragged tear. On the other the baby must be protected from trauma inflicted by the mother. Thus by performing an episiotomy on the mother, the baby "is spared a battering against the perineum as it dilates the vaginal outlet" (Niswander 1981, 191).

Though most obstetric debate has revolved around the question of siting and timing of the incision, concern has been expressed over the last decade as to whether the claims made for performing an episiotomy are scientifically justified. There is considerable doubt that these claims have any scientific basis. A factor contributing to the high rates of episiotomy is likely to be a blurring of the boundary of normal and abnormal birth.
In a Canadian study of low risk nulliparous women, a significant difference was found between the episiotomy rate for specialists (65%) and for general practitioners (38%). The authors concluded that a factor contributing to the higher rate, may be that specialists do not adjust their techniques of management for high risk women to their care of low risk women (Arroll 1988).

Womens' Experiences

A similar homogeneity of obstetric practice to that found in relation to the use of pethidine in labour was shown in the practice of episiotomy in labour. Despite the difference between the two hospitals in terms of obstetric population and technological sophistication, there was no statistical difference in the episiotomy rate between the two hospitals. The rate at Wellington Women's Hospital of 29% being only slightly higher than the 23% at Kenepuru Maternity Hospital. A significant difference was found as has been demonstrated in other studies, between parity and the episiotomy rate. This is shown in Table 8.6.

<table>
<thead>
<tr>
<th></th>
<th>Wellington Women's Hospital</th>
<th>Kenepuru Maternity Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parity</td>
<td>P0</td>
<td>P1+</td>
</tr>
<tr>
<td>Yes</td>
<td>56%</td>
<td>12%</td>
</tr>
<tr>
<td>No</td>
<td>43%</td>
<td>88%</td>
</tr>
</tbody>
</table>

chi-squared=36.11 df=1 p<0.0001 Mantel Haenszel test
An episiotomy was not the only form of perineal trauma a woman sustained at birth. A further 44% of the Samoan women were recorded as having a laceration. Unlike episiotomy however a laceration was not shown to be associated with parity when controlled for by hospital. Kenepuru Maternity Hospital had a slightly higher ratio of lacerations (52%) of women who did not have an episiotomy when compared to the 40% at Wellington Women's Hospital (controlled for caesarean). That a significant proportion of these lacerations were moderate to severe is seen in that 82% of all lacerations were sutured. No difference was shown between the severity rate of lacerations at Wellington Women's Hospital and Kenepuru Maternity Hospital as evidenced by the repair rate.

Given the frequency of perineal trauma from episiotomy or laceration, it is not surprising that among the women interviewed, particularly those having a first baby, 'being cut' and/or 'having stitches' was seen as a normal pattern of birth. As Morina said when asked if she had stitches, "Yea. I can't walk. Every woman has that done eh?". Given that Morina was having her first baby, and had not attended any antenatal classes or read any antenatal literature her attitude was likely to have been largely shaped not only by her own experience, but also by the experiences of other women around her in hospital.

While having 'stitches' was commonly perceived as a normal part of birth, it was also the main physical problem a woman complained of after birth. As Melaia said, "I couldn't sit properly. I could walk, but not normally! If I sat, I had to sit on the edge of the chair. But other than that, I felt good". Saua also had a painful few days. "Oh, the first day I was sore. I couldn't stand up, so they brought my breakfast in my bed and then at lunchtime when I wanted to go to the loo, I just sat there and sat there and I thought oh no, I've got to get up. Took me about twenty minutes, just to walk from where I was to the
lloo". When Lila was asked whether she had any pains after the birth she replied, "Only the pain I had from the stitches".

Having a lot of stitches can also be portrayed as a symbol of the hardship a woman has gone through to produce this baby. Isalei had an episiotomy with her first baby. She said with some satisfaction that she had to have twenty stitches as the baby had such a big head. On the other hand having no stitches at all was also considered praiseworthy. Panesa's response to her doctor's comment "oh, aren't you a clever girl, eight pound fourteen ounces and no stitches. I'm bloomin' clever!". A woman's feeling of pride at having on the one hand a lot of stitches or on the other hand no stitches was noted by Oakley (1981a 106)

MANAGING COMPLICATIONS

The Samoan Way

While obstetrics has been shown to draw primarily on physiological explanations of prolonged labour, Samoan fa'atosaga as with other forms of sickness or pathology, draw on physical, social and supernatural explanations. Displacement of the to'ala is one of the explanations of prolonged labour. The diagnosis which one of the fa'atosaga interviewed gave for the prolonged labour of one of her clients was, "it's because the to'ala is below the baby and thus blocking the passage and the baby's exit. Unless the to'ala is removed out of the way, the passage is blocked".

Samoan fa'atosaga by careful monitoring of the baby's position during pregnancy try to ensure that the baby will present head first at birth. When faced with a breech or other abnormal presentation fa'atosaga demonstrate pride in their ability to deliver the baby. Two of the fa'atosaga interviewed described their experiences in managing a breech delivery. These accounts were similar to that reported by Kinloch (Kinloch 1985a).
If this happens (leg or hand comes first) you have to push the baby back inside and try and turn it over to a more desirable position so that the birth can be directed smoothly with less pain for the woman and maybe the baby. The best alternative positions then for these sort of births would be both legs out first or in most cases the 'muli' (bottom). This position is more favourable than the legs.

The context in which the other fa'atosaga described using external cephalic version during labour to manage a complication illustrates the co-existence of Western and Samoan medicine in Samoa.

I was called to a young girl who was having her first baby. We took her to the local district hospital. The nurse had a look at the mother. They could only see the baby, but they couldn't get it out. When the mother was alone for a while I had a peep and I realised that it was the baby's chin we could see. I then went along and told the doctor, who happened to know that I could handle the situation. He then told me to go ahead and fix the baby. I then pushed the baby's head in and then turn her and then made the mother push on the next labour pain she had. The baby was blue when she came out. Then the nurses worked on her, cleaning out her nose and mouth. Then one nurse picked the baby up by her legs and pat her back and the baby scream out loud.

Even in a breech delivery the Samoan fa'atosaga considered it necessary and possible to ensure there was no trauma to the perineum. The fa'atosaga who were interviewed seemed to consider an intact perineum was as much a part of a normal as a breech delivery. The difference between the Samoan and obstetric approaches is not that perineal damage never occurs, but whether that damage is understood to be evidence of normality or abnormality.
The increase in the rate of caesarean section is an international phenomenon, in both industrialised and developing countries. Considerable differences however exist between countries and between geographical regions in the same country. New Zealand as can be seen from Table 8.7 was in the early 1980's at the lower end of the international caesarean league. An overview of the factors associated with an international increase in caesarean section rates can be found in Appendix G.

Table 8.7
Comparative Caesarean Section Rates per 100 Hospital Deliveries

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>1983</td>
<td>20.3</td>
</tr>
<tr>
<td>Canada</td>
<td>1980</td>
<td>15.9</td>
</tr>
<tr>
<td>Australia</td>
<td>1981</td>
<td>14.0</td>
</tr>
<tr>
<td>Scotland</td>
<td>1982</td>
<td>12.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>1983</td>
<td>12.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>1982</td>
<td>12.4</td>
</tr>
<tr>
<td>England-Wales</td>
<td>1983</td>
<td>10.1</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1983/4</td>
<td>9.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>1983</td>
<td>9.5</td>
</tr>
<tr>
<td>Norway</td>
<td>1983</td>
<td>9.4</td>
</tr>
<tr>
<td>Belgium</td>
<td>1983</td>
<td>8.1</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1983</td>
<td>6.0</td>
</tr>
</tbody>
</table>

(Notzon et al 1987)
Increases in caesarean section rates have accompanied a reconceptualisation of the most common indication for a caesarean section 'dystocia' that is, difficult labour. This reconceptualisation involved a shift in understanding dystocia primarily in terms of structural factors such as cephalo-pelvic disproportion, to an understanding based on a more timetabled approach to labour based on use of labour graphs. Caesarean section increase has also accompanied changes in the conceptualisation of what constitutes fetal distress, as a result of the more common use of continuous electronic fetal monitoring. There is considerable debate as to whether as a result of the increased use of fetal monitors, fetal distress is being recognised more adequately or is being over diagnosed. The increase in caesarean rate also reflects a change in the assessment of the relative risk of a breech delivery over a caesarean section. In contrast to twenty years ago, most breech births today, occur by caesarean section (Bottoms et al 1980, 562). The appropriateness of automatically using caesarean section rather than delivering the baby in the breech position has been questioned by some obstetricians (Bonham 1983).

Obstetrics has attempted to 'normalise' the experience of having a caesarean section. This is seen in the use of the term 'caesarean birth' which softens the surgical nature of the intervention28. Half of the texts reviewed, emphasised the need to take account of the attitudes and feeling of the woman and her partner to delivery by caesarean section, to reduce feelings of alienation. Normalising the experience was the dominant theme. Having a caesarean is promoted as a family affair, by use of epidural anaesthesia and allowing the father to be present.

All the texts reviewed noted the dramatic rise in caesarean section and the controversy and debate that has ensued. Most attributed the rise to the increased safety of the operation and in an era of smaller families the desirability of producing as near a normal child as possible29. Recognition of the
desirability to reduce or control the number of caesareans being done was noted in most of the texts reviewed. While all texts acknowledge that caesarean section involves a higher maternal mortality rate, let alone morbidity rate, than vaginal delivery, this has been 'balanced' by a belief that there was a direct relationship between a reduction in perinatal mortality and the higher rate of caesareans. Comparative studies have thrown such beliefs into question (O'Driscoll and Foley 1983, 1). The dilemma which faces obstetrics is expressed by Williams as "can a significant reduction in cesarean section rate be achieved without increasing perinatal mortality and morbidity?" (Williams 1985, 869). As was discussed earlier in this chapter, obstetrics in creating a conceptual division between the mother and the fetus is also faced with the dilemma of having two patients and thus two allegiances.

Caesarean Section - Samoan Women's Experiences

As can be seen in Table 8.8 Samoan women giving birth at Wellington Women's Hospital were shown to have a higher rate of Caesarean section than other women who gave birth at the Hospital during the same period. The rate of caesarean section is particularly high when compared with the rate for women in a similar period in American Samoa. The overall rate of caesarean section at Wellington Women's Hospital was higher than the national average. Other studies have also shown a significantly higher rate of caesarean section in the principal teaching hospitals in New Zealand, than in all other hospitals (Linton et al, 1988).
Table 8.8
Comparative Caesarean Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samoan women total</td>
<td>1984-85</td>
</tr>
<tr>
<td>Samoan women Wellington Women's Hospital</td>
<td>1984-85</td>
</tr>
<tr>
<td>General Wellington Women's Hospital rate*</td>
<td>1984-85</td>
</tr>
<tr>
<td>New Zealand rate**</td>
<td>1983-84</td>
</tr>
<tr>
<td>American Samoan rate***</td>
<td>1979-80</td>
</tr>
</tbody>
</table>

**SOURCES:**
*Wellington Women's Hospital
** Linton, Borman and Findlay 1988
*** Donnelly, unpublished paper see Appendix H

Increasing maternal age has been shown to be associated with higher rates of caesarean section (Martel 1987; Notzon et al, 1987; Linton et al, 1988). This association was also shown among Samoan women who gave birth at Wellington Women's Hospital and in comparable data series as shown in Table 8.9. There was a significant progressive increase in rate of caesarean section with increasing age among the study population as well as among other groups of women. Thus older women had significantly higher rates of caesarean section than younger women. Although the trend was similar in all the groups, the increase with age was not so steep in other groups of women, when compared with the Wellington Samoan women. This is particularly true when the increase with age of Samoan women in Wellington is compared with that of women in American Samoa.
Table 8.9
Comparative Caesarean Section Rates by Maternal Age

<table>
<thead>
<tr>
<th>Group</th>
<th>Age Group</th>
<th>&lt;19</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellington Samoan*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.5</td>
<td>10.5</td>
<td>15.3</td>
<td>24.5</td>
<td>36.4</td>
</tr>
<tr>
<td>chi-squared=11.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>df=1 p=0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealander*</td>
<td></td>
<td>6.0</td>
<td>8.0</td>
<td>10.6</td>
<td>12.9</td>
<td>21.0</td>
</tr>
<tr>
<td>Maori Women**</td>
<td></td>
<td>7.3</td>
<td>7.8</td>
<td>8.7</td>
<td>9.5</td>
<td>16.6</td>
</tr>
<tr>
<td>Other New Zealand Women**</td>
<td></td>
<td>7.4</td>
<td>9.1</td>
<td>9.5</td>
<td>11.2</td>
<td>13.1</td>
</tr>
<tr>
<td>American Samoan***</td>
<td></td>
<td>3.2</td>
<td>6.4</td>
<td>7.5</td>
<td>5.9</td>
<td>12.2</td>
</tr>
</tbody>
</table>

**SOURCES:**
* Wellington Samoan study
** Linton, Borman and Findlay 1988
*** Donnelly, unpublished paper see Appendix H

Some studies have sought to explain the association between maternal age and caesarean section as being the result of the higher rate of repeat caesareans amongst older women (Hurst and Sumney 1984). Others have not found this association (Linton et al, 1988). This study of Wellington Samoan women also did not find that repeat caesarean section explained the higher rate of caesarean section among older women. When caesarean section rate by age was examined for multipara women, who had not had a previous caesarean, a significant relationship between maternal age and caesarean rate remained (chi-squared=5.11 df=1 p=0.02 Mantel-Haenszel test for trend).
Having a first baby was also shown to be a factor which influenced caesarean section rate. While this has been shown in other studies, (Francome and Huntingford 1980) this relationship was unable to be examined in an earlier study in New Zealand because of inadequate data on parity (Linton et al, 1988). Although parity on its own did not appear to be an influence on caesarean section rate, this changed when parity was controlled for age. As multipara women tended to be older and all but two of the sixty seven primipara women were under thirty, caesarean rate was examined among the under thirty age group. This showed that the caesarean rate for primipara women under thirty at 12% was twice that of multipara women at 6%.

Most studies which have examined the relationship of caesarean section rates with birth weight have focused on low birth weight babies (Notzon et al, 1987; Bottoms et al, 1980). As is shown in Table 8.10, although a high rate of caesarean section was also found among low birth weight babies in the Wellington Samoan study, caesarean rates were highest for heavy weight babies (>4500gms). A significant difference in caesarean section rate was found between women who had low and high birth weight babies. This finding confirms the link noted by others that Pacific Island women in New Zealand have both high rates of caesarean section and a significantly higher proportion of heavy weight babies (>4500gm) than other ethnic groups (Linton et al, 1988). There is no comparable data available for either Western or American Samoan births. But it would seem from the description of one author that having a large baby is not uncommon in Samoa. "The Samoan woman frequently carries and delivers a large fetus of 8-10 pounds. She does so easily through a proportionately large pelvis" (Clark 1978, 166).
Table 8.10
Caesarean Section by Birth Weight

<table>
<thead>
<tr>
<th>Weight (gms)</th>
<th>1980-3000</th>
<th>3030-3500</th>
<th>3510-4000</th>
<th>4020-4500</th>
<th>4540-5660</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28%</td>
<td>8%</td>
<td>15%</td>
<td>20%</td>
<td>37%</td>
</tr>
</tbody>
</table>

p=0.008

The major reasons given as to why women in the Wellington study had a caesarean section were:

1. That the woman had a long labour; 31% of the women had a principal diagnosis of long labour of which 21% were for prolonged first stage.

2. Having a previous caesarean section; 17% of women had a principal diagnosis of previous caesarean section. Further this diagnosis made up 37% of the additional reasons given for the caesarean. There was a high repeat rate. Nearly half of the caesareans performed (18/42) being repeat caesareans. Further, of the women who had a previous caesarean, a very high proportion (82% - 18/22) had a caesarean for this birth.

3. The position of the baby; a further 17% of women had a principal diagnosis of fetal malposition or malpresentation. This diagnosis included breech presentations.

These findings confirm the findings of other studies and raise a number of different questions. It is probable that a similarly high rate of caesarean section would be found in Auckland, given earlier findings that the caesarean section rates (adjusted for
age) were found to be significantly higher in Auckland than most other hospital board areas including Wellington. Further the overall rate of caesarean section in New Zealand is considered to be continuing to increase rather than decrease. This has serious implications for the health of Samoan women who are likely to continue to have high rates of operative intervention in labour, with a subsequent increase in the risk of maternal morbidity. For further discussion on the implications of the caesarean section rate among Samoan women in Wellington see Appendix H.

ENDING LABOUR

Samoan Paradigm

The final stage of labour marks both endings and beginnings. The expulsion of the placenta marks the end of the pregnant state and the beginning of a woman's return to her normal non-pregnant state. Cutting the cord represents the ending of the feto/maternal relationship and the beginning of the maternal-child relationship.

Interviews with Samoan fa'atosaga in Wellington suggested that Samoan practices related to the expulsion of the 'fanua' (placenta or afterbirth) were more characteristic of an interventionist rather than a laissez-faire approach. A similar conclusion was made by Kinloch who notes that in her experience, "the expulsion of the placenta is usually manually assisted" (Kinloch 1985a, 208). Both the accounts, that which Kinloch reports and those which fa'atosaga in Wellington gave, demonstrate considerable individual variation in practices related to the expulsion of the 'fanua'. Fa'atosaga in Wellington differed as to whether they routinely massaged the abdomen after the baby was born or only if there was a problem and whether manual removal of the placenta was ever performed. They also
varied as to what they felt was the normal range of time for delivery of the fanua - from five minutes to half an hour.

The least interventionist approach was described by Mrs A who said that if the fanua did not come out by itself, then she just gently massaged the lower part of the stomach till it came out and gave the mother cold water to drink. She would never manually intervene to remove the fanua.

In contrast Mrs C described her routine practice as applying pressure to the uterus while at the same time applying traction to the cord. "When the baby has come out, I place one hand on the part of the belly under the navel and with the other you try to draw out the fanua. Stop the woman pushing and make sure you try and block the passage so that the to'ala won't fall out but just the fanua".

Both the fa'atosaga spoke of being called to treat women when there was a delay in the expulsion of the placenta. Both considered the situation to be a serious matter. In one case Mrs C was called by the family of a young woman who had given birth five hours previously. "She was not looking well when I got there. I just gently rub round the lower area of the stomach, then push the to'ala up and that makes it release the placenta and it came out". In the other case Mrs A was also called after a delay of some hours. "She gave birth at 11pm and by 2am the fanua still hadn't come out. So I just reached inside her and pulled out the fanua".

Samoans show an attitude of respect towards the fanua and the umbilical cord. (The word fanua means both earth and placenta, both symbolise the nurturing of life). Individual fa'atosaga demonstrate a variety of practices in terms of the timing of cutting the cord. Some cutting the cord before and some after the expulsion of the fanua (Kinloch 1985, 209). Two of the fa'atosaga interviewed in Wellington, considered that it was inadvisable to
cut the 'pute' (cord) before the fanua is delivered particularly in cases where the baby was slow to breathe. One fa'atosaga who had attended the Traditional Birth Attendant course described in an earlier chapter said,

I don't normally cut the pute immediately after birth. I wait until the fanua has fallen out. From the classes at the hospital, we were told to cut it as soon as the baby comes out. I'm not used to that though, so I just keep to my Samoan way. What if the baby is born dead? If you cut the pute right there and then, you won't be able to save it. Whereas if you wait for the fanua you have time to scheme up something that could save it. I had a baby like this. It was born dead and I tried bringing it back to life. I put it in a basin of cold water and then hot water. It lived.

Another older fa'atosaga described a similar cold and hot water treatment of a baby with breathing difficulties. She went on to say, "If this fails then put the fanua on a hard flat surface and slap hard. This usually brings forth a scream (baby). Then hold onto the fanua end of the cord, squeeze or milk it towards the baby. This is milking life to the baby from the fanua".

The fanua is also treated with respect in the manner of its disposal. Samoan people believe that if the fanua is not disposed of properly, harm will come to the baby (Umaga 1983). Changes have occurred in the disposal methods in Samoa. Kinloch reports that in old times a hole was dug, a fire was lit in the hole and the placenta was burnt before being buried. Some fa'atosaga are said to still practice a version of this method in that the fanua is carefully wrapped and then buried in the earth. However Kinloch suggests that contemporary practice in Samoa is to wrap the fanua and carefully throw into the sea (Kinloch 1985, 209; Umaga 1983, 10). This practice of wrapping before burying or throwing into the sea was also spoken of by one of the fa'atosaga interviewed. She stressed that if the fanua was buried it should be deep in the ground, so that the baby will not grow up easily
frightened or timid. This fa'atosaga went on to say that though the old practices are maintained in Samoa for women who give birth at home, this is not the case for women who give birth in hospital in Samoa. This made her wonder if that is the reason why children in Samoa today have so much more sickness.

Obstetric Paradigm

Expulsion Of The Placenta

The birth of the baby and expulsion of the placenta are both seen as times of potential crisis. A baby may not breath after birth and need urgent resuscitation. A mother may unexpectedly haemorrhage after a normal vaginal delivery. Uncontrolled haemorrhage can result in the death of the mother. Obstetric practices related to the expulsion of the placenta and cutting of the umbilical cord tend to be also characterised by an interventionist approach. A crisis management approach to birth, favours reducing the risk by reducing the time in which the risk might occur.

Like the accounts of Samoan fa'atosaga, there was a range of opinion in the obstetric texts reviewed, as to when was an considered an opportune time to cut the cord. Though most texts favoured cutting the cord earlier rather than later, some recognised that timing should be influenced by the condition of the baby. There was agreement however among text book writers that if the baby showed signs of distress or was unreactive, then the cord should be cut immediately, 'in order to commence resuscitation (Reid, Ryan and Benirschke 1972, 520; Turnbull and Chamberlain 1989, 721). This contrasts to the logic and practice of the Samoan fa'atosaga reported above who considered that cutting the cord would decrease the chance of saving the baby. Obstetricians who favour a delay in cutting the cord do so because they consider it enables additional transfer of placental blood to the baby (Williams 1985, 342; Llewellyn-Jones 1986,
125). This practice is also favoured by Samoan fa'atosaga. Their rationale is similar to that given by obstetricians. Kinloch reports that "after the baby is delivered the 'life' (ola) of the baby is still in the placenta, so the blood (toto) or 'life' is massaged down the cord into the navel (pute)" (Kinloch 1985, 208).

Variation also exists in the obstetric texts reviewed in relation to the timing and degree of manual assistance in the expulsion of the placenta which should be given. These could be termed the 'hands on' and the 'hands off' the placenta approaches. Those that advocate the former consider that, "immediately after delivery, the fundus (body of the uterus) is gently massaged to speed up the first contraction" (Niswander 1981, 188). A 'hands off' approach advocates no massage of the fundus, before separation of the placenta occurs (Williams 1985, 342; Green 1983, 96). All texts however shared a common belief in the benefits of a pharmacologically as opposed to a physiologically managed expulsion of the placenta.

Retention of the placenta and its subsequent manual removal under anaesthesia is said to occur in 2-5% of obstetrically managed births (Beischer and Mackay 1986, 502). Sometimes as an iatrogenic effect of pharmacological management techniques. Variation exists among the writers of obstetric texts as to how long an obstetrician should wait before deciding to carry out a manual removal of the placenta. The length of time would seem to depend as much on the willingness of the obstetric practitioners to wait as on the state of health of the mother. Williams states, "a question to which there is still no definite answer concerns the length of time that should elapse in the absence of bleeding before the placenta is manually removed" (Williams 1985, 343).

In contrast to the practices of Samoan culture and many of the world's cultures, neither the placenta nor the cord are treated with special respect by the obstetric paradigm. Once it has been established that the placenta has been expelled intact and that
no part remains inside the woman's uterus, the placenta will be treated as waste. After birth, medical concern with the umbilical cord is confined to ensuring its clean separation from the baby. Once it has separated it also is disposed of as waste.

Samoan Women

The Fanua and the Cord

Samoan women interviewed spoke about their understandings of the proper disposal of the fanua in Samoa. Two practices were traditionally common in Samoa, burial or disposal in the sea. Women interviewed spoke of the method which in their experience or the reported experiences of others was commonly used. A number of women spoke of the burial of the fanua in the ground, while others described burial at sea. Common to both methods was the theme that the fanua must be 'properly' buried. One woman recalled that Samoans believe that if the fanua was buried in the ground, the boy would be a planter and if they took it down to the sea he would be a fisherman. Another version of this was that if the fanua was not properly buried the child would not be able to take heights or would get seasick.

Around about the time that the study of Wellington Samoan women was commenced, the then Wellington Hospital Board had instituted a policy which enabled women to take their placenta home for private disposal. This policy was primarily developed to take account of the cultural beliefs of Maori regarding disposal of the placenta, but the policy was also designed to cater for the needs of other cultural groups with similar beliefs such as Samoan women. However, none of the Samoan women interviewed took the fanua home after birth or were aware of any other women taking the fanua home to bury in New Zealand. That Samoan women were unaware that such a practice was possible in Wellington, suggests that the policy was being passively rather than actively implemented. Only two of the Samoan women interviewed in
Wellington were explicitly offered the fanua to take home. Both of these were births at Wellington Women's Hospital. In both cases the women rejected the offer for similar reasons. Rosa said that the midwife showed them the placenta and "then she asked whether we wanted to take the fanua home. We refused. Where would we take it? There's no safe place where we can bury it. The dog will eat it".

Alisa and her partner had a similar reaction when the midwife offered them the fanua to take home. "We wanted it, but we had nowhere to put it. 'cause he said he wanted to bury it in the garden, but this isn't our house, so we couldn't". On the other hand two other women who had not been aware of the option said they would like to have taken the fanua home to bury if they had been aware such a thing was possible. Moliga who had her first baby would have liked to carry out the old tradition if she had known it was possible. While Tasia said that she would have liked to have taken the fanua home for burial for both of her babies, but was too embarrassed to ask.

The fanua was not only an organ which women knew very little about, but it was also an organ women felt to be unpleasant. About half of the women interviewed said they had seen the doctor examining the fanua. Their reaction was similar to Saua's. "I only saw him playing around with it. Oh, yuck. He was covered with blood and all I saw was this bag, bit like those sheep". The sight of the fanua made Saua think of biology lessons at school. When asked if she knew what happened to it afterwards, she said, "no, he just put it in a little silver tray and he wheeled it away". This alienation of the woman from her placenta is reflected in the fact that inspection of the placenta is something which is done away from the woman, who is not involved in the process.

On the other hand, being involved in examining the fanua can be an empowering process for the woman. Ropeka was asked by the
midwife if she would like to see the placenta. Though surprised as this was her third birth and the first-time such an offer was made she agreed. While she thought the fanua was "a yucky looking thing", Ropeka was also pleased to have been shown it this time as "it's part of my body, used to be eh. So I did enjoy it eh. Now I know what it looked like and when I'm going to have another baby, now I know how she sits in my stomach and that bag. Understand what's going on inside".

Women's practices in relation to the disposal of the pute (umbilical cord) are in marked contrast to those discussed regarding the fanua. All bar one of the thirty five women with whom this was discussed, kept the pute (cord). The fifteen women with whom the topic was not discussed differed in certain ways from the respondents. The majority of the women who did not discuss disposal of the cord (86%), were interviewed only once. Five of these women were unable to be contacted after birth and were thus interviewed only during pregnancy. Differences also existed in the pattern of distribution of cultural orientation between respondent and non responden groups as can be seen in Table 8. While almost all women who were classified as biculturally oriented were included among the respondents, only a little more than half of women classified as less Samoan oriented were located in this group. There was also a slightly higher proportion of experienced mothers (32%) in comparison to first time mothers (25%) in the non response group.
Table 8.11
Cord Disposal

<table>
<thead>
<tr>
<th>Cultural Orientation of Respondent and Non Respondent Groups</th>
<th>&gt;Samoan</th>
<th>&lt;Samoan</th>
<th>Bicultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>69%</td>
<td>55%</td>
<td>93%</td>
</tr>
<tr>
<td></td>
<td>(11)</td>
<td>(11)</td>
<td>(13)</td>
</tr>
<tr>
<td>Non respondents</td>
<td>31%</td>
<td>45%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>(9)</td>
<td>(1)</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>20</td>
<td>14</td>
</tr>
</tbody>
</table>

Some women having a first baby, such as Melaia, kept the cord because she was told to by her sister. "I chucked it away in the rubbish the night it fell off. Then my sister said to me, 'where's her cord?' And I told her I put it in the rubbish. She said, 'what did you put it in the rubbish for, you're supposed to treasure it. So I got it out of the rubbish and put it in the jar".

While most women found it hard to explain why they kept the cord, two themes emerged from the stories of the ten women who did give a reason for keeping the cord. The first was that failure to dispose properly of the cord would have a negative impact on the child's development. A number of women referred to the belief that if the cord is just thrown away like 'rubbish, the child will grow up to be an 'ula vale' hard case. The other theme which emerged was that if the cord was properly disposed, of this would be to the child's benefit. A number of women spoke of burying the pute as the appropriate method of disposal. A variety of practices were spoken of by the women. The favoured place for burial was beside the church. Some women sent their babies cords back to Samoa for burial, some cords were buried near the church.
in New Zealand, others spoke of cords buried in the back garden, or in flower pots, or thrown into the sea. While some women just put the cords in a bag to keep.

Samoan women in Wellington were concerned about the proper disposal of the 'pute' and almost all ensured it was kept safely once it had separated. Further women expressed distress when the 'pute' was lost or accidentally disposed of. On the other hand, women expressed less concern about disposal of the fanua, neither did they seek to dispose of it according to Samoan custom. Part of the explanation may lie in the fact that Samoan practices related to the disposal of the fanua are part of a birth system to which Samoans in New Zealand do not have access. Traditionally it would seem that others, usually the fa'atosaga, would manage and supervise the correct disposal of the fanua. In contrast, the separation and the disposal of the pute form part of the responsibilities of early parenthood. In contrast to birth in hospital, women are able to exercise greater control over what happens to the pute.

THE EARLY PERIOD AFTER BIRTH

Samoan Approach

Samoans understand the period after birth, like pregnancy, to be a time of vulnerability for a woman. Restoring the strength of the mother, assisting her internal reproductive organs return to normal and ensuring successful bonding between her and her baby are central themes in the traditional care of the failele (newly delivered woman).

Special food is prepared for the failele. This takes the form of vaisalo, young coconut meat boiled up with some sago and coconut juice, and su'afai, bananas boiled with sago and coconut milk. This is the first food presented to the new mother (Umaga 1983, 10).
An important part of the postnatal treatment of the failele, is said to be to massage the to'ala and uterus into position. As was discussed in a previous chapter, Samoans believe that pregnancy displaces the to'ala. It must be massaged back into place otherwise the woman will suffer from back pain and prolapse of her reproductive organs. After the massage, an abdominal binder (fusi) is tied around the woman's abdomen. This is usually left in place for about a month. Binding is said to prevent the to'ala and/or the uterus 'falling down' causing lower back pain and leg pain on walking (Kinloch 1985, 210). The practice of massage and binding is also reported in other cultures (Fuller and Jordan 1981).

The postbirth period is also marked by a freeing of the woman, particularly for a first baby, from her normal household and child care responsibilities. "She didn't have to wash the baby, or the clothes, or the nappies. Just rest and rest. It's a lovely time". This period is said to vary from one month for a first child, to the time the cord falls off for subsequent births (Umaga 1983, 11). Babies sleep with their mothers for the first year of their life. The concept of a baby being placed to sleep in a room on its own, is alien to the Samoan mother.

Obstetric Paradigm

The obstetric paradigm also considers that the period from birth to about six weeks after birth is a special period in which the woman is still vulnerable. This is known as the puerperium and the woman is described as a puerperal woman that is a failele. The woman is thought to be vulnerable to secondary haemorrhage and infection, and to be experiencing substantive physiological and psychological adaptations.

The primary hazard of the hours after birth as has been discussed above is haemorrhage. This requires careful observation of the mother and frequent examination of the state of her uterus.
Massage is not used unless there is evidence of abnormality, when it will be used to stimulate a contraction to control bleeding. The puerperal woman is considered to be vulnerable to infection. Though puerperal fever with its high maternal mortality rate is in most obstetric environments a thing of the past, the hospital environment remains a potential source of infection and thus a hazard to the woman and her baby. The puerperal woman is warned of the need to take special precautions in the performance of normal toileting and hygiene while in hospital.

The new mother is not served special food or drink after birth. The first refreshments are likely to be 'tea and biscuits'. Frequently the first hours of the puerperium are marked by the termination of the pharmacologically managed labour, for example the effects of an epidural or pethidine may be wearing off, oxytocic drugs may be administered, or an intravenous infusion may be removed. Later aspects of the puerperium may be marked by the use of analgesics to assist with the 'after pains' associated with involution of the uterus.

Physiological adaptation: The puerperium is marked by a return of the uterus to its normal non-pregnant size and position. The use of an abdominal binder after birth was once thought by obstetrics to help in the involution of the uterus and restoration of a woman's figure but is now no longer recommended (Turnbull and Chamberlain 1989, 899). Instead, early mobility and abdominal exercises to strengthen the abdominal and pelvic muscles are advocated. The obstetric binder performed a similar function to the Samoan fusi.

Psychological Adaptation

Post-partum 'blues' or transient depression is considered to be a 'normal' part of the first postpartum week. Some obstetric texts advocated that "pregnant women should be forewarned about the mild depression and tearfulness which afflicts 50% of mothers
during the first week, and reassured that it is likely to last only a few days at most. "A wide range of factors are considered to be influential in both the transitory and more prolonged depressive episodes. These include,

the emotional swing away from the elation immediately following delivery; the discomforts of the early puerperium; fatigue from lack of sleep during labour and postpartum in most hospital settings; the mother's anxiety over her ability to establish breastfeeding in the early days and her capability for caring for her infant in general after leaving hospital; and fears that she has become permanently less attractive to her husband (Turnbull and Chamberlain 1989, 899).

Nowhere in this list, is there a perception that the technological nature of the birth itself, may be a factor in the genesis of postpartum depression (Oakley 1980).

Womens' Feelings After Birth

Postnatal 'blues'

While postnatal depression is said not to be found in preliterate societies, its incidence in industrialised societies is said to affect 10-25% of mothers (Oakley 1977, 31). Medical explanations of postnatal depression tend to focus on psychological or physiological problems with the woman herself. Another way of understanding postnatal depression is to do as Oakley did and examine the social context in which woman gave birth and the nature of the birth and early postbirth experience.

Oakley considered that the term postnatal depression described a number of emotional states which ranged from the transient postnatal 'blues' to the more serious state of depression. Postnatal 'blues' is defined as, "a condition of emotional lability characterized by crying and occurring during hospitalization" (Oakley 1980, 114).
In marked contrast to Oakley's findings, feeling unhappy or getting the 'blues' in the early days after birth was not a theme which was evident in the stories of the Samoan women. It was never volunteered in response to a general question about how a woman felt after birth. Further, when women were specifically asked, whether they had felt weepy or unhappy at any stage in the first week after birth, the majority of women found such a question so strange that it fell into the category of what I called 'non-questions'. For these Samoan women, it appeared to be inconceivable that a woman would feel unhappy after the birth of her baby unless there was something wrong with the baby.

As was noted in an earlier chapter more Samoan women spoke of feelings of deep unhappiness during pregnancy, often associated with problems in their personal relationships, than after birth. For some such as Lemapu, the birth of the baby brought a welcome end to the severe depression she had experienced during pregnancy and an improvement in her relationship with her partner.

Features of Hospitalisation

Although Samoan women did not appear to have episodes of 'uncontrolled weeping' or unhappiness of a non-specific nature, some women did report feelings of unhappiness while in hospital after the birth. These feelings, such as those expressed by some of the women interviewed by Oakley related to certain features of hospitalisation. A common theme which women expressed was that of social isolation.

Puni who was classified as more Samoan oriented said, "I was unhappy because I was the only (Samoan) patient at the time, so I didn't have someone to talk to. Especially as I didn't know anyone at the hospital, so I felt lonely".

Similarly Saua who was classified as less Samoan oriented also felt lonely. "I felt like that (unhappy), when my sister's going
home. Because in there, it gets really lonely. On my first two days, there was only five up there and nobody will talk to you. Everybody with their own little thing and then they just started coming in from Wellington Women's Hospital and there was some girls up there that I knew. After that, it got really good".

Tala, who was in hospital at New Year said, "I'm very sad, because I'm in the hospital by myself. But after that I'm enjoying myself with the other ladies". I classified Tala as less Samoan oriented.

The postbirth period is also characterised by differences between medical and maternal frames of reference. While the potential for conflict has been shown to exist at all parts of the pathway to birth, conflict between Samoan women and obstetric practitioners seemed more overt in the postbirth period. This conflict emerged when hospital staff imposed rules which sought to constrain a woman's relationship with her baby or with her family and friends.

Social Support From Family and Friends

An important element of Samoan healing of the sick is the physical presence of members of a person's social support group. One area where there was not only potential but frequently real conflict between Samoan mothers and midwives was the question of visitors. Samoan mothers have a lot of visitors, frequently more than the maximum number approved by the hospital staff at any one time. Not only are there a lot of visitors, but they have different attitudes as to how a newborn baby and failele should be treated. As one Samoan mother who was also a Samoan trained nurse explained,
"they just overcrowded the room and holding the baby, kissing and that's the Samoan way eh, because they love to hug the baby, but in here (hospital), they don't accept it. They try to stop that. So when a nurse come in and tell them to stop holding the baby and try to give more time for the mother to rest, they got angry with her".

Alofa's mother laughingly told of how, "we have a very big family and whenever they came to visit, they created a scene. They attracted a lot of attention and commotion". She went on to say that because Alofa had so many visitors, the nurses were always trying to chase them out. The nurses would 'tell the visitors off' when they would find them nursing the baby and tell them to put the baby down as it's too small to be nursed.

In the postbirth period, it is nurses rather than doctors, who have control over a woman's physical and social environment. In informal interviews nurses expressed the belief that many visitors were not conducive to the well being of either the woman or her baby or in the interests of other patients. While a flexible visiting policy operated for the parents, children and spouse of a mother, (that is, the immediate nuclear family,) there was less sympathy for the extension of such a policy to other persons.

Continuity of Contact With Their Baby

The most disliked hospital practice involved the separation of the mother from her baby at night. This practice primarily occurred in the four bed units at Wellington Women's Hospital.

Mothers said that the practice of taking babies to the nursery at night was justified by the nurses as being either in the
woman's interest, or in the interests of other women. Women who had Caesarean sections were also likely to be separated from the baby in their own interest. Lagi recalled the concern she felt the first night after birth by caesarean section, when the baby was taken to the nursery to sleep to give Lagi a rest. "The first night when they sent him to the nursery, I can't sleep well, because I heard babies crying and I thought it maybe my baby crying".

Rosa said, "I really miss him when they come and take him out and I could hardly sleep. Sometimes I wake up during the night and I walk down to see him. Other mothers feel the same. It's better if the babies were left with the mother".

The feeling of loss which women expressed when their baby was taken away from them is illustrated by Morina's story. "One night I was sleeping with A. and he started waking up. And the nurse came to our room and said to me, better for me to have a rest and she would take A. with her for five minutes. Then I lay down but I look at my watch. Five minutes, ten minutes, fifteen minutes, but A. is not here with me and I cried. I like him to be with me all the time".

Women who were in four bed units at Wellington Women's Hospital were more likely to be separated from their baby at night in the interests of other mothers. Women were also more vulnerable to accusations of being 'inconsiderate' to other mothers, if they wanted their baby with them at night. These themes are illustrated in this quote from an interview with Leuma.

"Because I ask the nurse I don't want to take him to the nursery and they say it's not fair, because other new patients come in and they want to sleep. So might be my baby woke up and cry. And they said if I want to sleep with him, they take me to the television room or rest room, but I thought, 'no, I don't want to sleep in those rooms'". Leuma felt that this policy
discriminated against the mother who wanted to have her baby with her and who through no choice of her own was in a four bed unit. She felt that allocation to a four bed unit should be made on the basis of a woman's preference for having the baby with her and that those women who did not want their baby with them, should be the ones to move, rather than the reverse.

The absence of clinical symptoms of postnatal depression either in the form of postnatal 'blues' or more serious depression among the Samoan women interviewed, more closely resembles birth in preliterate societies than birth in an obstetric context. Although Samoan women had relatively high levels of obstetric intervention this did not appear as has been shown in other studies to be related to symptoms of postnatal depression syndrome. (Oakley 1980). Though some Samoan women expressed feelings of unhappiness at some points in their stay in hospital these feelings seemed to be incident specific, rather than general feelings of unhappiness. Caring for a baby was not a new experience for most of the Samoan women. Women did not express anxiety about caring for a baby. Most felt competent to do the job. Feelings of competence were likely to be reinforced by the high levels of social support which Samoan women received after birth from family and friends. Such support I suggest can empower the woman and counteract feelings of negative self image which a 'bad' birth might bring.

The postbirth period was characterised by more reports of overt and covert conflict between Samoan women and health practitioners mostly hospital midwives, than during birth itself. This may reflect the fact that women felt less vulnerable than during labour and thus less under the control of the obstetrician and the hospital.
CONCLUSIONS

Changes have occurred in the medical management of birth to take account of the criticisms of women and their partners and these were evident in the orientation of the earlier in comparison to the later obstetric texts reviewed (Reid et al, 1972; Turnbull and Chamberlain 1989;). Concessions to consumer demand for more 'natural' birth, that is a less clinical birth environment include enabling a woman a greater choice of birth position, encouraging the presence of key support persons for the woman, and scrapping of such routine preparations as enemas and perineal shaves. Nevertheless control of the nature of labour remains strongly with the obstetric practitioner rather than the labouring woman. Doing birth the obstetric way is characterised by routine technological intervention, such as routine fetal monitoring of all women in labour (intermittently or continuously); pharmacological management of pain by analgesics and epidural anaesthesia; augmentation of labour by early rupture of the membranes; routine use of oxytocic drugs in the third stage of labour; and reconceptualisation of conditions requiring induction (prolonged pregnancy) and caesarean section (dystocia).

The medically constructed nature of birth in New Zealand was demonstrated in this chapter by the stories of Samoan women — both in the stories told by the women themselves (narratives) and in the stories about the women (hospital records).

For a substantial proportion of the Samoan women in the Wellington study, labour was a medicalised experience. Some of the features of this medicalisation were that 55% of women had their membranes artificially ruptured during labour; 64% of the women had some form of pharmacological management of pain; 23% of women who gave birth at Wellington Women's Hospital had an epidural; half of the first-time mothers giving birth at both hospitals had an episiotomy; 40% of women giving birth at Wellington Women's Hospital and 52% of women at Kenepuru
Maternity Hospital had a birth laceration of which 82% required suturing; while 26% of the women who gave birth at Wellington Women's Hospital had a caesarean section. The homogeneity of obstetric practices in Wellington was reflected in the similar experiences women had at both hospitals in terms of basic technological intervention in labour. This finding suggests that little difference exists between the basic conduct of birth by general practitioners and obstetric specialists and generally supports the decision made in this thesis to incorporate them in the use of the term obstetric practitioner.

The imbalance in the power relationship between obstetric practitioners and Samoan women was most clearly evident in the way in which Samoan women did birth. This was reflected in the fact that Samoan women had more limited access to the existing options available to them, such as using the family room at Wellington Women's Hospital during labour. But it was also reflected in the way in which professionals framed the pain management choices available to women as was shown in Panesa's story.

As was evident from the narratives of the women, maintaining their inner strength, demonstrating bravery and self control in the face of pain remained important to the women. Samoan women and obstetric practitioners drew from different understandings of the meaning of pain. The preference of Samoan women to manage their own pain, to demonstrate their inner strength, was differently perceived by the health professionals involved.

This illustrates what happens when providers control what consumers receive. It raises the question, what happens if consumers, be they Samoan or other women, are empowered to influence the process. And further, it may be asked, what can be done to redress the unequal distribution of power away from the provider to the health consumer.
That Samoan women had pharmacologically managed births which differed little from that of other Wellington women illustrates the theme - that whoever controls the labour process controls the character of that process. In Samoa, birth at home is largely socially managed and pain is socially controlled. This was shown to be also reflected in the way women did birth in an obstetric context in Samoa in which Samoan cultural beliefs continued to be dominant. In New Zealand, Samoan women do birth without the mediation of Samoan culture. Differences for Samoan women between birth in New Zealand and birth in Samoa were also demonstrated when the caesarean section rates for Samoan women were compared. Samoan women in New Zealand not only had higher rates of caesarean section than women in American Samoa, but higher rates than other women in New Zealand. As Samoan women did not choose to have a caesarean section the higher rates need to be understood as reflecting differences in the bases of obstetric decision making.

In seeking to explain variation in the way in which Samoan women did labour and birth it was found that the classificatory system of cultural orientation I had constructed did not adequately account for difference among the women. Differences did exist between the labour and birth experiences of first-time and experienced mothers in that the former experienced higher levels of technology. However both experienced and first-time mothers expressed feelings of great vulnerability during birth. Giving birth was an intense emotional experience for women. For some women this was expressed as a fear for their lives.

Despite the imbalance of power which existed between Samoan women and obstetric practitioners and for many, the medically constructed nature of their experience, Samoan women sought at many points during labour to retain jurisdiction over their own labour. This was seen in the narratives, in the way that women tried to ensure that they were indeed in labour before coming into hospital. It was illustrated in the way in which Melaia drew
from the knowledge of the experts to reinterpret that knowledge in the light of her own experience, to control what was happening to her body following the induction of labour.

Philosophies of intervention and of laissez-faire were shown to be characteristic of both the obstetric and the Samoan paradigms in relation to the augmentation of labour, the management of complications in labour, and expulsion of the placenta. Deconstruction of both Samoan and obstetric understandings and practices also revealed that variation exists in the individual practices of both Samoan fofo and Western obstetric practitioners.

Planned preparation for childbirth was not characteristic of women giving birth for the first-time nor of the labours of those women who had given birth before. This has some negative implications for inexperienced women giving birth in New Zealand. Migration changed the social context in which women did birth. The social relationships within which a woman did birth in Samoa were mostly not accessible to women. Migrant women did birth within a different set of social relationships, which included for the first-time, a woman's male partner.

Wellington Women's Hospital featured prominently as a birth location for Samoan women, whether they lived in Wellington City or in Porirua. It was shown to play a more significant role as a location than would have been expected, given the geographic concentration of Samoan women in the Porirua basin. Therefore the needs and views of Samoan women should be sought and taken into account in the provision of birthing services at Wellington Women's Hospital. This is particularly relevant in view of the changes which have been occurring in the planning for the future provision of health services in Wellington.

The clinical management of birth alienates a woman from her placenta. For most women the placenta was a largely unknown and
alien organ. The change in the hospital policy to allow women to take the placenta if they wished was relatively new. It would seem however that in the mid 1980's this policy was not actively made known to Samoan women giving birth in Wellington, who continued to believe that institutional control of the placenta had displaced private rights of disposal. Failure to adequately inform Samoan women of their rights as health consumers ensured that control of birth remained in the hands of obstetric practitioners.

This acceptance of institutional methods of disposal to that traditionally practised may also reflect the reality of the lives of many migrant Samoans. Few Samoan own their own homes. As new migrants it is harder to have their own ground to stand on. Burial in the backyard of a State house unit in Porirua does not have the same meaning as burial in the home village in Samoa. As Rosa said there was 'no safe place'. As others have shown the social structure and social relationships of the church for the migrant Samoan community has replaced the village (Pitt and Macpherson 1974). This would also seem to be reflected in that burying the pute near the church in New Zealand was considered to be an acceptable practice.
1. The proportion of women delivering in National Hospital as opposed to other hospitals in Samoa remained around the 85% level during the decade up to 1981. Although one of the obstetricians with whom this was discussed, felt, from his clinical observations, that there had been an increase in women coming to National Hospital to deliver, this could not be confirmed. The annual report for 1981 notes that women came from all over Samoa to deliver. While many of the women were likely to have been referred to National Hospital because of complications of pregnancy or labour, an unidentified number chose to come to Apia to have their baby. A number of reasons included an increasing belief by women and their families in the greater safety of births conducted within a higher technology obstetric environment than is available in the districts. A more Samoan reason given was that women used birth as an 'event' to visit aiga in Apia.

2. Discussions with health personnel in March 1983, suggested a range of between 40-60% of births occurred at home at this time. Figures from one health centre (Fusi) in rural Upolu revealed a 60-40% split between home and health centre deliveries in 1982. In contrast at Lauli'i a village near Apia, most births occurred in hospital. Only one of a dozen women present at a well baby clinic I attended had her baby at home with a TBA.

3. Kinloch 1985, 207 notes the reversal of the trend for hospital deliveries which characterised the decade up to 1978 and concludes that the reason for this was a recognition by the western-trained doctors that their facilities could not cope with the demand. It was within this context that the training programme for TBA's was introduced. The medical response however was probably characterised by a good deal of ambivalence. The senior nursing staff and specialist obstetricians with whom I had discussions in 1983, were uneasy about programmes which encouraged the perpetuation of an indigenous midwifery system. It is possible also that women may have made an active choice not to deliver in hospitals. While this may have been because women considered the midwifery services of western-trained midwives to be unsatisfactory in comparison with that of indigenous midwives, a financial consideration may also have played a part. With the exception of the National hospital, provision of health facilities in the rest of Samoa is the joint responsibility of local and central authorities. Hospital delivery involves a fee, the level of which in 1983 was set by the local women's committee responsible for the health facility. The fee for
hospitals and centres in Upolu, ranged from 5-20 Tala a day. Members of the women's committee payed a smaller amount of around $2 a day.

4. The district nurse based at the Fusi health centre reported that during 1982, of the seven births she assisted at, three were in the health centre and the remaining births occurred in the woman's home.

5. Personal observations during a visit to Apia in 1981.

6. Personal communication with hospital midwives, March 1983


8. Such social interventions used to describe birthing among Maya women in the Yucatan are described by Jordan as 'birth talk' Jordan 1978

9. The partograph is based on the work of Friedman and that of other researchers. In studies carried out in the 1950's on changes in cervical dilation over time, Friedman noted that the cervical dilation time curve in primigravid women was sigmoid in shape. He divided the curve into a latent and active phase. The former being the time taken to reach 3cm dilation from the onset of labour. During this time effacement of the cervix occurs. The latter phase he defined as occurring when the cervix was 3cm dilated up to 9cm, when normal dilation takes place at the rate of 3cm/hr Turnbull and Chamberlain 1989, 718

10. Though all of the 'British' obstetric texts discussed the use of the partograph, as part of the management of normal labour, including the chapter on the role of the midwife in normal labour in Turnbull and Chamberlain, neither of the two American texts made mention of it.

11. For a discussion of the debate within obstetrics see, Beard et al 1975; Richards 1975; Chalmers et al 1976).

12. For an interesting interpretation of why there was greater public debate over induction in Britain than in the United States of America despite similar increases in rates, see (Arney 1982) Arney argues that the increasing elective induction rate in the United Kingdom was more visible and hence more vulnerable to criticism, because of the stronger professional boundaries which characterised British obstetrics.

13. For further discussion of this issue see: Yudkin et al 1979; Kitzinger 1975; Stewart 1979; Hutton 1986; Tilyard et al 1989;
14. Jordan gives a detailed description of the support which a Maya woman is given during birth. (Jordan 1978, Chp 1)

15. Personal communication from Sene Neitch.

16. Though there are no directly comparable data for non-Samoan women giving birth at the two hospitals, a study conducted in 1977, of women giving birth at St Helens hospital (which like Kenepuru Maternity Hospital catered for women having normal general practitioner delivered births) and at Wellington Public hospital, (which catered for clinic patients and women with complications) showed that 80% (175/220) received pain relief in labour (pethidine and epidural). This was considerably higher than the 64% rate among Samoan women. A similar proportion of pain relief 90% was also from pethidine. Crowthers and Allen 1985

17. The 1984 and 1985 figures for epidurals at Wellington Women's Hospital were based on data collected by delivery suite staff. The 1989 figure was reported in the Listener March 12 1990 p14) It is probable that these figures also include epidurals given for caesarean section rather than pain relief.

18. Personal communication, Hilary Shannon, Obstetric Registrar, Wellington Women's Hospital, Diploma of Obstetrics project, based on primigravida delivering Feb/March/April 1990 at Wellington Women's Hospital.

19. Other studies have also shown a much lower rate of attendance at antenatal classes by Pacific Island women in comparison to Pakeha women. Gunn 1983

20. That the interview was often the medium of a two way exchange was evident from this comment. A conscious decision was taken to answer women's questions fully. This was particularly pertinent to questions which might have arisen because of topics introduced by us which caused concern to the woman.

21. Mead and Newton 1967 record that this practice is used in some cultures in the advent of a difficult delivery.

22. It would seem if a British study is an indication that primigravid women delivered by midwives also have high rates of episiotomy. Morgan A T 1984, BMJ 289, p317

23. In discussions with midwives and obstetricians in Western Samoa in 1983, episiotomies seemed to be routinely performed on women having a first baby.
24. Arney 1982, notes from his historical review of British and American obstetric texts that though in the former episiotomy was treated more as a technique of abnormal labour, with the passage of time, such texts came to reflect the American texts in which episiotomy straddled the normal/abnormal boundary.

25. For discussion of the pro's and cons of episiotomy see: Harrison et al 1984. The authors question the value of
33. Article in Kapi Mana December 1985
CONCLUSIONS

I began by describing this thesis as a voyage of discovery. In this chapter I want to pull together the main themes and insights which emerge in addressing the question of how Samoan women do birth in New Zealand and suggest some future directions for research.

Being a migrant woman and having a baby are both complex processes. This thesis is an attempt to further understanding of some of the issues involved when these two processes are interwoven. In exploring these issues, an interdisciplinary rather than a disciplinary focus was embraced. This focus is reflected in these conclusions.

The experience of being pregnant and giving birth has been explored through the voices of the Samoan women themselves. The thesis followed the pathway of pregnancy, beginning with conception and ending with the immediate postbirth period. The account of birth which is presented is, as I acknowledged at the outset, one which I have constructed in order that women's voices are heard. The construction of knowledge about reproduction is not restricted to experts. Samoan women gave meaning to the changes which were occurring in their bodies by comparing their pregnant and non-pregnant states as well as re-creating and re-interpreting changes on the basis of previous experience.

In addressing the question of how Samoan women do birth in New Zealand this thesis began with the assumption that Samoan women would draw from at least two bodies of 'expert' knowledge. This assumption is based on the work of others who have shown that in Samoa, a Samoan indigenous system of health care beliefs and practices co-exists with a Western introduced medical system (Macpherson and Macpherson 1990; Laing 1985b). Each chapter of the thesis therefore juxtaposed women's voices with those of the 'experts' from whose bodies of knowledge and practice Samoan
women were thought to draw in giving meaning to pregnancy and childbirth.

The work of the thesis showed that not only did Samoan women draw from both Samoan and obstetric bodies of knowledge, but in so doing they recreated these in the light of their own experiences. Expert understandings co-existed for the women as alternative ways of doing pregnancy and birth. Samoan women considered that there were some conditions which were better understood and treated by one or other set of practitioners. Thus Samoan practitioners were seen as being best able to ensure the correct positioning of the to'ala in order that conception might occur and to ensure that the baby was in the right position at birth. On the other hand, obstetric practitioners tended to be seen as best able to provide assistance in case of complications at birth itself.

During pregnancy many women drew on Samoan beliefs and practices to care for themselves as well as seeking help when needed from a Samoan fofo. Going to the fofo was not only associated with treatment of a problem such as a breech position, but also to provide comfort and relief from the common accompaniments of pregnancy such as sore backs and legs. Samoan women drew on a doctor's knowledge when there were problems or complications that could not be resolved by the woman herself or by the help of a fofo. It should be noted that visits to the fofo are not without economic cost to the woman and her family - an illustration of the ongoing importance of the Samoan fofo in the life of Samoans in New Zealand. In contrast the visit to the general practitioner during pregnancy and attendance at hospital ante-natal classes are free. For those women who had uncomplicated pregnancies, their contact with doctors and midwives was minimal. However, not only did all Samoan women give birth in hospital, but women considered the hospital to be the proper place, the safe place to give birth in New Zealand. While Samoan women were less prepared to accept a medicalised definition of
pregnancy, all accepted a medicalised definition of birth location. Women associated giving birth in hospital with access to doctors, who were thought to be best able to cater for complications at birth. For Samoan women, the 'waiting' room and the delivery theatre appeared to symbolise the obstetric way of doing birth. Rather than being part of the ideological debate over the proper conduct and location of birth, Samoan women's energies have gone into weaving their way through the intricate patterns created by obstetrics, both Western and Samoan.

Part of the explanation as to why Samoan women appeared to favour the Samoan way during pregnancy and the obstetric way during labour and giving birth, also lies with the way in which the management of pregnancy and birth is structured in New Zealand. While the management of birth is the legal monopoly of the professional expert, doctor or midwife, no such legal barrier exists during pregnancy. Thus a fa'atosaga living in New Zealand can and does provide care for a woman in pregnancy, but legally can not care for her as an autonomous practitioner at birth itself. It is likely, however, that some Samoan women, as was the case for some of the women in the study, have a fa'atosaga or fofo with them while they are in labour. However, she largely goes unrecognised by the obstetric experts, who will see her only as the Samoan aunty or mother of the woman who is in labour. The way in which birth is structured in New Zealand erodes the status of the fa'atosaga and enhances the role of the obstetric practitioner in relationship to Samoan women.

Feminist analysis of the obstetric paradigm have delineated the gendered as well as the professional nature of obstetric power (Frankfort 1972; Oakley 1980; Graham and Oakley 1981; Davis-Floyd 1990;). Obstetric texts in use at the Wellington School of Medicine were found to exemplify certain features of obstetric power, such as the relationship of the professionals, who are mostly men, to the 'patients' who are women. Some of these differences are demonstrated when the understandings which Samoan
women bring to pregnancy are compared with those in the obstetric literature. Following women's voices also revealed similarities between women's and doctors' understandings of pregnancy. However, the accounts of Samoan women more closely resemble those given by other women in different contexts (Oakley 1980; Graham 1977; Graham and Oakley 1981).

Feminist analysis of the obstetric paradigm argues, that obstetric understandings of reproduction and of women as reproducers are not confined to biology, but are shaped by a patriarchal view of women which is embedded in the philosophical foundations of obstetrics (Davis-Floyd 1990). Women are portrayed as biologically destined to reproduce, nurture and keep their husbands happy. Womanhood and motherhood are seen as inextricably linked. Such a view mirrors the popularly held societal belief in 'maternal instincts'. As one writer said,

This concept is often taken to imply that humans (and especially women) want to have babies, or have instinctual drives towards reproduction; that this drive has individual and species survival value; that pregnancy is normal; and that childbearing is woman's highest, yet most basic, function (Macintyre 1976, 151).

Obstetric understandings of infertility are framed by a biologically determined view of women. Women who are denied or deny their biological drive are considered likely to suffer psychological trauma. One obstetric author implied the face of English history may have been different if Mary Tudor had been able to become a mother (Green 1983). Such a perspective has as Oakley notes, not only influenced clinical theory and behaviour, but has stimulated an enormous amount of medical research on feminine status and reproductive outcome.
For example, infertility, habitual abortion and premature delivery have all been analysed as psychosomatic defences, as a result of hostile identification with a woman's mother, as rejection of the feminine role, as failure to achieve feminine maturity and as evidence of disturbed sexual relationships with husbands/boyfriends (Oakley 1980, 48).

Samoan women also seem to reflect the popularly held belief in 'maternal instincts'. Becoming a mother was considered by the Samoan women interviewed in Wellington during the mid 1980's to be a normal and expected part of the life of an adult woman. When women were faced with the prospect of not having children, they worked to change it, either by increasing their chances of conception or constructing a family from within the aiga by adoption. While much feminist analysis has focused on issues to do with women's rights not to mother, i.e. safe contraception and abortion, less emphasis has been given to exploring women's needs to mother as demonstrated by the Samoan women interviewed in Wellington and by those women in New Zealand and other countries, who seek to become pregnant by use of the New Reproductive Technologies.

The understandings which Samoan women brought to the social construction of motherhood are differently framed from those delineated in the obstetric paradigm. The focus of the obstetric paradigm is the biological construction of motherhood. While Samoan women wanted to attain biological parenthood, there was a greater emphasis on the socially constructed nature of parenthood. Couples who were having problems conceiving chose to or were prepared to construct their family by adoption of other family members. While having children fulfills the social and affective needs of the Samoan couple, children can also be seen to renew and strengthen the migrant aiga. Having children thus becomes an act of cultural as well as biological renewal.
For Samoan migrants in New Zealand the aiga remains the primary source of social and often economic support. Women saw themselves as the primary care givers to children, their own and those of other women. Other women, aunties, sisters or cousins, provided a childcare resource which women tapped into when at some point in their childbearing and childrearing years they were engaged in paid employment. Women who did not have access to aiga based child care support worked at night in order to continue to play a full time mothering role in the day.

Both women and doctors expressed ambivalence about the nature of pregnancy. However, there are qualitative differences in womens' and doctors' understandings. Pregnancy is perceived by Samoan women as by other women as both a normal and not normal state. This is exemplified in the way some women, Samoan and others used animal similes to describe the sensation of fetal movement. While feeling the baby move is welcome evidence of normality, that is that the baby is 'all right', it is also evidence that something alien and thus not normal is happening in a woman's body. Being pregnant while for most woman a 'normal' process was not seen as a normal status. Rather, not being pregnant was considered to be a woman's normal status. For mothers, feeling the baby move is not just confirmation of pregnancy as medical texts defined it. Though it is that too, it is also the beginning of a relationship with their unborn baby. That women establish a tactile relationship with their baby before birth is illustrated in the graphic representations Samoan women used in describing movement. Feeling the baby move aroused strong even passionate feelings in many of the women. For some there was the sense that this was the beginning of their love affair with their baby.

While medical understanding of the nature of pregnancy is grounded in second hand accounts and accessible only through medical texts, a woman's understanding is rooted in her knowledge and experience of her own body. For most Samoan women confirmation of pregnancy was not medically constructed, in that
woman had already self diagnosed before their first visit to the doctor. Neither was pregnancy perceived by most women as a state of sickness requiring early medical monitoring.

Obstetric ambivalence about the nature of pregnancy has been explained as a reflection of the tension between nature and culture. Pregnancy lies at the interface of culture and nature (Davis-Floyd 1990). Babies are born of women and of nature, but nature is unpredictable. This unpredictability sits uncomfortably with a medical model based on scientific, rationalist principles of predictability. Thus vigilant obstetric monitoring is required to ensure that any deviation from the predicted obstetric pathway can be corrected.

Reproduction is considered to be a legitimate medical subject. Obstetric understanding of reproduction is framed by a potentially pathological perspective. The dilemma for medicine is that demonstrably the great majority of pregnancies and births are not pathological events. One way that obstetrics copes with this dilemma, it has been suggested, is by the routinisation of medical interventions (Oakley 1980). In contrast, for Samoan women, being pregnant while not a 'normal' state was nevertheless understood as a to be expected and normal part of a woman's lifetime experience. In understanding this experience, women drew from knowledge of their own bodies. When women were asked to describe the pain of labour the most common analogy they drew on was that of the monthly pain and discomfort many women experience with menstruation. While Samoan women drew on the knowledge of Samoan and obstetric experts in making sense of the changes which were occurring in their bodies, women also considered that their own and other women's knowledge about reproduction was valid and applicable.

Obstetrics it has been argued, defines the pregnant role as woman's only relevant status. Pregnancy thus becomes synonymous with being a patient (Graham and Oakley 1977). Pregnant women
are considered to need the knowledge and guidance of medical experts in order to make sense of their pregnancy experiences. Medicine divorces reproduction from its social context (Oakley 1980). Labour is understood as a physiological process which can be monitored and controlled without requiring the active involvement of the woman herself. That obstetrics equates women with their wombs, was evidenced in obstetric texts analysed, which portray the uterus rather than the woman, as doing the labouring.

Being pregnant and being a patient, while closely interlinked in medical understanding and practice, were shown not to be necessarily synonymous for Samoan women. For a Samoan woman being pregnant was not her only relevant status. In the absence of problems or complications, Samoan women did not seek to establish early contact with their doctors, although once the first visit had been made women were relatively regular attenders. Despite the expectation, both Samoan and Western, that women who are in married relationships will be happy to be pregnant, pregnancy was shown to be not always a welcome event. Women also had other agendas, which sometimes conflicted with that of pregnancy, such as maintaining paid employment or commencing a new career such as teaching.

While mothers and doctors use different criteria to establish the success of pregnancy and birth, the birth of a live healthy baby was a common goal for both Samoan women and doctors. Having a 'good' pregnancy and birth however is understood by women to mean more than the absence of serious morbidity. Symptoms which obstetrics tends to consider as minor such as nausea and vomiting, fatigue or backache were for women, disorders which had the potential to shape the meaning a woman assigned and the way she did a particular pregnancy.

The potential for conflict between woman-as-expert and doctor-as-expert was evidenced at many points during a woman's pregnancy.
career. The power of bio-medicine to control the choices Samoan women or other women make about pregnancy and birth is considerable. The balance of power in the relationship which pregnant women have with their doctors is not an equal one. Obstetrics does act to control and shape the medical encounter of women and their doctors. Medical technology gives obstetric practitioners access to women's bodies. By being able to see what women themselves are not readily able to see, constitutes an important basis of obstetrical claims to reproductive expertise (Oakley 1982, 669). New medical technologies such as ultrasound have been shown to empower the obstetrician over and above the woman. During pregnancy, most Samoan woman were able to largely control their own agenda. This was less true for most Samoan women during labour. Birth in hospital meant that women were more intensively exposed to obstetric control of their bodies than during pregnancy. The medicalised nature of Samoan women's labour was similar to that reported of other women in different contexts (Oakley 1980). The birth experiences of many of the Samoan women were characterised by techniques to augment labour, manage pain by pharmacological methods and to justify the use of surgical intervention in the form of an episiotomy at birth as protecting the mother and fetus from inflicting damage, the one on the other. The majority of Samoan women had medicalised labours. This is seen in that 64% of women had some form of analgesia during labour, 55% of women had artificial rupture of membranes, 23% of first time mothers at Wellington Women's hospital had an epidural anaesthetic, half of the first-time mothers had an episiotomy, while 82% of birth lacerations were sufficiently serious to require suturing. Birth for these women was a surgical event.

However, giving birth in hospital did not mean that Samoan women did not continue to draw on Samoan understandings and their own experiential knowledge in making sense of their experience. Women did so in a number of ways including the way in which they coped with labour pains. While control of pain for some women
was mediated through the social support provided by their husbands and/or close family members, women experienced intense emotions during labour. That some women felt very vulnerable was evident in the reports of those women who were afraid of dying while in labour. This fear was shaped not only by the pain they were experiencing, but by the obstetric context in which they were labouring. Obstetrics recognises that fear can be a feature of labour and acts to reduce that fear. It does so by attempting to supplant woman created knowledge about birth ie the birth stories of other women, with obstetric knowledge. During labour, fear is considered to be primarily a factor of pain. Controlling pain by pharmacological means is seen as the most effective way of reducing fear.

Obstetrics acts as if it had a monopoly on reproductive knowledge (Oakley 1981a). Review of the obstetric literature revealed that 'obstetric knowledge' is portrayed as superior to 'women-derived knowledge'.

Added to this are the cultural misconceptions regarding pregnancy and labour which are handed down by word of mouth from mother to daughter in all communities. The attitudes derived from this ancestral information are frequently disadvantageous and often dangerous to the health of the mother and baby (Llewellyn-Jones 1986, 59-60)

Obstetric knowledge is portrayed as expert, scientific and therefore 'real' or 'proven' knowledge. Women's knowledge is portrayed as folk, experiential and, therefore 'unproven' knowledge. This perspective was evident in chapter five, in which doctor observed indicators were shown to be more valued than woman reported symptoms and constitute stronger evidence for stating that a woman is pregnant. Other studies have shown that obstetric understandings of women as reproducers are informed by stereotypical images of women (Scully and Bart 1973; Koutroulis 1990). The ideological character of obstetric understanding of women and Samoan women in particular, is exemplified in the
exchange of information between medical practitioners recorded in Chapter five. A pregnant woman in one exchange is referred to as a "girl", rather than a woman. This is qualified by the adjective 'pleasant', a term frequently used by doctors in recording the life history of the Samoan women, or in written communication with other doctors. As some writers have suggested, many doctors remain either unaware or refuse to acknowledge that their behaviour and attitudes are sexist (Koutroulis 1990, 74).

Obstetrics devalues and seeks to replace the reproductive beliefs and practices of other obstetric experts with that of its own. This was evidenced in the hypothesis developed by Becroft and Gunn (1989), that traditional massage, in particular the practice of external version, was the cause of the higher stillbirth rate among Pacific Island women. External version once commonly used by obstetric practitioners to manage breech positions, has been largely supplanted by caesarean section, which is claimed to be safer for the fetus. The process by which the researchers selected this hypothesis and discarded or rejected others is discussed in Appendix F. This exemplifies the way in which biomedicine reconstructs the beliefs and practices of other cultures on the basis of its own cultural understandings and practice.

Few of the Samoan women attended antenatal classes. As has been shown the low attendance of Pacific Island and other women at antenatal classes is a factor of concern to New Zealand health professionals. This was also found to be the case with midwives and doctors in Wellington. The overt function of antenatal education is to provide the mother with information about pregnancy and to prepare her and her partner for childbirth and childrearing. But as Oakley has suggested, much antenatal education is less to do with enlightening and empowering women about the social or biological aspects of motherhood and more to do with socialisation of women into acceptance of the medical construction of pregnancy and birth. "In the high technology
obstetrics of the 1970's and 1980's, the education of mothers has thus acquired a new element, namely education in the advantages of technology" (Oakley 1984, 262). The normalisation of obstetric interventions could be said to begin with antenatal education. This underlying theme was demonstrated in a New Zealand study in which a significantly higher rate of epidurals in labour was attributed to either "better medical attention or to better education of the patients, who could therefore make an informed choice about analgesia" (Clark et al 1986).

The medicalisation of reproduction evident during pregnancy and birth continues in the immediate period after birth. Health professionals, largely midwives and mothers constructed this period differently. What women saw as being in their interest did not always fit with what health professionals considered to be in women's interests. One example of this was the practice of removing a baby to the nursery at night. Health professionals justified this practice, as giving the mother and/or other mothers a chance to rest. Such practices were spoken of as painful experiences for the Samoan women concerned. As other studies have shown Samoan women are not alone in feeling considerable anxiety and emotional pain when separated from their baby after birth. For Samoan women these feelings are exacerbated by Samoan understandings that as with pregnant women and failele (nursing mothers), very young babies are vulnerable to ma'i aitu (Neich and Neich 1974). In Samoa babies are rarely separated from their mother. They sleep beside her at night and during the day are near to her or another member of the family. This practice may be a factor in the low level of cot death among Pacific Island babies in New Zealand. A practice which has drawn on woman's rather than expert's knowledge bases.

Another point of tension between Samoan women and midwives related to the question of visitors. Samoan women, particularly those who give birth at Kenepuru Maternity Hospital and are therefore more accessible to family and friends, tend to have a
large number of visitors. Frequently this resulted in friction between the woman, her visitors and the nursing staff. Both Samoan and obstetric views are framed by understandings of the vulnerability of the new mother. They differ, however, in the way in which that vulnerability can be protected. Western medical understanding focuses on sickness and its treatment at the level of the individual. For Samoans, sickness and healing are social as well as biological processes. Visiting with the new mother and baby in hospital is both a celebration of new life and the provision of ongoing social support as part of the healing process until the woman returns to her normal non-pregnant state.

The way in which migrants adapt to life in their new society has implications not only for the migrant themselves, but also for the wider society. Not surprisingly therefore, social scientists from a variety of disciplines have tried to develop theoretical and methodological tools which can help to explain the nature of this adaptive process. The concept of acculturation was drawn on for explanations of the similarities and differences in the way Samoan women did pregnancy and birth. Samoan women varied in the way in which they drew from the alternative bodies of knowledge and practice available to them. However, variance in the way Samoan women did pregnancy and birth could only partly be explained by differences in the classifications I constructed of cultural orientation. Samoan women did seem to differ in their attitudes to and involvement in Samoan and palagi cultures. However, the categories of cultural orientation which were constructed to take account of these differences were not always helpful in explaining the way women did pregnancy and birth. Thus a woman who seemed to be more oriented to Samoan culture and who drew on Samoan understandings to treat her infertility, also demonstrated she was aware of and welcomed the use of modern obstetric technology to provide her with reassurance that her baby was developing normally. Other women who appeared to be less Samoan oriented indicated they considered pregnancy to be
a vulnerable state for a woman. They did not go out at night on their own when pregnant, because of the fear of aitu induced sickness.

During the conduct of the analysis, the finding that women repeatedly behaved in ways which did not fit the explanations generated by my classificatory categories opened up questions about the conceptual basis of theories of acculturation. Implicit in such theories is an understanding that people who share certain socially constructed characteristics such as ethnicity or social class will behave in certain relatively predictable ways. The acculturation model assumes that migrants who share certain characteristics such as length of residence, level of competency in the language of adoption or level of interaction with their culture of origin are likely to draw on similar explanations in making sense of or solving problems. The goal of much acculturation research has been to develop typologies and explanations which would both cater for and better predict variation in the way in which migrants adapt to their new environment (Richman 1987; Pescosolido 1986). In following Samoan womens' voices I found that the assumptions underlying the classifying of women by cultural orientation, failed to do justice to the active ways in which women constructed their experiences. Hence the assumptions failed to account for the richness and diversity in the ways in which women made sense of and acted to shape their lives. Samoan women selected, rejected, challenged and utilised those parts of Samoan and obstetric understandings as they saw fit in a variety of ways. Women who were already experienced mothers considered that their understanding of how to give birth was superior to that of a young male doctor. A woman whose doctor had suggested that she had recalled the dates of her last menstrual period incorrectly reminded him of that when the baby was born near to her predicted date. In other words in creating their understanding of birth, women drew on both Samoan and palagi cultural tools.
Grounding this account of birth in the experiences of Samoan women also raised doubts about the appropriateness of using concepts such as paradigm or model to depict bodies of knowledge and practice about reproduction. The concept of paradigm was drawn on in this thesis to differentiate between Western scientific and Samoan indigenous medicine. It was considered that a paradigm conceptualised a relatively coherent body of knowledge which included a set of beliefs and practices based on a shared culture. Implicit in the concept of paradigm is the notion that sets of rules exist which govern the way that people who draw from the paradigm construct knowledge and seek to explain physical or social phenomena. However when the Samoan paradigm of birth was analysed it was found to be characterised as much by variation as by cohesion and agreement. Similarly deconstruction of the obstetric paradigm revealed a greater amount of variation than might have been expected, given obstetric claims for the scientifically constructed nature of its knowledge. Unlike Samoan knowledge of reproduction, obstetric knowledge is codified in written texts and other forms of obstetric literature and thus accessible to all practitioners. Obstetric knowledge is also shared among practitioners through such common modes as medical education programmes.

However when Samoan and obstetric knowledges about reproduction were juxtaposed, greater similarity was found in the way in which these expert knowledges were constructed than would have been expected. The variation which was found within both Samoan and obstetric beliefs and practices about reproduction suggest that both are essentially practical bodies of knowledge. By a practical body of knowledge I mean that both Samoan and obstetric knowledge is empirically rather than theoretically derived and is based on culturally specific rather than universal principles. In both Samoan and Western obstetric practice there is evidence of what could be called 'rule of thumb' guides to the management of reproduction. Such guides allow for greater flexibility than paradigmatic rules and this is reflected in the various ways in
which both Western and Samoan individual practitioners freely interpret and apply culturally derived understandings of reproduction.

In following Samoan womens' voices it has been shown that alternative ways of doing birth co-exist in Wellington. These include a Samoan way and an obstetric way. While some doctors and midwives recognise the validity of alternative ways as exemplified in Samoan birthing practices, as does the World Health Organisation, others are less willing to recognise that Western constructed knowledge like other forms of knowledge is culturally embedded rather than based on universal principles. This is what some have called the culturally myopic view of the bio-medical paradigm (McClain 1982). Similarly, New Zealand is often said to be a multicultural society and likely to be increasingly so as the 1990's unfold. However the majority of New Zealanders, as with the majority of health professionals, continue to operate in a monocultural fashion.

Pregnancy and childbirth are periods in a woman's life which in societies such as New Zealand are marked by a close interaction with health professionals - including doctors and midwives. Womens' experiences at that time are likely to influence the way in which they will utilise the health services for themselves and their children in the future.

Problems in cross cultural understanding exist between Samoan women and obstetric practitioners. These problems affect the way in which Samoan women do birth. This is most dramatically illustrated by the high rate of caesarean sections, which Samoan women in Wellington were shown to have in comparison to Samoan women in Samoa and other women in New Zealand. Given the comparatively low rates of caesarean section in the early 1980's in American Samoa when compared with that of Samoan women in New Zealand, it is unlikely that the explanation is that Samoan women differ from other women in having a greater need to have a
caesarean section. A more likely explanation is that in making such decisions, obstetricians are influenced by a number of criteria, some measured and some not, some clinically derived and others not.

Having a baby changes women's lives, whether that baby is a first or a fourth. For Samoan women, as for other women, pregnancy brought changes in their relationships with others, particularly their male partners. Samoan women were both more vulnerable as well as more powerful during pregnancy. On the one hand, they required help with work usually performed by them, such as care of other children and household chores. On the other hand, they were able to define if and when sexual relations could take place during pregnancy and after birth.

For Samoans and other peoples of the South Pacific, migration to New Zealand brings mixed blessings. One of the reasons which women gave for coming to live in New Zealand, which other studies have also found, was the advantages which their children would have in comparison to life back in the Islands (Pitt and Macpherson 1974). To ensure that advantage, migrant women have as others have shown, become an integral part of the 'blue blouse' workforce (Larner 1990). Migrant Samoan women are however deprived of the social support network that would be available to them in Samoa. In New Zealand women not only contribute to income generation as members of the paid workforce, but continue to be the person primarily responsible for the care of children. Changes in the character of the marital relationship do seem to be occurring, when the experiences of pregnant Samoan women in New Zealand are compared with reports of contemporary life in Samoa. This was particularly evident in the social support women received in labour from their partners. In Samoa such support in the 1980's continued to be provided by a woman's female relatives. Men did not have a legitimated role at the birth itself.
Issues to do with women researching other women and researchers from one cultural group researching a group different from their own, are interlinked in this thesis. I recognised and attempted to address process and power issues, in the interview format adopted and by working with a Samoan woman researcher both in the research design and in the conduct of the interviews. While it would have been desirable to have continued to work closely with a Samoan researcher throughout the analytic stages, this was not financially possible. It would have also been desirable to have provided early feedback to Samoan mothers of the analysis undertaken. Because of the time lapse between interview and analysis many of the Samoan women had moved and were not able to be contacted. Some feedback has been provided to the broader migrant community from which Samoan women are drawn, (Ministry of Pacific Island Affairs) and further material is being prepared for distribution to PACIFICA and to Samoan organisations in Wellington.

RECOMMENDATIONS
In doing birth in Wellington in the mid 1980's, Samoan women drew not only on their own sources of knowledge - but also those of Samoan fofo and obstetric practitioners. In this thesis I have sought to unravel some of the threads in this complex process and to explain how Samoan migrant women giving birth in New Zealand constructed their experiences. The challenge to the social and medical sciences, which comes from listening to womens' voices is the need to better develop frameworks both theoretical, methodological and clinical which can ensure that peoples' voices are heard.

This thesis has demonstrated that Samoan women have developed innovative patterns of health care utilisation during pregnancy, drawing on Samoan and obstetric knowledge bases, as well as their own experientially derived knowledge. Future health research and policy development should be framed in such a way to enable Samoan and other Pacific Island women to build on these
innovative patterns. This requires a commitment to the cross-cultural construction of knowledge. To achieve this there needs to be an increase in health researchers, including Pacific Islanders, committed to working in cross-cultural contexts.

The work of this thesis has identified expressions through women's voices of some issues which in their own way and time, Samoan and other Pacific Island women may wish to address. Around 1974 channels of communication between Pacific Island women and host society institutions were opened up and remain active. These channels of communication were not opened specifically to deal with issues related to birth and may or may not prove adequate channels for addressing them now. There is however an urgent need for such channels to involve Pacific Island women in the development of culturally appropriate health services.

In doing birth in an obstetric context the power of Samoan women to control their own birth experience was shown to be constrained. The medically constructed nature of birth did not provide for power sharing between women and obstetric practitioners. If Samoan women are to be empowered to make informed choices they, as with other women, need to be fully involved in the decision making process. This means they must have access to all the options available to them. One such option is the location of birth. None of the women who gave birth at Wellington Women's Hospital were aware of the existence of the family birth room. This was never discussed as an option with any of the women who gave birth in that hospital. This suggests that midwives adopt a selective approach to informing women of their options. Another option is the birth position which a woman might wish to adopt during labour. Samoan women had very limited information about the range of birthing positions they could adopt. The very limited amount of information available in the Samoan language about giving birth in New
Zealand in the mid 1980's continues to be a reality in the early 1990's.

This thesis evidences the need for effective cross-cultural communication between health professionals and the people for whom they provide services. The Samoan women's voices show this need. Samoan women's voices showed cross-cultural communication was not easy for the health professionals who assisted them. The presence of Samoan and other ethnic minorities in the culturally diverse New Zealand population of 1985-6 was not accompanied by cross-cultural communication capacities able to meet the needs of Samoan women or the health professionals.

Medical and nursing education helps shape the understandings of clinical practitioners, in relation to the beliefs and practices of Western scientific medicine as well as those of other cultures. The conclusions of this thesis are that most obstetric practitioners lacked recognition of the culturally derived nature of their own beliefs and practices related to health and sickness. One way of developing a more pluralistic approach is to develop strategies to address women's health issues, ethnicity and culture within medical and nursing curricula in New Zealand.

DIRECTIONS FOR FUTURE RESEARCH
1. Examination of the way in which women's health issues, ethnicity and culture are currently addressed in medical and nursing curricula in New Zealand and the exploration of the contribution which education can make in bringing about a more pluralistic approach to health, illness and healing by medical and nursing practitioners in New Zealand.

2. Development of an appropriate methodology within a cross-cultural context, to examine the high rate of stillbirths among Pacific Island women in New Zealand.
3. Comparison of birthweight data of Pacific Island babies born in New Zealand with those born in the Pacific Islands and the relationship to vaginal or operative delivery.

4. Exploration of the differences between Samoan and non-Samoan women in New Zealand in terms of self reported symptoms of 'depression' during pregnancy and in the postbirth period.

The empowering of Samoan and other women necessitates that health professionals, including health researchers, share their power.
BIBLIOGRAPHY


Australian Department of Immigration 1984. About Migrant Women - A Bibliography. Canberra: Australia


Western Samoa Health Department 1981. *Health Statistics for Western Samoa*. Apia.


<table>
<thead>
<tr>
<th>Samoan Word</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a'oga</td>
<td>school</td>
</tr>
<tr>
<td>afuafua</td>
<td>to conceive</td>
</tr>
<tr>
<td>aiga</td>
<td>family</td>
</tr>
<tr>
<td>aitu</td>
<td>spirit, supernatural agency</td>
</tr>
<tr>
<td>ali'i</td>
<td>one of two orders of matai, a high chief</td>
</tr>
<tr>
<td>aso anamua</td>
<td>olden times</td>
</tr>
<tr>
<td>fa'atosaga</td>
<td>indigenous midwife</td>
</tr>
<tr>
<td>fa'a Samoa</td>
<td>Samoan way/custom</td>
</tr>
<tr>
<td>fa'aautagata</td>
<td>female reproductive organs</td>
</tr>
<tr>
<td>fa'alavelave</td>
<td>life crisis celebration</td>
</tr>
<tr>
<td>fa'anoaanoa</td>
<td>a deep sadness</td>
</tr>
<tr>
<td>fa'atiga</td>
<td>labour pain</td>
</tr>
<tr>
<td>fa'ife'a</td>
<td>pastor</td>
</tr>
<tr>
<td>fa'ilele</td>
<td>woman who has recently given birth</td>
</tr>
<tr>
<td>fale</td>
<td>house</td>
</tr>
<tr>
<td>fanau</td>
<td>to be born</td>
</tr>
<tr>
<td>fanua</td>
<td>placenta; earth</td>
</tr>
<tr>
<td>feagaiga</td>
<td>an established relationship between different parties as between brothers and sisters.</td>
</tr>
<tr>
<td>fofo</td>
<td>usual term for traditional healer</td>
</tr>
<tr>
<td>fuesina</td>
<td>massage; treatment</td>
</tr>
<tr>
<td>fuamananava</td>
<td>Samoan medicine</td>
</tr>
<tr>
<td>fuamiti</td>
<td>polite word for testes</td>
</tr>
<tr>
<td>gutu tele</td>
<td>big mouth</td>
</tr>
<tr>
<td>gutu mo'o</td>
<td>small mouth</td>
</tr>
<tr>
<td>gutu tipia</td>
<td>hare lip</td>
</tr>
<tr>
<td>kainga</td>
<td>Tongan word for family</td>
</tr>
<tr>
<td>laufu</td>
<td>labia</td>
</tr>
<tr>
<td>lavalava</td>
<td>wrap around garment.</td>
</tr>
<tr>
<td>lefelefe</td>
<td>interior vagina</td>
</tr>
<tr>
<td>lefiafia</td>
<td>unhappy; upset</td>
</tr>
<tr>
<td>ma'itaga</td>
<td>a confinement (polite word for pregnancy)</td>
</tr>
<tr>
<td>ma'ito</td>
<td>pregnancy</td>
</tr>
<tr>
<td>mafa</td>
<td>opening of vaginal orifice</td>
</tr>
<tr>
<td>mafasi</td>
<td>vaginal orifice</td>
</tr>
<tr>
<td>magamaga</td>
<td>vaginal orifice</td>
</tr>
<tr>
<td>ma'i</td>
<td>sickness</td>
</tr>
<tr>
<td>maisi</td>
<td>vaginal orifice</td>
</tr>
<tr>
<td>mamafa</td>
<td>heavy, burdened; used in association with pregnancy</td>
</tr>
<tr>
<td>manava</td>
<td>stomach</td>
</tr>
<tr>
<td>masina</td>
<td>month</td>
</tr>
<tr>
<td>matai</td>
<td>general word for chief</td>
</tr>
<tr>
<td>meama</td>
<td>infants; young</td>
</tr>
<tr>
<td>mea'ai mai fafo</td>
<td>imported food</td>
</tr>
<tr>
<td>mea'ai papalagi</td>
<td>European food</td>
</tr>
<tr>
<td>Samoan Word</td>
<td>English Meaning</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>mili</td>
<td>gentle massage</td>
</tr>
<tr>
<td>milimili</td>
<td>gentle massage</td>
</tr>
<tr>
<td>moa</td>
<td>chicken</td>
</tr>
<tr>
<td>muli</td>
<td>bottom; rump</td>
</tr>
<tr>
<td>mumu</td>
<td>red rash</td>
</tr>
<tr>
<td>niu</td>
<td>coconut</td>
</tr>
<tr>
<td>oloa</td>
<td>riches; wealth</td>
</tr>
<tr>
<td>palagi</td>
<td>European</td>
</tr>
<tr>
<td>palapala</td>
<td>polite term blood especially menstrual blood</td>
</tr>
<tr>
<td>papalagi</td>
<td>European</td>
</tr>
<tr>
<td>pepe</td>
<td>baby</td>
</tr>
<tr>
<td>pepe fa'apa'u</td>
<td>abortion</td>
</tr>
<tr>
<td>pu</td>
<td>vagina; anus</td>
</tr>
<tr>
<td>pua'i</td>
<td>to vomit</td>
</tr>
<tr>
<td>pute</td>
<td>umbilical cord; navel</td>
</tr>
<tr>
<td>si</td>
<td>ova</td>
</tr>
<tr>
<td>suasi</td>
<td>semen</td>
</tr>
<tr>
<td>siva</td>
<td>Samoan dance</td>
</tr>
<tr>
<td>suau'u</td>
<td>oil</td>
</tr>
<tr>
<td>ta'amu</td>
<td>plant used in Samoan medicine</td>
</tr>
<tr>
<td>tala</td>
<td>tale; narration</td>
</tr>
<tr>
<td>tama</td>
<td>child; boy</td>
</tr>
<tr>
<td>tamameamea</td>
<td>infant</td>
</tr>
<tr>
<td>taulasea</td>
<td>polite word for healer</td>
</tr>
<tr>
<td>teine</td>
<td>girl</td>
</tr>
<tr>
<td>to'ala</td>
<td>internal organ; source of life</td>
</tr>
<tr>
<td>to'onai</td>
<td>main Sunday meal</td>
</tr>
<tr>
<td>ulu niniva</td>
<td>giddiness</td>
</tr>
<tr>
<td>ulutununu</td>
<td>roasted breadfruit</td>
</tr>
<tr>
<td>vaesape</td>
<td>clubfoot</td>
</tr>
<tr>
<td>vaisalo</td>
<td>a food given to a woman after birth</td>
</tr>
</tbody>
</table>
Appendix A
Profiles of Samoan Taulasea and Fa'atosaga
Interviewed in Wellington

HEALER A

Mrs A who was in her early sixties, was still practising as a fa'atosaga in Samoa. We interviewed her while she was visiting her daughter in Wellington. Mrs A said she had learnt her skills from her mother, who had also been a fa'atosaga. She was very close to her mother and used to spend a lot of time helping her, particularly when she was called out in the middle of the night. Mrs A thinks that is why she rather than her sisters followed in her mother's footsteps. She stressed however that the transfer of such knowledge is not restricted to one's own child, but can be passed on to any keen and able person. It could be a friend, a family member or a patient the taulasea has been treating. The main thing was that the recruit was keen and able to do the job. The experienced healer knows who is a likely recruit. At first the new recruit follows the healer around, learns to identify the plants which are used in Samoan medicine and make up the medicines and finally is sent off to treat first simple then more complicated sickness events.

Mrs A described herself as a fa'atosaga rather than a fofo (taulasea). She differentiated between the two positions. A person who is trained as a fa'atosaga does not necessarily also have the skills to practice as a taulasea. However, some taulasea perform both functions. Though most fa'atosaga are women, Mrs A knew of some male taulasea in the past who had also helped women in childbirth.

HEALER B

Mrs B who was in her early forties was practising as a fofo in Wellington. She became a widow when her youngest child was still quite young and she was the sole provider for her family of girls. Unlike Mrs A she practices as a fofo rather than a fa'atosaga in that, while she massages pregnant women, she has never delivered a baby. Her 'early experience of Samoan healing was gained by going around with an old lady, not a relation, who was a fa'atosaga to watch and learn. She did not do an apprenticeship as such but used her healing powers to treat her own children when they were sick. Hearing of her skills, other mothers brought their children to her for treatment. Mrs B has been living in New Zealand for five years. She gets calls to help sick people from all over Wellington, including pregnant women who are very sick from displacement of the to'ala. Mrs B also described massaging the baby into the right position before birth. She told of one client who came to her after the doctors had told her the baby was lying across the stomach and she would require a Caesarean section. "I turn the baby around. Then when she went in to have her baby, she did not have to have an operation". Mrs B said that fa'atosaga believe that sometimes the baby will turn itself, and thus prefer to leave trying to turn the baby till later in pregnancy.
HEALER C

Mrs C unlike the other two women practices both as a fofo and as a fa'atosaga. This came about for different reasons. Her knowledge of Samoan medicine she learnt mainly from her first husband who she said was a well respected healer. In contrast to herself, her husband did not have anyone in his family who was a healer. He became a taulasea by long periods of prayer, meditation and fasting, which enabled him to become strong of spirit and soul, the fundamental qualities of a taulasea. Her husband also delivered all seven of their children at home. Mrs C herself came from a long line of healers. She became interested in midwifery at an early age. Even when she was not allowed to be near where a woman was giving birth, she said she found excuses to be there. At first it was because she was curious to find out where babies came from, but as she got older her interest was in helping women to give birth successfully. She gained most of her midwifery knowledge from an eminent old fa'atosaga in her family. She delivered her first baby when she was eighteen. But Mrs C also had some nursing training and delivered babies in district hospitals as well as in the womens' own homes. Until she came to Wellington Mrs C was working as a fofo and fa'atosaga in her home village. Since she has been in Wellington she continues to practice as a fofo and is particularly skilled at treating women who have fertility problems. Mrs C also considered that it was possible for a man to practice as a fa'atosaga.
Appendix B
Information Leaflet To Samoan Women
O tina e soifua maloloina lelei e soifua mai ai pepe malolosi ma le ola maloloina lelei.

A outou fesoasoani mai, matou te fesoasoani malosi atu ai. Ua amata nei su'esu'ega i Tina Samoa i le fanauga o pepe i Samoa po'o Niusila fo'i. I le tele o Tina Samoa o le fanauna o sana pepe i Niusila e matua ese mai ilo le ola i Samoa. O falema'i fo'i i Niusila nei e fa'afoeina ma galuea'ina e palagi mo palagi. A'ole taimi nei ua to'atele foma'i ua lagona ua tatau ona sui lea tulaga, ua tatau nei ona aofia ai isi itu aiga tagata nu'u ile fa'afoeina o galuega fa'afoma'i. Ola ma su'esu'ega la e fa'a faigofiena ai lea tulaga, i le fa'amalamalamaina lea i palagi o tu ma uiga o tagatanu'u o Samoa, ia fa'aapea fo'i i Tina Samoa ona malamalama i tu fa'apalagi.

Afai la na ola sou alo i Samoa po'o Niusila fo'i, pe o'e mamafa nei, pe sa'e fesoasoani foi i le fa'afanauga o se pepe ma te fia talanoa tele ma 'oe e uiga i ia tulaga. E fia maua fo'i ni tala i le fanauga o pepe i aso ua te'a.

'A'e fia mana'o e fa'afeso'ota'i mai: Tusi lou suafa, tuatusi ma lau telefon i le avanoa i lalo, sasae le pepa i le laina togitogi ma tu'u i le pusa ua saunia. 'A le o lea vili mai i le telefoni numa ra........ 855-999 extension 5659. Fesili mo Sene po'o Tricia.

Fa'a fetai tele le loto atunu'u.

Igoa..............................................................................................................

Tuatusi......................................................................................................

Telefoni Numera....................................................................................
Appendix C
Quantitative Study Coding Schedule
Wellington Samoan Study of Childbirth

Medical Record Schedule
Study Number: 
Hospital: 
Hospital Number: 

SECTION A: DEMOGRAPHIC DATA
Q.1 Current marital status:
Married
De facto
Divorced
Widowed
Never married
Separated

Q.2 Religion:
Samoan Congregational
P.I.P.C.
Samoan Assemblies of God
Roman Catholic
Samoan Methodist
Seventh Day Adventist
Mormon
Methodist
Anglican
Baptist
Presbyterian (NZ)
Other
None
Q.3 Age in years:
Q.4 Date of birth:
Q.5 Place of birth:
Q.6 Present address:
Q.7 Length of residence in N.Z.:
Q.8 Present Occupation:
Q.9 Highest level of education:
   Primary only
   Secondary 1-2 years
   Secondary 3 years
   Secondary 4-6 years
   Tertiary
   Not given
   If tertiary, specify type
**SECTION B: PAST OBSTETRIC HISTORY**

Q.10 Parity:  

Q.11 Gravid:  

Q.12 Where did previous births take place?  

<table>
<thead>
<tr>
<th>Child</th>
<th>Number</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>38</td>
<td></td>
</tr>
</tbody>
</table>

Q.13 In which countries did previous births occur?  

<table>
<thead>
<tr>
<th>Child</th>
<th>Number</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>49</td>
<td></td>
</tr>
</tbody>
</table>
Q.14 Has she had any miscarriages?

YES  NO

a) If yes, which of her previous pregnancies ended in miscarriage?

Pregnancy:

1. .................................................................................................
2. .................................................................................................
3. .................................................................................................
4. .................................................................................................
5. .................................................................................................
6. .................................................................................................
7. .................................................................................................
8. .................................................................................................
9. .................................................................................................
10. .................................................................................................
11. .................................................................................................

Q.15 Have any previous pregnancies been terminated?

YES  NO

a) If yes, which pregnancies?

Pregnancy:

1. .................................................................................................
2. .................................................................................................
3. .................................................................................................
4. .................................................................................................
5. .................................................................................................
6. .................................................................................................
7. .................................................................................................
8. .................................................................................................
9. .................................................................................................
10. .................................................................................................
11. .................................................................................................
Q.16 Were any of the following conditions associated with any previous pregnancies?

YES ___ NO ___

a) If yes, indicate which conditions and level of severity.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q.17 Were any of the following interventions/complications reported for any previous deliveries?

YES ___ NO ___

a) If yes, which deliveries?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q.18 Were any of her previous babies stillborn?

YES ___ NO ___

a) If yes, which pregnancy?

Pregnancy:

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. 

11. 

Q.19 What was the birth weight of previous babies?

Baby

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. 

11. 

12. 

13. 

14. 

15. 

16. 

17. 

18. 

19. 

20. 

21. 

22. 

23. 

24. 

25. 

26. 

27.
SECTION C: CURRENT PREGNANCY

Q.20 Did she suffer from any of the following conditions during pregnancy?  YES  NO

a) If yes, indicate which conditions and level of severity.

1 2 3 4 5 6
Hyp/Gravid Hypertension Haem. Diabetes Asthma Other

Q.21 What was her weight gain during pregnancy?

Q.22 What was her height?

Q.23 Does she smoke? YES NO

a) If yes, how many cigarettes does she smoke a day?

Q.24 How many weeks pregnant was she at her first visit to the G.P.?

Q.25 How many weeks pregnant was she at her first visit to antenatal clinic?

Q.26 How sure did she report being of the date of her last menstrual period?  Sure  Unsure  Not known

Q.27 Was she on the pill prior to this pregnancy?  YES  NO  NOT RECORDED

a) If no, was she using any other form of contraception?  YES  NO  NOT RECORDED

b) If yes, which one was she using?

I.U.D.
DEPO PROVERA
OTHER
Q.28 Who provided initial antenatal care during this pregnancy?

- G.P.
- HOSPITAL ANTENATAL CLINIC
- PRIVATE OBSTETRICIAN

a) Was she referred for specialist consultation during this pregnancy?

**YES** [ ] **NO** [ ]

If yes, what reason was given?

---

Q.29 How many antenatal visits did she make each month, during this pregnancy?

**Dates**

<table>
<thead>
<tr>
<th>PREGNANCY WEEKS</th>
<th>EXPECTED VISITS</th>
<th>ACTUAL VISITS</th>
<th>DIFF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 - 16</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 - 20</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 24</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 - 28</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 - 32</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 - 36</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 - 40</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 +</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**CODE**

- **48**
- **49**
- **50**
- **51**
- **52**
- **53**
- **54**
- **55**
- **56**
- **57**
- **58**
- **59**
Q.30 Did she attend any antenatal classes?
YES       NO

a) If yes, what kind of classes were they?
   EXERCISE AND RELAXATION
   PARENT EDUCATION
   OTHER
   NOT RECORDED

b) How many of each kind of class did she attend?
   EXERCISE AND RELAXATION
   PARENT EDUCATION
   OTHER

Q.31 Who ran the classes she attended?
   WELLINGTON WOMEN'S STAFF
   KENEPURU MATERNITY STAFF
   KARITANE FAMILY UNIT
   MANA PARENTS' CENTRE
   WELLINGTON PARENTS' CENTRE
   OTHER
**SECTION D: LABOUR AND DELIVERY**

**Q.32 Was labour induced?**

<table>
<thead>
<tr>
<th></th>
<th>66</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

- **a)** If yes, what method was used?
  - SURGICAL INDUCTION
  - MEDICAL INDUCTION
  - COMBINATION
  - OTHER

- **b)** What was the major reason given for the induction?

- **c)** List any other reasons given for the induction.

**Q.33 How long before birth did the membranes rupture?**

**Q.34 Were the membranes artificially ruptured after the onset of labour?**

<table>
<thead>
<tr>
<th></th>
<th>70-71</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

- **a)** If yes, was there evidence of meconium in the liquor?
  - YES | NO |

- **b)** What was the major reason given for rupturing the membranes?

- **c)** List any other reasons given.

**Q.35 Was the labour augmented with either oxytocin or prostaglandins?**

<table>
<thead>
<tr>
<th></th>
<th>76</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

- **a)** What was the major reason given for augmenting labour?

- **b)** List any other reasons given.
Q.36 Were narcotic drugs used during labour to relieve pain?
   YES ___  NO ___

   a) If yes, what drugs were used?

Q.37 At which stage/stages of labour were narcotic drugs given?
   Latent  1st STAGE
   Transit 1st STAGE
   2nd STAGE

Q.38 Was an IV inserted during labour or after birth?
   YES ___  NO ___

   a) If yes, what was the reason given?

Q.39 Was an anaesthetic given?
   YES ___  NO ___

   a) If yes, which method was used?
      LOCAL
      PUDENDAL
      EPIDURAL
      GENERAL
      OTHER

   b) What reason/s were given for the anaesthetic/s?

Q.40 Was external electronic monitoring used during labour?
   YES ___  NO ___  NOT RECORDED ___
Q.41 Was it an instrumental delivery?
   YES ___ NO ___
   a) If yes, what method was used?
      FORCEPS
      VENTOUSE
   b) If FORCEPS, what method was used
      MANUAL ROTATION PLUS FORCEPS
      KJELLANDS
      BARNES NEVILLE'S
   c) What was the major reason given for the intervention?
   d) What other reasons were given?

Q.42 Was a Caesarean section performed?
   YES ___ NO ___
   a) If yes, was this an
      ELECTIVE SECTION
      SECTION IN LABOUR
   b) What was the major reason given for the intervention?
   c) What other reasons were given?
Q.43 Was an episiotomy done?
   YES    NO
a) If no, was there a record of laceration?
   YES    NO
b) If yes, did this require suturing?
   YES    NO

Q.44 Was the placenta manually removed?
   YES    NO
a) If yes, what reasons were given?

Q.45 Did a PTH occur?
   YES    NO

Q.46 Did the woman receive a blood transfusion?
   YES    NO
a) If yes, what reason was given?

Q.47 Was the husband present at the birth?
   YES    NO    NOT RECORDED

Q.48 What was the length of time between admission to delivery suite and birth of the baby?

<table>
<thead>
<tr>
<th>TIME OF ADMISSION</th>
<th>TIME OF BIRTH</th>
<th>DIFF.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q.49 How long was each stage of labour?

1st STAGE       hrs.
2nd STAGE       mins.
3rd STAGE       mins.

Q.50 Level of English competency?


SECTION F: DISCHARGE

Future Contraception

Q.56 What form of contraception does she plan to use in the future?

1. I.U.D.
2. ORAL CONTRACEPTIVE
3. DEPO PROVERA
4. TUBAL LIGATION
5. NONE
6. OTHER (State) ____________________________
7. NOT RECORDED

Q.57 Was she breast feeding on discharge?

1. YES  2. NO  3. NOT RECORDED

[Codes filled in by hand: □ 47 □ 48]
ANTENATAL INTERVIEW

Diagnosis:  - What was the first thing that made you think you might be pregnant?  
          - Did you feel you needed to go to the doctor to be sure you were pregnant?

Perceptions:
Of self:  - How did you feel when you found out you were pregnant?  
          - Do you think being pregnant is the same as being sick?
Of others:  - Do you think other women you know enjoy being pregnant?  
By others:  - Have you been treated differently by your husband since you became pregnant?  
           - Have other people treated you differently?

Review of pregnancy:
- What does it feel like physically, now that you are x months pregnant?  
- Has there been anything in your pregnancy that you found new or surprised you or worried you? (sickness, depression, tiredness, insomnia, discomfort)  
Food:  - What sort of food are you eating at present?  
- Did you eat different foods when you were not pregnant?  
- Have you had any cravings for any particular food?  
- What sort of foods do you think are the best to eat when you are pregnant to help the baby grow inside you?  
- Is there any activity around the house that you don't do, now that you are pregnant?  
- Why is this?  
- How many months pregnant were you, when you first felt the baby move around inside you?  
- Can you describe what it felt like inside your stomach, when you first felt the baby move?  
- What have you most enjoyed/disliked about this pregnancy?  
- Why did you want another baby?  
- Did you plan this baby or did it just happen?  
- Have you and your husband discussed and planned having children?

Cultural beliefs and Practices:
- Did you ever hear any old people talk of things you must and must not do when pregnant?  
- Has anyone given you any advice since you were pregnant this time? What did they tell you?  
Other pregnancies?
- Who has given you the most information about labour and birth?
- What have you been told?
- Do you feel you know enough about what labour will be like, to help you when your baby is being born?
- Have you ever been present when another woman has had her baby?

Learning process: - What do you feel is the best way for a Samoan woman to learn about becoming a mother?
- Have you gone to any antenatal classes this pregnancy?
- Knowledge about classes.
- Attitude to classes?
- Suggested changes in style, location, content, to help bridge the gap between what the health services offer and what the women want.

First medical encounters:
Doctor: - How many months pregnant were you, when you first went to see the doctor?
- What sort of things did the doctor do when you first went to see him/her?
- Did any of the things the doctor did worry or embarrass you?
- Did he/she do an internal examination? How did you feel about that?
- Did you feel the doctor tried to understand how you were feeling?

Booking in: - When did you go to the hospital to book in to have your baby?
- Could you tell us what happened when you went to the hospital the first time?
- What happened on the other visits to the hospital?
- Did you feel unhappy or embarrassed on any of these visits to the hospital?
- Did you feel the staff tried to understand how you were feeling?
- Were you given any written information in Samoan about the hospital and/or having a baby?
- Would written information in Samoan be helpful?

Expectations of Labour:
- How will you know when you are in labour?
- When do you intend to go to the hospital?
- When you go to the hospital, what things do you think the nurse will ask you to do? (have a shower, foetal heart, internal exam etc.)
- Do you think you will have an easy birth?
- Do you know of any reasons why some women have longer or more difficult labours than other women?
information about labour and birth?
- What have you been told?
- Do you feel you know enough about
what labour will be like, to help you when your baby is being
born?
- Have you ever been present when
another woman has had her baby?

Learning process:
- What do you feel is the best way for a
Samoan woman to learn about becoming a mother?
- Have you gone to any antenatal
classes this pregnancy?
  - Knowledge about classes.
  - Attitude to classes?
  - Suggested changes in style,
location, content, to help bridge the gap between what the
health services offer and what the women want.

First medical encounters:
Doctor:
- How many months pregnant were you, when you first
went to see the doctor?
  - What sort of things did the doctor
do when you first went to see him/her?
  - Did any of the things the doctor did
worry or embarrass you?
  - Did he/she do an internal
examination? How did you feel about that?
  - Did you feel the doctor tried to
understand how you were feeling?

Booking in:
- When did you go to the hospital to book in to
have your baby?
  - Could you tell us what happened when
you went to the hospital the first time?
  - What happened on the other visits to
the hospital?
  - Did you feel unhappy or embarrassed
on any of these visits to the hospital?
  - Did you feel the staff tried to
understand how you were feeling?
  - Were you given any written
information in Samoan about the hospital and/or having a
baby?
  - Would written information in Samoan
be helpful?

Expectations of Labour:
- How will you know when you are in
labour?
- When do you intend to go to the
hospital?
- When you go to the hospital, what
things do you think the nurse will ask you to do? (have a
shower, foetal heart, internal exam etc.)
  - Do you think you will have an easy
birth?
- Do you know of any reasons why some
women have longer or more difficult labours than other women?
If a woman is having a long or difficult labour, do you think the doctor should do something to hasten the birth? (drug to hasten labour, forceps, caesarean)

- Do you expect to want to walk around while you are in labour?
- What sort of food do you think a mother should eat while in labour?
- Who do you expect will be with you while you are in labour?
- Is this the person you would most like to be with you?
- Do you expect you will have the same doctor and nurse with you all the time you are in labour?
- Do you expect your labour to be very painful?
- What do you think the pain will be like, ie what sort of pain will it be?
- Do you know of any ways to help yourself to cope with the pain?
- Do you think the doctor and nurses can do anything to help you with the pain? (methods of pain relief)
- Would you like to be given any of these things to help you cope with the pain?
- Do you know of any Samoan medicines to help with the pain?

If other children: - How did you cope with the pain with your other children?
- Can you remember what the birth of your last baby was like? (duration, pain, birth experience) Could you tell us about it?

If more than one child: - Were there any differences between the birth of your first baby and your last baby? Could you tell us about them?
- Do you have any fears or worries about going into hospital?
- If you had a choice, would you prefer to have your baby at home or in a hospital?
- When you are ready to push the baby out, what position do you think you will be in?
- Is that the position you would like to be in?
- Do you feel you will be able to ask the doctors and nurses to help you while you are in labour?

Placenta:- What do you know of the work of the placenta?
- Do you know of any Samoan beliefs about the placenta?
- Did you know you can take the placenta home with you if you want?
- Did the family take the placenta home to bury after any of your other babies?

Cord: - Do you know of any Samoan beliefs about the baby's cord?
- What do you know of the function of the cord?
Knowledge of labour processes and medical procedures:

- Can you tell us what you think will happen, from the time your first pains start, to the birth of the baby?
- Sometimes the doctor feels it is necessary to carry out some medical procedures while a woman is in labour. Could you tell us firstly if you have ever heard of each of these procedures and secondly if you know of any reasons why these would be done.
  - **Episiotomy:** Making a cut at the opening of the birth passage.
  - **Induction:** Breaking the waters and/or putting a drip in the vein with a dug to start labour pains.
  - **Monitoring:** Putting a belt around your stomach and attaching you to a machine which records your baby's heart beat.
  - **Forceps:** An instrument used to put around your baby's head during delivery.
  - **Caesarian:** Making a cut in your stomach through which the baby is born.
  - **Drip:** Putting a needle in your vein in your arm to which a tube is attached and through which fluid flows into your body.
POSTNATAL INTERVIEW

Experience of labour:  
- Could you tell us about your labour and the birth of your baby, starting with 
  - Recognition of labour; 
  - Activity between recognition of labour and departure for hospital; 
  - Arrival at hospital and subsequent activities (eg shower or bath, shave/enema, mobility allowed, monitoring of baby, internal examination, taking blood, drip insertion, fluid intake, food allowed) 
  - Feeling while you were in labour: Did you feel at all worried or unhappy while you were in labour? 
    - Did the nurses and doctors know you were worried or unhappy? 
    - Did you feel the nurses and doctors tried to understand how you might be feeling? 

Support: 
- Was your husband with you while you were in labour? At the birth? 
  - What did he do to help you while you were in labour? 
  - Did you have anyone else with you eg family or friend? 
  - What did they do to help you while you were in labour? 
  - Did you have the same nurse looking after you while you were in labour? 
  - What did she do to help you while you were in labour? 
  - Did you have more than one doctor looking after you while you were in labour? 

Labour pain: 
- Was your labour very painful? 
  - What sort of pain was it? 
  - How long were you in labour? 
  - What did you do to help yourself bear the pain? 
  - Did the doctors and nurses do anything to help you bear the pain? 
  - Would you have wanted to have some pain relief? 
  - Do you feel that labour pain is just something that women have to put up with? 

Delivery: 
- Who helped you deliver your baby? 
  - What position were you in when you were pushing the baby out? 
  - Was this the position you wanted to be in? 
  - Did you see the baby being born? 
  - Would you have wanted to? 
  - Did you hold the baby straight away? 
  - Did you see the fanua? 
  - Do you know what happened to it? 

Medical terms: 
- Did the doctors and nurses use any terms you didn't understand while you were in labour?
- Did you hear any of these words: stages of labour; induction; episiotomy; caesarian; forceps; monitoring; drip.

Postnatal:
- How did you feel physically the first few days after your baby was born? (fatigue, pain from piles or stitches, sore nipples, stomach pains, nauseated)
- How do you feel now?
- Did you feel at all depressed or unhappy at any time after the baby was born, while you were in hospital? (crying; sad) What was the cause?
- Did you know any of the other mothers you were in hospital with, before you had your baby?
- Which of the other mothers did you spend most time with?
- Was she/they Samoan?
- Do you plan to meet them/her again?
- Can you tell us the sort of things you did each day while you were in hospital?
- What about the day the baby was born?
- What did you do the day before you went home?
- What food did you mainly eat while you were in hospital? (own or hospital)
- Did you share a room? What would you have preferred?
- Did you have the baby in the room with you while you were in hospital?

Delivery suite environment:
- Can you describe the room you were in while you were in labour?
- If you had a choice what sort of room would you like to be in? (size, colour, light, furniture)
- Was the baby born in the same room you were in labour?
- How did you feel about having to move at such a time?
- Would you have preferred to have stayed in the same room all the time you were having your baby?
- If you had a choice, would you have preferred to have your baby at home?

Role changes:
- What changes have you had to make in your life since the baby was born?
- What changes has the family had to make since the baby was born?
- What help do you get with looking after the house and children?
- Who is the person who helps you the most?
- Have any of your other children done any of these things since the baby was born eg bedwetting; temper tantrums; clinging to you; afraid or shy of other people; crying more; reverting to baby ways?
- Are there any activities you do around the house now that you didn't do when you were pregnant?
- Are there any other things you are able to do now that you didn't do when you were pregnant?
- Is the food you are eating now different from when you were pregnant?
- What to you usually have for breakfast, lunch and dinner? What did you have today/yesterday?
- Have you gone out visiting since the baby was born?
- Looking back, what did you like/dislike most about being pregnant?
- How long after the baby is born do you think a couple should wait before they have sex again?
- If work plans known: Are you still planning to go out to work? When is that likely to be?
- If work plans not known: Do you plan to go out to work in the next 6-12 months? When is that likely to be?
- Who will look after the baby while you are at work?

Motherhood role:
- When you were in hospital, did you feel that you knew best how to look after your baby?
- Were there any new things you learnt about how to look after your baby while you were in hospital?
- What are the things you like most about looking after your baby? (feeding, cuddling, smell, playing)
- What are the things you like least about looking after your baby? (broken sleep, crying, dirty nappies, extra washing, no social life)
- What do you think are the most important things about looking after a baby?
- What are some of the qualities that make a good mother?
- If other children: Are there any things you are doing differently in looking after this baby in comparison with your other babies?
Alice was 20, and had been in New Zealand for three years at the time of the interview. She was married and lived with her nuclear family. She had no extended family in Wellington and missed this support. Alice, who had completed fifth form, spoke Samoan at home but had a good grasp of English. She was classified as less Samoan oriented.

Amataga was Samoan born but had been in New Zealand for 10 years, from the age of 20. She had a medium level of education and had worked as a packer. Amataga was married and lived with extended family who formed a strong family network. Samoan was spoken at home but her English was good. Amataga was classified as biculturally oriented.

Alofa, who was having her first baby, was 19 years old and single when she was interviewed. From Upolu, she had been in New Zealand for 18 months and was living in a dependency relationship with her mother and younger sisters. She had a medium level of education but was unemployed. Alofa was shy about speaking in English and at home spoke Samoan. She was classified as more Samoan oriented.

Alisa was a 23 year old first-time mother who was in a defacto relationship. Samoan was spoken in the home but having lived in New Zealand for 19 years, she was a fluent English speaker. Alisa had completed three years at secondary school and had been working in a manual job but was unemployed at the time of the interview. She lived with her partner's extended family who were very supportive. Alisa was classified as less Samoan oriented.

Clare was born in a village in urban Upolu and had moved to New Zealand 11 years before the interview. Aged 30 and married, she had a medium level of education and worked as a machine operator. Samoan was the language used at home but Clare's English was good. Clare was classified as biculturally oriented.

Fisaga had moved to New Zealand from a rural area of Upolu five years before the time of the interview. Aged 26 and married, she had fairly good English. Fisaga was a housewife and lived with her nuclear family who spoke Samoan at home. She also had the support of extended family and many friends in Wellington. Fisaga was classified as more Samoan oriented.

Faasau was a 33 year old married woman having her second child. She was a long-term New Zealand resident who spoke in confident but broken English. Faasau had a low level of education and worked as a cleaner as well as a housewife. She lived with her extended family and Samoan was spoken at home. Faasau was classified as less Samoan oriented.

Gagau was a 35 year old housewife who had worked in a factory up until she was eight months pregnant. Although Samoan was spoken at home, she had a reasonable command of English. Gagau was one of the few women in the study without a partner.
- her husband having recently left her to return to Samoa. Gagau was born in Samoa and was classified as more Samoan oriented.

Haru was a 25 year old married woman who lived with extended family. Samoan born, she had attended teachers college there and had planned to study here before becoming pregnant. They spoke Samoan at home and her English was limited. Haru was classified as more Samoan oriented.

Isalei was an 18 year old first-time mother. She was born in New Zealand so was fluent in English but spoke Samoan at home. Isalei was married and although she wanted to set up her own home, felt that her extended family did not want to let them go. She had completed three years at secondary school and had been working as a clerk before she became pregnant. Isalei was classified as less Samoan oriented.

Josie had a low level of education and was a housewife. A long-term resident of New Zealand, she had few problems with English, although Samoan was spoken in the home. Aged 30, she lived with her husband in a nuclear family unit. Josie had a large network of relations in Wellington. She was classified as less Samoan oriented.

Kuini was 19 years old at the time of the interview and together with her husband and children was living with her extended family. She had arrived in New Zealand five months previously with very limited English. Samoan was spoken at home. Kuini was a housewife and classified as more Samoan oriented.

Kelemete, who was from a rural area of Upolu, had been in New Zealand for two years. She had completed sixth form but did not work. When interviewed she was 28 and married, living with her nuclear family. They spoke Samoan and her English was limited. She had some family members in Wellington. Kelemete was classified as more Samoan oriented.

Leafa, a 32 year old woman, had emigrated from a rural area of Upolu 11 years before the interview. She was married and lived in a nuclear family unit, although other members of her family lived nearby. Leafa spoke English well and talked to the children in a mixture of Samoan and English. She had a low level of education and had worked in a factory until she had children. Leafa was classified as less Samoan oriented.

Lemapu was a 23 year old single woman who was having her first baby. She had moved to New Zealand from urban Upolu three years ago. She had completed fifth form and had worked as a packer in a canning factory. Lemapu lived with her extended family and her social network was restricted to them and church members. She spoke Samoan at home and had some difficulties with English. Lemapu was classified as more Samoan oriented.

Lila was 32 years old and had been in New Zealand for 12 years at the time of the interview. She had a low level of education. Her English was good and a mixture of English and Samoan was spoken in the home as her husband spoke little
Samoan. They lived in a nuclear family but her support networks included relatives, neighbours and friends made through sporting interests. Lila was from rural Upolu and was classified as biculturally oriented.

Lagi, born in rural Upolu, was a long-term resident of New Zealand. She was 40 years old and had a low level of education. Her most recent job was as an assembler. Lagi was living with her nuclear family, although both she and her husband had relatives in Wellington. She had good English and a mixture of English and Samoan was spoken at home. Lagi was classified as biculturally oriented.

Leata was a 29 year old married woman who had moved to New Zealand 8 years before the interview. She had a low level of education and worked as a cleaner at night. She lived with her nuclear family in which Samoan was spoken but she had a reasonable command of English. Some members of her extended family lived in Wellington. Leata was classified as less Samoan oriented.

Leuma was born in a rural area of Upolu and had lived in American Samoa before coming to New Zealand five years before the interview. She was 20 when she had emigrated. She spoke good English but Samoan was spoken by her extended family with whom she and her husband lived. Leuma had a medium level of education and worked as a housemaid. She was classified as less Samoan oriented.

Morina was a first-time mother who had moved to New Zealand from rural Upolu three years previously. She had a high level of education and had worked as a teacher in Samoa, then as a process worker after moving to New Zealand. Morina and her husband were living with extended family although they hoped to get their own unit after the birth of the baby. Morina's English was very good and a mixture of English and Samoan was spoken at home. Morina was classified as more Samoan oriented.

Malia had emigrated to New Zealand 11 years before the interview at the age of 24. She was married and lived with her husband and two children. She had been a telephone operator before having the children. Malia had a good command of English but spoke Samoan at home. With three sisters and two brothers in Wellington, she had a good social support network. Malia was classified as biculturally oriented.

Mareta had moved to New Zealand from a rural area of Savai'i as an 18 year old married woman. At the time of the interview five years later, she was living with two of her three children in an extended family situation which formed her main social network. Mareta, who had completed fourth form in Samoa, had worked as a machinist and intended to return to work when her children started school. Samoan was the language used at home but Marigold had a reasonable command of English. She was classified as more Samoan oriented.
Moliga was from Savai'i and had emigrated two years previously at the age of 22. She had a medium level of education and had worked in manual employment before coming to New Zealand, although she had not worked since. A first-time mother, Moliga lived with her de facto husband but was very isolated with no family and few friends in Wellington. Moliga was classified as less Samoan oriented.

Melaia, an 18 year old New Zealand born woman was having her first baby. Unmarried at the time of the interview, she was living with her sister and brother-in-law. She spoke English fluently, though Samoan was spoken at home. Melaia had three years of secondary education and had been working as a clerk when she got pregnant. She was classified as less Samoan oriented.

Matagi was born in an urban area of Upolu. When interviewed, she was 27 and had been in New Zealand for six years. Matagi was married and lived with her husband and two children. Her English was limited and she was more comfortable in Samoan which was the language spoken at home. Matagi was classified as more Samoan oriented.

Nana was born in an urban area of Upolu and was aged 22 at the time of the interview. A housewife with a low level of education, this was her first child. She was married and living with her husband's family. Nana had only been in New Zealand for 18 months and her English was very limited. Nana was classified as more Samoan oriented.

Olana was Samoan born but a long-term resident of New Zealand. She had a low level of education and was working as a motor vehicle assembly inspector. Olana was 32 years old and married with one daughter whom she insisted speak Samoan at home. Olana's English was good and she had friends of varying ethnicity whom she had met mainly through work. Olana was classified as biculturally oriented.

Panesa, aged 25, came to New Zealand from a village in rural Upolu for her education, completing seventh form. She had been in New Zealand for eight years at the time of the interview and was in a de facto relationship. After a move from Auckland, she became a volunteer community worker in order to meet people but this led to problems with her own family. Panesa was classified as biculturally oriented.

Pua was born in Samoa but had been in New Zealand for 10 years. She was 29 years old and had worked as a typist and a filing clerk and was presently working as a cleaner. Pua was married and lived with her nuclear family. Her children often spoke to one another in English and although her English was good, she spoke to them in Samoan. All of her extended family in New Zealand lived in Auckland. Pua was classified as biculturally oriented.

Puni was a 26 year old woman who was born in Samoa and had migrated to New Zealand only one year previously, leaving two children in Samoa. Puni and her husband were living with her aunt but as she had no other close relatives in Wellington and did not get on with her husband's family, she had a
limited social network. Puni was classified as more Samoan oriented.

Rosa was a 36 year old woman born in rural Savai'i. She had a low level of education and was a long-term resident of New Zealand. She worked as a cook and lived with her husband and their three children. Samoan was the language used at home and Rosa found it easier to use Samoan to express her feelings. Rosa was classified as biculturally oriented.

Ropeka was a 28 year old married woman. Born in Samoa, she spoke Samoan at home but her English was also very good. She was a long-term resident, having come to New Zealand for schooling. She had a medium level of education and had worked in the post office before having children. She lived with her nuclear family but had a wide social network including relatives, workmates and friends made through sporting and political interests. Ropeka was classified as biculturally oriented.

Saua was Samoan born but a long-term resident of New Zealand. She completed fifth form her and had worked as a machinist. 20 years old and single at the time of the interview, she was a first-time mother and living with her parents. Her English was fluent and this was the language she used at home except when explaining things to her mother. Saua was classified as less Samoan oriented.

Sarai was a 32 year old married woman from an urban area of Upolu. Although she had arrived from Samoa less than a month before the interview and spoke Samoan at home, her English was reasonable. Sarai had a medium level of education and had worked as a nurses aide. Sarai was classified as less Samoan oriented.

Susana was a 31 year old shop manager who was having her first child. She was born in urban Upolu but had been in New Zealand for 11 years. She spoke good English and this was the language used at home. Susana was single and had no close family in Wellington. She was classified as less Samoan oriented.

Sose was a 24 year old married woman. When interviewed, she had been in New Zealand for two years. Sose worked as a nurses aide and had a medium level of education. She lived with her nuclear family and did not appear to have any other relatives in Wellington. Her English was good although Samoan was spoken in the home. Sose was classified as less Samoan oriented.

Tala was 28 and had moved to New Zealand from a rural area of Upolu five years previously. She was in a de facto relationship and lived with her extended family. They spoke Samoan at home and her English was limited. Tala had a medium level of education and had worked as a fish filleter. She was classified as less Samoan oriented.

Tusiga was a 31 year old married woman who had emigrated to New Zealand from a village on Upolu 11 years before the interview. She had a low level of education and had been a
cook before starting her family. They lived in a nuclear family unit. Although Samoan was spoken at home, her English was quite good. Tusiga was classified as more Samoan oriented.

Manatua was born in the village of Savai'i but moved to New Zealand 11 years before the interview at the age of 19. She was married and lived with her extended family. Terry worked in a hospital and spoke good English although Samoan was spoken at home. Manatua was classified as less Samoan oriented.

Telesia was a 20 year old woman who had moved to New Zealand aged one. She had a medium level of education and worked as a clerk. Telesia was in a de facto relationship and lived with her extended family. She spoke fluent English to her children and Samoan to her mother. Telesia was classified as less Samoan oriented.

Tasi had moved to New Zealand with her husband 10 years previously. She was 29 years old with a medium level of education and, though she had worked, was now a housewife. Thelma lived in a nuclear family unit but had members of her extended family in Wellington. They spoke Samoan at home. Tasi had quite good English skills and was classified as more Samoan oriented.

Tasia was a 30 year old Samoan-born woman. She was married and living with her extended family. Before the birth of her children, she had worked in various manual occupations. Samoan was the home language and Tasia had difficulty expressing herself in English. She had many relatives in Wellington. Tasia was classified as less Samoan oriented.

Uila was from Savai'i and had been in New Zealand for two years. She had a low level of education and worked as a cleaner. 25 years old and married, she was living with extended family members. They spoke Samoan at home and Uila had limited English. She was classified as more Samoan oriented.
Some medical researchers have hypothesised that a relationship exists between the practice of Samoan traditional massage, in particular the practice of external cephalic version or 'turning' the baby and the higher than average stillbirth rate in Samoan infants in New Zealand. The process by which the researchers selected this hypothesis and discarded or rejected others, in seeking to explain the finding in 1981 that Pacific Islanders had the highest stillbirth rate in New Zealand is used here to exemplify the way in which bio-medicine reconstructs the beliefs and practices of other cultures within its own cultural understandings and practice.

The conclusion that traditional massage was the cause of the high stillbirth rate among Pacific Island infants was not one immediately made by the researchers. The original study which found that unknown gestation and no antenatal care were associated with the higher Pacific Island rate considered that early and regular antenatal care would reduce the stillbirth rate. Among the findings of the original study although it was not statistically significant, was that there was an "unexpectedly high incidence" of intrauterine death from intracranial haemorrhage. (Gunn and Hayden 1981, 296) Subsequent studies based on the original work have put forward further hypotheses to explain this phenomenon. In 1985, the hypothesis that the cause might be the practice of traditional massage, in particular the practice of external version, was proposed and further developed in 1989. (Becroft and Gunn 1985; Becroft and Gunn 1989)

From such a perspective, birth beliefs and practices of other than the obstetric culture are likely to be viewed with hostility. The research pathway although presented within a 'scientific framework' includes speculative conclusions based on limited evidence.

The main sources which the authors drew on in making their conclusions were from a narrow band of the medical literature which focused on reports and studies of intrauterine trauma and particularly those which involve intracranial haemorrhages. The literature included Journals of Obstetrics and Gynaecology, Paediatrics, Trauma, Neurology and General Medicine. In developing their hypothesis the researchers drew on the clinical observations of other medical practitioners. They cite information acquired by a visiting New Zealand obstetrician to Samoa, about the prevalence of traditional massage in pregnancy as well as unsourced medical opinion from other Pacific Islands that a link exists between stillbirth rates and traditional massage. They do not however cite reports from district nurses in Samoa many of whom work closely with Samoan traditional healers and midwives. The researchers also cite descriptions of Samoan massage (Kinloch 1985; Umaga 1983), which they reinterpret to fit their own understanding that the practice of version is potentially hazardous to the fetus.
When the authors do look outside the narrow band of medical literature to other literatures, they evaluate it within the context of their tentative diagnosis. They therefore discount the description in the anthropological literature of the essentially gentle nature of the massage practiced and assume if attempts are made to change the position of the baby that force is an inevitable factor involved. Surprisingly the authors make no reference to the vast medical literature which exists on the practice of external cephalic version which has been extensively reviewed by Brigitte Jordan. (Jordan 1984) The practice of external cephalic version is not something which only traditional midwives practice. Before caesarean section became a less risky operative venture, version was practiced by many obstetricians to reduce a breech before delivery. An examination of the medical and anthropological literature illustrates that the researchers developed their hypothesis within a narrow bio-medical context.

1. Becroft and Gunn place emphasis on the forceful nature of the manoeuvre involved in external cephalic version. However examination of the medical and anthropological literatures suggests that both obstetric and traditional practitioners stress the need to avoid force as illustrated in these quotations. Jordan describes her observations of a midwife carrying out traditional massage in the Yucatan. "If her hands encounter resistance in one direction, she will try the reverse, but emphasises that you should never apply force. What is important is to have patience and to guide rather than force the baby." (Jordan 1984, 645) Similarly an American obstetrician wrote, "with experience, one learns to be gently persistent withing reasonable physiologic limits, almost coaxing the fetus around and never exceeding safe limits of pressure and version." (Ranney 1973)

2. Neither does it seem in comparing Samoan methods of version with those reported of other traditional practitioners, that there is any particular difference in technique from other traditional approaches. (Kinloch 1985; Umaga 1983; Jordan 1984;) Jordan considers that there is little difference between the version techniques practiced by traditional midwives and obstetric practitioners. She bases this conclusion on her observation of external cephalic version as practiced by traditional midwives and obstetricians, interviews with practitioners and reports in the medical and anthropological literatures.

3. Three major potential risk factors associated with the practice of external cephalic version are identified in the literature. These include damage to the placenta, cord entanglement leading to fetal distress, and fetomaternal transfusion (Jordan 1984, 643). None of these complications were reported as significant factors by Becroft and Gunn (1985; 1989). On the other hand none of the literature on medically performed version, which
Jordan estimates contains reports on close to 10,000 cases include intrauterine death from intracranial haemorrhage as a possible risk factor (Jordan 1984).

The bio-medical pathway which the researchers adopted to explain the cause of a medically established condition, that is intracranial haemorrhage as a cause of fetal death, shaped their final conclusions, which though presented within a 'scientific' framework remain essentially speculative.
Appendix G
The Increase in Caesarean Rates

Concern about the rising rate of induction which provoked consumer criticism in the 1970's, has been replaced in the 1980's with concern and criticism of increases in the rate of Caesarean section. It is not the intention here to examine the debate on Caesarean section in detail, but rather to highlight the key aspects of the debate. Factors which have been shown to be associated with high caesarean rates include advanced maternal age, and women having their first baby. Between 70-75% of caesarean sections are said to be attributed to four indications: dystocia, fetal distress, previous caesarean section and breech presentation (Anderson and Lomas 1984).

Most studies attempting to explain the increase in caesarean section rates have focused either on differential characteristics of the obstetric population or on change and differences in obstetrical policy and practices, or on some mix of the two. It is likely that much of the international and national variation is in fact the result of differences in obstetrical practices rather than diversity in obstetrical populations.

Caesarean section which "was once considered the ultimate in drastic obstetrical intervention in labour is now considered simply another component of childbirth delivery systems" (Arney and Neill 1982, 146). Though a few 'absolute' indications for caesarean remain, the importance of these has been displaced in modern obstetric texts and in obstetric practice by 'relative' indications for caesarean section. In the texts reviewed, indications for caesarean were given as a list often with a table stating the proportion done for each indication at a 'teaching hospital', which was sometimes but not always identified. The implication of this would seem as Arney and Neill suggest, to act as guidelines for obstetricians in assessing their performance. This is illustrated in a 1978 study in a New Zealand hospital which found that compared to overseas hospitals, the overall rate for caesarean and for specific indications was low. Rather than conclude this reflected favourably on their own obstetric policy, the authors concluded that "with today's smaller family size and relatively lower uterine segment approach, caesarean section rates could be increased. More liberal use of caesarean section for breech presentations and prolonged labours would be reasonable" (MacLean and Blanchette 1978).
ENDNOTES TO APPENDIX

1. Any national obstetrical study in New Zealand is severely limited by the inability to match the delivery records of mother and baby, eg on such factors as educational status of mother, maternal parity and birth weight. (Linton et al 1988)

Appendix H
UNPUBLISHED PAPERS - CAESARIAN SECTION: A STUDY OF SAMOAN WOMEN IN WELLINGTON BY P. DONNELLY
CAESAREAN SECTION: A STUDY OF SAMOAN WOMEN IN WELLINGTON

Paper presented at
The Public Health Association of New Zealand Conference
Auckland

17-19 May 1989

Patricia Donnelly
Department of Community Health
Wellington School of Medicine
Wellington

Introduction
The results which I am presenting here today, represent a small part of a larger study on which I am currently working. This study examines the birthing experiences of Samoan women in Wellington, during 1984-85. The two main research objectives of the study were, firstly to describe the pregnancy and birth experiences of Samoan women as reported by the women themselves and secondly as reported by the health professionals involved. Today's presentation is based on data collected with the second objective in mind.

The sample was composed of all Samoan women who booked in for delivery at Wellington Women's hospital and Kenepuru hospital during 1984 and part of 1985. The point of entry to the study was the booking in visit made by the woman at one or other hospital. The two hospitals were selected because they provide different birth environments and thus allow certain comparisons to be made between birth in a high technology obstetric base hospital and a low technology peripheral hospital. The results presented today, relate to only one of the hospitals, ie WWH.

In carrying out the second objective, information on a large number of variables was collected from the hospital records of 248 Samoan women, on the antenatal, labour and postpartum experience of each woman. It was considered that the pregnancy and birth experiences of a woman, would be primarily influenced by three variables. First, as to whether this was her first baby or not.

Second, the socio-economic status of the woman. Education was chosen as an indicator of ses as most women were not in paid employment. Also, educational level has been found to be associated with women's attitudes to and differential use of health services.

Third, that new migrants would have different experiences to women who had been resident in New Zealand for longer periods.

Other variables considered also likely to be associated with differential pregnancy and birth experiences included maternal age, marital status, occupation and past obstetric history.
Before moving on to the topic of caesarean section, I would like to present a broad picture of the women in the sample.

**Table 1: Demographic outline of the Samoan women**

Most women were married, 85%

were having their second or subsequent baby, 72%

were migrants, 92%

who had lived in New Zealand for more than two years, 81%

had at least 3 yrs secondary education, 68%

and

were aged between 20-29 yrs, 62%

**Caesarean section:**
The increase in caesarean section rate has been observed, documented and debated in a number of countries.¹ The factors associated with this increase and the health implications for women and their babies remain a matter of controversy.

Most studies attempting to explain the increase in caesarean section rate have focused either on differential characteristics of the obstetric population or on change and differences in obstetrical policy or on some mix of the two.²
Where does New Zealand fit on the international scale of caesarean section rates?

Table 2  Caesarean section rates (per 100 hospital deliveries) in various countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>1983</td>
<td>20.3</td>
</tr>
<tr>
<td>Canada</td>
<td>1980</td>
<td>15.9</td>
</tr>
<tr>
<td>Australia</td>
<td>1981</td>
<td>14.0</td>
</tr>
<tr>
<td>Scotland</td>
<td>1982</td>
<td>12.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>1983</td>
<td>12.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>1982</td>
<td>12.4</td>
</tr>
<tr>
<td>England-Wales</td>
<td>1983</td>
<td>10.1</td>
</tr>
</tbody>
</table>
| New Zealand    | 1983-4 | 9.6  *
| Hungary        | 1983   | 9.5  |
| Norway         | 1983   | 9.4  |
| Belgium        | 1983   | 8.1  |
| Czechoslovakia | 1983   | 6.0  |

As can be seen New Zealand tends towards the lower rather than the higher end of the table in terms of overall rate. But as will be shown later, there is considerable difference in the distribution of this rate.

Caesarean section results:

In presenting a selection of the findings of the Wellington Samoan study, comparisons will be made with the caesarean experiences of other women in New Zealand and with Samoan women in American Samoa. Data for other women in New Zealand is based on the findings of a national study of Caesarean section 1983-84, as well as data on WWH.

Data on American Samoan women was obtained by analysing the 1979-1980 hospital admission/discharge file for women admitted for delivery at Pago Pago hospital.
Caesarean section rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samoan</td>
<td>17% (95%CI,13-22%)</td>
</tr>
<tr>
<td>women in sample</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>Samoan</td>
<td>26% (95%CI,19-33%)</td>
</tr>
<tr>
<td>women at WWH</td>
<td>1984-85</td>
</tr>
<tr>
<td>General</td>
<td>14.4% (95%CI,13.5-</td>
</tr>
<tr>
<td>population</td>
<td>15.3%)</td>
</tr>
<tr>
<td>at WWH</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>New Zealand study</td>
<td>1983-84</td>
</tr>
<tr>
<td></td>
<td>9.6% (95%CI,9.4-</td>
</tr>
<tr>
<td></td>
<td>9.8%)</td>
</tr>
<tr>
<td>American Samoan women</td>
<td>1979-80</td>
</tr>
<tr>
<td></td>
<td>7.8% (95%CI,5.1-</td>
</tr>
<tr>
<td></td>
<td>8.2)</td>
</tr>
</tbody>
</table>

What then was the overall rate of caesarean section for the Wellington study? Of the 248 women in the study, 17% (42) underwent a caesarean section. When only women who gave birth at WWH are included, the rate increases to 26% (42/163).

How does this rate compare with the general population of women who gave birth at WWH during that period? The answer is significantly higher. The average rate for the period at WWH was 14%.

How then does the rate at WWH compare to the overall NZ rate? The answer is also, substantially higher. During 1983-84 the NZ rate was 9.6%.

If Samoan women in Wellington have high rates of caesarean section, does this also apply to Samoan women in Samoa? The answer is not necessarily. Samoan women having babies in Pago Pago had caesarean rates one third that of Samoan women in Wellington. This rate 6.5% was even lower than the NZ rate and comparable to the lowest rate found in the comparative study referred to earlier.
Factors associated with caesarean section rates:
As there is insufficient time in the context of this presentation to describe all of the factors associated with caesarean section rates, I will present examples from:
First, the differences found in the characteristics of the women themselves and
Second, differences which could be attributable to obstetrical policy.

1) Characteristics of the women themselves
The major factors which appear to influence the rate of caesarean section in the study population are advanced maternal age, length of residence in New Zealand and parity.

I have chosen age as the example of differences among the women. (a Caesarean by age
A number of studies have shown an increase in rate of caesarean section with increasing maternal age. In particular, rates have been found to be highest in the >35yr old group.

Table 4 Caesarean section rates by maternal age

<table>
<thead>
<tr>
<th>Location</th>
<th>&lt;19</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellington</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samoan women</td>
<td>4.5</td>
<td>10.5</td>
<td>15.3</td>
<td>24.5</td>
<td>36.4</td>
</tr>
<tr>
<td>(p=0.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>women</td>
<td>6.0</td>
<td>8.0</td>
<td>10.6</td>
<td>12.9</td>
<td>21.0</td>
</tr>
<tr>
<td>Maori</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>women</td>
<td>7.3</td>
<td>7.8</td>
<td>8.7</td>
<td>9.5</td>
<td>16.6</td>
</tr>
</tbody>
</table>
Other NZ women
American Samoan women

*What was the relationship of age to caesarean in the Samoan study? There was a significant progressive increase from 4.5% for 14-19yr olds to 36.4% for 35-40yrs. So older women had significantly higher rates of caesarean section.

*How does this rate compare with other groups in New Zealand? The Samoan rate is higher for women over the age of 30, than the rate for Pacific Island women identified in the national study. In that study, Pacific Island women had the highest rate in the >35yr age group.

*Is this trend for increasing caesarean section with age also found in the American Samoan data? The answer is that the increase is not so steep, but nevertheless, women in the >35yr old group had the highest rate of caesarean section. However, the Wellington Samoan rate was two thirds that of the >35yr old American Samoan group.

Age and current caesarean stratified by previous caesarean

*What is it about age that leads to older women having higher caesarean rates? It has been suggested in some studies, that the association between maternal age and caesarean section can largely be explained by the higher rate of repeat caesarean sections amongst these women. However, the findings of this study do not support this contention. When caesarean rate by age is examined for multipara women who had not had a previous caesarean, a significant relationship between maternal age and caesarean rate remained. p=0.021.

In the national study, it was also found that stratifying for previous caesarean did not alter the pattern of caesarean rate increasing with maternal age.
Differences in caesarean rate and obstetric policy
I would like now to take an example from differences which may be attributable to obstetric policy. The example I have chosen, is the reasons given for performance of a caesarean.

*What were the major reasons given for performing a caesarean?

1. A considerable proportion of Samoan women had a principal diagnosis of long labour, of which 21% were for prolonged first stage.

2. The second most frequent major reason given for the operation was a previous caesarean. There was a high repeat caesarean rate. Nearly half of the caesareans performed, (18/42) were repeat caesareans. Of the women who had a previous caesarean, a very high proportion 82% (18/22) had a caesarean for this birth.

3. The third major reason given for performing a caesarean section is malposition and malpresentation of the fetus. It is probable that a number of these diagnoses would include breech presentations.

*How do these reasons compare with the distribution of diagnoses reported in the national study in New Zealand? Long labour was also the most frequent diagnosis given, but it occupies a less dominant place than in the Samoan study, 15% v 31%

The rate of repeat caesarean section attributed as a major reason for the current caesarean, was similar 17% v 12%. But as was shown earlier, examining major reasons given for the caesarean does not give a true indication of the rate of repeat caesarean section.

The rates for malpresentation and malposition were also similar between the Samoan study and the national data.
<table>
<thead>
<tr>
<th>DIAGNOSIS</th>
<th>ICD9</th>
<th>Wellington NO</th>
<th>Wellington %</th>
<th>National NO</th>
<th>National %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long labour: 662.0</td>
<td>662.0</td>
<td>13</td>
<td>31</td>
<td>1376</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(95%CI, 18-47)</td>
<td></td>
<td>(95%CI,14.5-16.0)</td>
<td></td>
</tr>
<tr>
<td>Abnormality of organs and soft tissues of</td>
<td>654.2</td>
<td>7</td>
<td>17</td>
<td>1115</td>
<td>12</td>
</tr>
<tr>
<td>the pelvis: 654.2</td>
<td></td>
<td>(95%CI,7-31)</td>
<td></td>
<td>(95%CI,11.7-13.1)</td>
<td></td>
</tr>
<tr>
<td>Malposition and presentation</td>
<td>652</td>
<td>7</td>
<td>17</td>
<td>1331</td>
<td>15</td>
</tr>
<tr>
<td>of fetus: 652</td>
<td></td>
<td>(95%CI,7-31)</td>
<td></td>
<td>(95%CI,14.0-15.5)</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>652</td>
<td>15</td>
<td>36</td>
<td>5205</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(95%CI,22-52)</td>
<td></td>
<td>(95%CI,56.6-58.7)</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>42</td>
<td></td>
<td>9027</td>
<td></td>
</tr>
</tbody>
</table>
Summary:

To summarise then, the major findings of this study are:

1) that the overall rate of caesarean section was higher among the Samoan study population, than any comparable group. The rate was almost two thirds that of Samoan women in American Samoa. The relatively low rate of caesarean sections performed in American Samoa is interesting for two reasons. Firstly, given that all women on the main island give birth in the base hospital at Pago Pago and given that the obstetricians are mainly from the US or are American trained, one would expect to see rates more similar to the US figure of 20.3% in 1983. Yet the rate of 6.5% in 1979/80 is lower than the 1983 New Zealand rate of 9.6% Secondly, if Samoan women in Samoa give birth without having high caesarean rates, what is different about Samoan women in New Zealand? Or put another way, what is different about New Zealand obstetric practices as these affect Samoan women? Do obstetricians in New Zealand faced with an 'overweight' older Samoan woman with perhaps a big fetus decide to operate when the obstetrician in Samoa would not? While some differences may exist in obstetric and other characteristics between Samoan women in Wellington and Pago Pago and there may be differences in level of resources available, it seems more likely that differences are better explained by differences in obstetric policy.

2) that the major factors which appear to influence the rate of caesarean section in the study population are:
   a) advanced maternal age; Samoan women in the study had higher age-adjusted rates in the over 30 age group than the Pacific Island rate in the national study. The Pacific Island rate was itself higher than for Maori and other women in the older age group. It would seem that Pacific Island women and Samoan women in particular are over represented in the caesarean rates for older women.

   b) length of residence; the highest rates were for longterm residents. When length of residence by caesarean section was stratified by age, the relationship remained, but it was no longer statistically significant.

   c) parity; when caesarean rate by parity was stratified by age, primiparas were shown to have a caesarean rate twice that of multiparas.
d) previous caesarean section; there is considerable debate in the literature about the necessity and appropriateness of adhering to the old maxim 'once a caesarean always a caesarean'. A number of studies report women safely delivering vaginally, having been given the opportunity to undergo a 'trial of scar'. Whether a woman should be given the opportunity to choose, whether she wants a repeat caesarean or the chance to labour normally, is less rarely discussed. One suspects that in the majority of cases the chance to choose is never made explicit to the woman or her partner.

e) low or heavy birthweight of the baby; for many years, caesarean section rates have been high in the low birth weight infant population. International comparisons however show a wide range of caesarean rates for low birth weight infants. There is little reporting of the influence of heavy weight infants on caesarean rates. Data from the Wellington study seem to confirm the suggestion made in the national study, that heavy birthweight babies of Pacific Island women, in this case Samoan women, may contribute to the higher caesarean rate among these women.

3) the most frequent major reasons for performing a caesarean in the Samoan study were:
1) Long labour: In a study of American Samoan women, it was suggested that Samoan women may have different labour patterns to other women ie a lengthy first stage, punctuated by periods of uterine inactivity, followed by resumption of normal contractions and cervical effacement. This pattern it was suggested could result in a higher proportion of migrant Samoan women in America ending up requiring a caesarean section because of this unexplained phenomenon and the protracted labour.

Prestudy discussions with midwives at WWH also indicated that they felt Samoan women have 'funny' ie unpredictable labour patterns. Whether Samoan women have a different labour pattern to other women, which may be interpreted as failure to progress in obstetric terms and thus increase the woman's chances of having a caesarean section can not be conclusively proven by the data.

2) Previous caesarean section: Samoan women in the study had a high rate of repeat caesarean. Some studies have suggested that the rapid increase in the caesarean rate in the US and Canada may be largely because of the greater number of repeat caesareans performed in those countries.

3) Malpresentation and malposition: When this involved a breech presentation. There is considerable debate as to the necessity and desirability of performing a caesarean for a breech presentation in the absence of obstruction.
Future research:
Like many studies these research findings raise questions which I feel merit further investigation. These include:

1) What role does ethnicity play in contributing to the high caesarean rate among Samoan women in Wellington and Pacific Island women in general? Is heavier birthweight of their babies a sufficient reason?

2) If women in American Samoa both residents and migrants from Western Samoa give birth without having high caesarean rates, what is different about Samoan women in New Zealand? Or put another way, what is different about New Zealand obstetric practices as these affect Samoan women?

3) Do different rates exist for Samoan women in different hospitals in New Zealand? If so, how do obstetricians come to make the choices they make and to what extent are they constrained by the prevailing obstetric policy of the hospital?

4) Finally, is there consensus among New Zealand obstetricians about what constitutes an acceptable caesarean section rate in New Zealand and what are acceptable reasons for this operative procedure?
References:


4. Martel M et al op cit

   Notzon et al op cit

   Linton et al op cit
