

**Culture, Risk and HIV:
The Case of Black African Migrants
and Refugees
in Christchurch, New Zealand**

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Abstract

Black African migrants and refugees are disproportionately affected by heterosexually acquired HIV in New Zealand. Despite this, there are no data on their HIV related sexual attitudes, beliefs and behaviours. This sequential mixed methods study aimed to address this gap. The study had four phases: community consultation, social mapping, a survey, and focus group discussions. Ten community researchers were nominated during consultation and received training in research methods. The community researchers used social mapping techniques to identify social venues and events (such as churches, mosques, soccer games, drums of Africa, Miss Africa Christchurch, baby showers, hair salons, universities, colleges and formal and informal community organisations) from which to recruit participants for the survey phase. The questionnaire from the Mayisha I study in the UK was adapted for use in this study. The survey used a self-administered questionnaire on HIV-related sexual behaviours, attitudes and practices. A sub-sample of survey participants was purposively selected and invited to attend the focus group discussions to explore the issues identified in the survey findings in more depth.

In total, 250 participants completed the survey questionnaire and five focus groups were conducted. Participants came from 13 different countries in Africa (Tanzania, Kenya, Ghana, Nigeria, Somalia, Ethiopia, Eritrea, Sudan, South Africa, Zimbabwe, Zambia, Malawi and Botswana). Risk factors identified in this study included low condom use, low HIV risk perception, having more than one sexual partner (including concurrently) and previous sexually transmitted disease (STD) diagnosis. Focus group discussions identified that cultural beliefs and practices played a key role in influencing risk perception, attitudes towards condom use, the practice of multiple concurrent partnerships (MCP), and gender violence. Some of these beliefs were not compatible with the biomedical understandings and approaches that commonly underpin HIV prevention programmes. There is a need therefore to develop HIV prevention programmes that are culturally informed and appropriate to the needs of black Africans in New Zealand.

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My PhD journey has been a humbling one. There were two main events on that journey that I will always remember. First, the death of my original supervisor, the late Oliver Davidson, whom I had known and worked with for four years. This was a big loss for me and it took me time to get back on track. Second, the two major earthquakes that hit Christchurch in September 2010 and February 2011 which meant the loss of our Department's building and working space. The earthquakes have affected every aspect of our lives, then and since.

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Dedication

This thesis is dedicated to my first supervisor, the late Associate Professor Oliver Davidson (July 1959 – July 2009). Without him this study would not have been possible.

You will never be forgotten Oliver and your work among Africans will live on.

Abbreviations

ABC	Abstain, Be faithful, Condom use
AEG	AIDS Epidemiology Group
AIDS	Acquired Immune Deficiency Syndrome
ARV	Antiretroviral
BBC	British Broadcasting Cooperation
BC	Before Christ
CALD	Culturally and Linguistically Diverse
CD4	Cluster of Differentiation 4 (a glycoprotein found on the surface of immune cells)
CDC	Centres for Disease Control
CI	Confidence Interval
CNN	Cable News Network
DAH	Deutsche AIDS-Hilfe
DHS	Demographic Health Survey
ECDPC	European Centre for Disease Prevention and Control
EU	European Union
FGM	Female Genital Mutilation
FHI	Family Health International
GPA	Global Programme on AIDS
HAART	Highly Active Antiretroviral Therapy
HBM	Health Belief Model
HIV	Human Immune-deficient Virus
HPA	Health Protection Agency
HSV	Herpes Simplex Virus
IAS	International AIDS Society
IOM	International Organisation for Migration
KFF	Keiser Foundation Fund
MAA	Migrants Against AIDS
MC	Male Circumcision
MCPs	Multiple Concurrent Partnerships
MH	Mantel Haenszel
MSM	Men who have Sex with Men
NAP	National AIDS Programme
NZ	New Zealand
NZAF	New Zealand AIDS Foundation
NZIS	New Zealand Immigration Services
PHAC	Public Health Agency Canada
PMTCT	Prevention of Mother To Child Transmission
RNA	Ribonucleic Acid
SPSS	Statistical Package for the Social Sciences
SSRC	Social Science Research Council
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TACAIDS	Tanzanian Commission for AIDS
TRA	Theory of Reasoned Action
TZ	Tanzania

UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Education Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children Education Fund
USA	United States of America
USAID	United States AID agency
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

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Preface

My involvement with HIV/AIDS started early as a child. I was born in Karagwe District, which is located in the North-Western corner of Tanzania near Lake Victoria. It is one of the six districts in Kagera region, others being Bukoba town, Bukoba rural, Muleba, Ngara and Biharamulo, Karagwe covers an area of 7,716 square km. Karagwe borders the Republic of Uganda in the north, the Republic of Rwanda in the west, the districts of Ngara and Biharamulo in the south and Muleba and Bukoba districts to the east (Karagwe 2009). The first cases of HIV/AIDS in Tanzania were diagnosed in the Kagera region in 1983 and by 1986, all regions of Tanzania had reported AIDS cases and the region was the epicentre for HIV/AIDS in Africa. (TZ-Government 2001). Currently UNAIDS (2008a) estimates that the number of adults with HIV/AIDS in Tanzania is around 1,400,000.

People from Kagera region where Karagwe is situated, carried the brunt of stigma from other parts of the country. They were blamed for bringing HIV into Tanzania and for spreading the virus to other tribes through their “promiscuous” and “reckless” behaviours. During that time, HIV/AIDS caused havoc in Kagera region; people were dying in numbers every day. Streets were practically devoid of adults, only young children and the very old seemed to be untouched by the epidemic. At first, no one knew what the disease was, the main symptom was the loss of weight, and people became so thin that they called the disease ‘*slim*’. I still remember the immense suffering AIDS brought into my area. Singing and dancing that used to be a norm was gone, mourning replaced the drums and older people wondered what had descended onto the land. I was living with my maternal grandparents during my primary school years in the 1980s. At first my family was untouched by the epidemic but by the early 1990s, AIDS had selectively started killing my close family members. It was as if once AIDS has entered in a certain family, all young adults were targeted. It was not until later I understood that what was taking place may be due to the cultural practice of sharing spouses among relatives. I remember parents who would walk around showing the graves of their sons and daughters who were buried in the backyards. Traditionally, people are buried in their land so it was common to have siblings lying beside each other. The stigma associated with AIDS was unimaginable; the intense

shame about having a family member die of AIDS then, cannot be described in words.

I went through high school and compulsory National Service or military training, away from home. All the time I got letters from home informing me that ‘so and so is dead’. Couples died the same day or a few days apart, leaving behind young children. On my return from military service, I joined an AIDS organisation that was run by a church and I trained as a counsellor in Zimbabwe in the mid-1990s. The centre provided treatment for opportunistic infections as there was no anti-retroviral treatment available in Tanzania. The home-based care programme provided care for those AIDS patients who could no longer attend the clinic. Clients were dying on a daily basis; it was common to visit a home and find tents erected, which was a sign that a person had died. Sometimes we found children around a dead parent or patients who had died alone because of isolation from family members. On some occasions we had to clean our patients because no one else was willing to touch them. Families were hiding dying patients because of fear of being stigmatised. Helen Epstein (2007) explained this phenomenon in Southern Africa as follows:

“Everywhere I went in Southern Africa, AIDS-related shame and denial seemed to hang over the region like a spell. Many AIDS patients suffered and died in their house cared for with compassion but in silence, their condition shrouded in euphemism. Occasionally, those known to be HIV positive would be thrown out of their houses, scorned by their relatives, or quietly fired from their jobs when their status becomes known or even suspected” (2007 p 141).

My work involved pre-test and post-test counselling for HIV and general counselling for people affected by or infected with HIV/AIDS. I was also involved in conducting HIV education, training counsellors and developing Information, Education and Communication (IEC) materials. The centre had a medical doctor who was a nun from the United Kingdom, a nurse who was also a nun from Italy, two counsellors, a medical assistant, a driver and a director who was a Catholic priest from France. After providing counselling for my clients, a nurse would take a blood sample which was kept in the fridge and then taken by motorbike to the main medical test centre to test for HIV. Test results were then collected in two weeks’ time by our motorcycle driver who would take the sample there and bring back the results of previous tests. One day he was stopped by the traffic police who searched him and asked what he was carrying. He replied, “HIV” and he was released immediately. Most people who came

to us for testing were worried about being infected or had AIDS-related symptoms and most of the results came back positive for the HIV. On average, I had eight counselling sessions a day and at least six of these eight would have an HIV positive test result.

Part of my pre-test counselling for HIV involved asking intimate sexual details to assess the risk of HIV infection. It was at that time I became interested in sexual behaviours because my counselling sessions sometimes left me confused. I realised that both men and women had multiple sexual partners but pretended to have none or to have only one. Counselling couples together became a challenge, and I learned very fast that I needed to talk to them separately as it was impossible to assess their HIV risk based on the information given while the two of them were present. There was a widely held belief that all women were victims of the promiscuous sexual behaviours of men and men too subscribed to that idea and blamed themselves if their wives or girlfriends became infected with HIV. But my counselling sessions revealed something different. Women too, had secret lovers, but were highly secretive about it and hoped that their husbands would not find out.

I remember one case, a couple came to me, the wife was very angry blaming her husband of twenty years that he might have infected her with HIV because she felt unwell. The husband was subdued because indeed he had multiple extra-marital affairs, he too was very worried that he may be infected and might have passed on the virus to his wife. They both agreed to test for HIV and the wife warned the husband that if he had infected her, he would suffer the consequences. The results came back, the woman was HIV positive and the man was HIV negative. We all doubted the results and the more advanced Western Blot test was ordered. The husband paid for the test and when the results came back they confirmed those of the earlier test. Later the wife confessed to having extra-marital affairs over the years, but nobody knew as she was always at home. I learned that both men and women were capable of engaging in risky sexual behaviours but the feminist movement by then was strong and male behaviours became the focus. The Tanzania Commission for AIDS (TACAIDS) website lists '*men's irresponsible sexual behaviours*' as one of the key drivers of the HIV/AIDS epidemic (TACAIDS 2009) while women's sexual behaviours are not commented on.

My counselling sessions with young people were no different: having multiple sexual partners concurrently was a norm for both young men and women. Most of them could not recall how many sexual partners they had for the past year. When I moved to Swaziland and worked for an HIV testing and health centre in 1997, the same trend was evident: both men and women had concurrent multiple sexual partners. At that time, no research was conducted to link this particular sexual behaviour to the out-of-control HIV epidemic in Africa.

When I arrived in New Zealand in 2000, I found a different kind of HIV/AIDS scenario. First, the prevalence was very low; second, those infected with HIV had free access to HIV treatment that prolonged their lives. It was a challenging time for me to adjust to this kind of reality. It was at that time I became particularly upset by the realisation that Africans would have lived longer if they had access to HIV treatment. While in Africa, there were no drugs for anybody so it was an accepted reality that most people infected would die, therefore death and HIV infection were linked. We accepted that there was nothing we could do to prolong the lives of many of our clients including our family members. In New Zealand, I thought of my clients who used to ask God to prolong their lives just for one year so that their children could finish school. I thought also of those who chose not to buy medicines to treat opportunistic infections so that they could pay for school fees for their children and as a result they died faster. I was also surprised at the way the world was oblivious to what was happening in Africa. It was as if genocide was going on and western countries had turned away. In addition, I attended HIV/AIDS related meetings in New Zealand and found that some health professionals were campaigning hard against allowing foreigners with HIV to live in New Zealand. In one incident, they called out to an immigration official in the meeting and practically shouted at her and insisted that immigration rules must be changed. One of them said “we cannot spend over \$10,000 a year per person to treat these bloody Africans while my own grandmother cannot get a hip replacement operation”. Such encounters were so upsetting for me because I knew that slow and painful death awaited those deported with HIV/AIDS.

In 2001, one year after my arrival to New Zealand, I worked for a refugee health education programme as a national education coordinator. My job involved developing education materials and training African trainers for HIV/AIDS education.

I also worked for a year for the New Zealand AIDS foundation as an African support worker; my job was to offer counselling to Africans with HIV/AIDS in Christchurch and the South Island. Most migrants and refugees had other resettlement challenges, such as isolation from families and trying to cope in a culturally different country. Sexual health was not a priority for either providers of services to migrants and refugees, or to migrants themselves. In my Master's thesis, I looked at attitudes towards voluntary counselling and testing for HIV among black African migrants and refugees in Christchurch. My findings suggested that most Africans viewed HIV diagnosis as a death sentence. In 2007 I joined the Mayisha NZ¹ study as an assistant research fellow and a PhD student. The Mayisha study is described in detail later.

¹ Mayisha NZ follows the basic model of the one conducted in the United Kingdom, where the study was designed to study sexual behaviours and lifestyles of black Africans in London

Chapter 1 Introduction

1.1 Introduction

HIV/AIDS is the worst epidemic in history and it has killed over 25 million people since the virus was first identified in 1981 (UNAIDS 2007b). Sub-Saharan Africa is the most affected region in the world and accounts for two thirds of the 33.4 million people living with HIV/AIDS worldwide (UNAIDS 2009). The Acquired Immune Deficiency Syndrome (AIDS) was first described by the Centres for Disease Control (CDC) after the diagnoses of an unusual cancer, Kaposi's sarcoma, and *Pneumocystis carinii* pneumonia among homosexual men in North America (CDC 1981). AIDS is caused by Human Immuno-deficiency Virus (HIV) which is a retrovirus transmitted from an infected person through exchange of body fluids, principally through blood transfusions, contaminated needles, or unprotected sex with an infected person (WHO 1988). HIV can also be transmitted from mothers to infants during pregnancy, childbirth, or breast feeding. Many people who have HIV do not feel sick and may not know they are infected until years later, when the symptoms of AIDS finally appear. Symptoms associated with AIDS include loss of body weight, chronic fatigue, diarrhoea, respiratory problems, swelling of the lymph nodes and deterioration of the central nervous system. HIV/AIDS weakens the immune system and presents a pathway for opportunistic diseases such as tuberculosis, pneumonia and meningitis (WHO 1988).

HIV/AIDS prevalence in New Zealand is still very low and the virus has historically affected men who have sex with men (MSM) (AEG 2008). However, the epidemiology of HIV/AIDS has begun change with an increase in incidence in heterosexual populations, especially among those from high prevalence countries, especially Sub-Saharan Africa. Africans in New Zealand carry a disproportionate burden of HIV. Surveillance data from the New Zealand AIDS Epidemiology Group (AEG) show that black Africans are the second group most affected by HIV/AIDS behind men who have sex with men or MSM (AEG 2008). For example, despite making up less than 0.4% of the total New Zealand population (Statistics-NZ 2007), 22% (440 out of 2053) of people diagnosed with HIV/AIDS since 1996 are African. In addition, Africans account for nearly half (48% of men and 50% of women) of all

heterosexually acquired HIV infections in New Zealand.

Although the majority of Africans who have been diagnosed with HIV in New Zealand (96% of men and 91% of women) are believed to have been infected in Africa, there has been a small rise in the number of Africans infected with HIV in New Zealand (AEG 2010). For example, in the year 2009, the number of people who were heterosexually infected with HIV in New Zealand was 19 and 7 (37%) of those were African (AEG 2010). Although the New Zealand Immigration Services (NZIS) introduced mandatory HIV testing in 2005 for people applying to live in New Zealand for 12 months or longer (NZIS 2005), it is likely that at least some Africans may have already had undiagnosed HIV when they came to New Zealand. In addition, the increase in the number of Africans who have been infected in New Zealand may suggest that HIV may be spreading silently. Indeed, the current HIV/AIDS New Zealand report shows that of the four men infected heterosexually in New Zealand and diagnosed in 2010, two reported having a partner from a higher-prevalence country, and of the six women infected heterosexually, three were infected by a partner from a higher prevalence-country (AEG 2011). It is worthy of note that information on the partners of the remaining two men and three women was not available. Although the report did not explicitly mention that “higher-prevalence countries” were in Africa, it is reasonable to assume that some of those partners were African.

Since HIV acquisition and spread is largely determined by sexual behaviours, it is crucial to study and understand sexual behaviours among the affected groups. Although there has been a concerted effort to confront HIV among MSM in New Zealand, including periodic sexual behaviour surveys (Saxton, Dickson et al. 2002; Saxton, Dickson et al. 2003; 2004; Saxton, Dickson et al. 2006; Saxton, Dickson et al. 2010), there has been no research on knowledge, attitudes and sexual behaviours among Africans in New Zealand. Primary interventions currently offered to these communities are largely concerned with HIV/AIDS education and condom use. Unfortunately, there are no baseline data on these communities’ HIV-related knowledge, attitudes and behaviours so it is difficult to know whether these interventions are appropriate and are effectively targeting specific risk factors. This places a substantial burden on those service planners and providers who are

responsible for the allocation of primary and secondary HIV prevention resources in New Zealand, as they have little or no evidence base on which they can base informed decisions. This study seeks to address this gap in knowledge and understanding. This research is broadly based on the principles of the Mayisha 1 UK, with a few modifications.

1.2 The Mayisha Studies: UK and NZ

Mayisha is a broken Swahili word (the correct spelling is Maisha) for life or lifestyle. The Mayisha study was first conducted in the United Kingdom (UK) in 1999 to study HIV-related sexual behaviours and attitudes among Africans living in inner London (Chinouya, Davidson et al. 2000). During that time, the UK was facing an increasing number of HIV diagnoses among Africans and Mayisha I was conducted to study sexual behaviours to inform interventions. In total 748 respondents (396 men and 352 women) were recruited for the study. Major findings in this study were: over 60% of respondents did not feel that they were at risk of contracting HIV, a quarter of respondents had been previously diagnosed with a sexually transmitted disease and less than half reported using a condom during their last sexual intercourse. The Mayisha I study was followed by Mayisha II, a similar study that extended to include two areas outside London that had significant numbers of Africans. In addition, Mayisha II included a measure of HIV prevalence using antibody testing of oral fluid. In total 1359 eligible black Africans were recruited, of whom 74% provided a sufficient oral fluid sample for HIV testing. Overall 14% tested HIV positive and nearly 60% of those were previously undiagnosed (Sadler, McGarrigle et al. 2006).

One of the principal investigators for both Mayisha I and II was Associate Professor Oliver Davidson, who returned home to New Zealand in 2005 from the United Kingdom to take up an appointment at the Department of Psychological Medicine, University of Otago, Dunedin. Because of his involvement with the Mayisha studies in the UK, he was interested in carrying out a similar study in New Zealand as no such research had been conducted here. He was awarded an Otago University research grant to establish the Mayisha NZ project to conduct similar research in New Zealand. I was hired to work as an assistant research fellow on the Mayisha NZ project. Mayisha NZ was to be similar to the Mayisha I in the UK in its overall design and recruitment strategies but with the addition of a second phase consisting of focus

group discussions. Sadly, Oliver died in July 2009 before the Mayisha NZ study could be fully realised. The Mayisha NZ project would never have happened without his dedication and enthusiasm and its future is still unknown. However, this PhD project utilises the model developed for Mayisha NZ, and applies it in one city in New Zealand.

1.3 Aims and Objectives

The aim of this research was to investigate HIV-related sexual behaviours, attitudes and lifestyles of black African migrants and refugees in Christchurch using both a survey and focus group discussions. The specific objectives were to determine among this group:

HIV related attitudes, beliefs and behaviours

- Sexual behaviours that increase HIV transmission among this group
- Factors that influence the reported behaviours, attitudes and beliefs.

During the course of the thesis, these objectives were modified, at least to some extent, as will be discussed in the conclusion to the thesis.

1.4 Structure of the Thesis

This thesis is organised in eleven chapters. Chapter Two summarizes the historical context of black Africans in New Zealand and HIV immigration policies both locally and internationally. The chapter highlights that strict immigration policies around HIV cannot protect the host population from HIV infection and to the contrary, those infected may not seek help hence increasing the risk of transmission. Chapter Three looks at the epidemiology of HIV/AIDS both globally and in New Zealand.

Chapter Four examines the factors that determine the spread of HIV in a human population. These factors are classified as biological, socio-cultural and socio-economic. The concept of the reproductive rate is discussed in detail. Socio-cultural factors such as sexual behaviours that increase the risk of HIV transmission, especially the practice of multiple concurrent partnerships (MCPs), are examined. This chapter also shows how other factors such as gender, education and poverty may

or may not increase the risk of HIV transmission. Measures currently used to control the spread of HIV in Africa are discussed.

Chapter Five reviews the literature on black Africans in diaspora and HIV/AIDS. It looks at studies conducted in North America, Europe, Australia and New Zealand and it examines the risk factors and risk behaviours for HIV among black Africans in the diaspora as well as gaps in the literature. Chapter Six examines theoretical concepts used in this study as well as other theories commonly used in HIV prevention and research. Methods and methodology are explored in Chapter Seven. The chapter explores the use of mixed methods approach in conducting this study that included the survey and the focus group discussions. Chapter Eight presents the findings from the survey while Chapters Nine and Ten present the findings from the focus group discussions. The last chapter, Chapter Eleven, outlines the conclusions of the thesis.

Chapter 2 Black Africans, New Zealand and Migration Policy

2.1 Introduction

The links between New Zealand and Africa go back to the colonial past because white settlers were allowed to move freely between British territories or empires. African countries under British rule were called British Africa Possession. According to the New Zealand census, in 1871 around 65 people were born in Africa, the 1911 census recorded 92 people born in Africa and by 1986, there were 3,939 people born in Africa (NZ-History 2011). The majority of all those born in Africa were white and came from Commonwealth countries. This chapter looks at the history of Africans in New Zealand as well as the international and local immigration policies towards migrants and refugees.

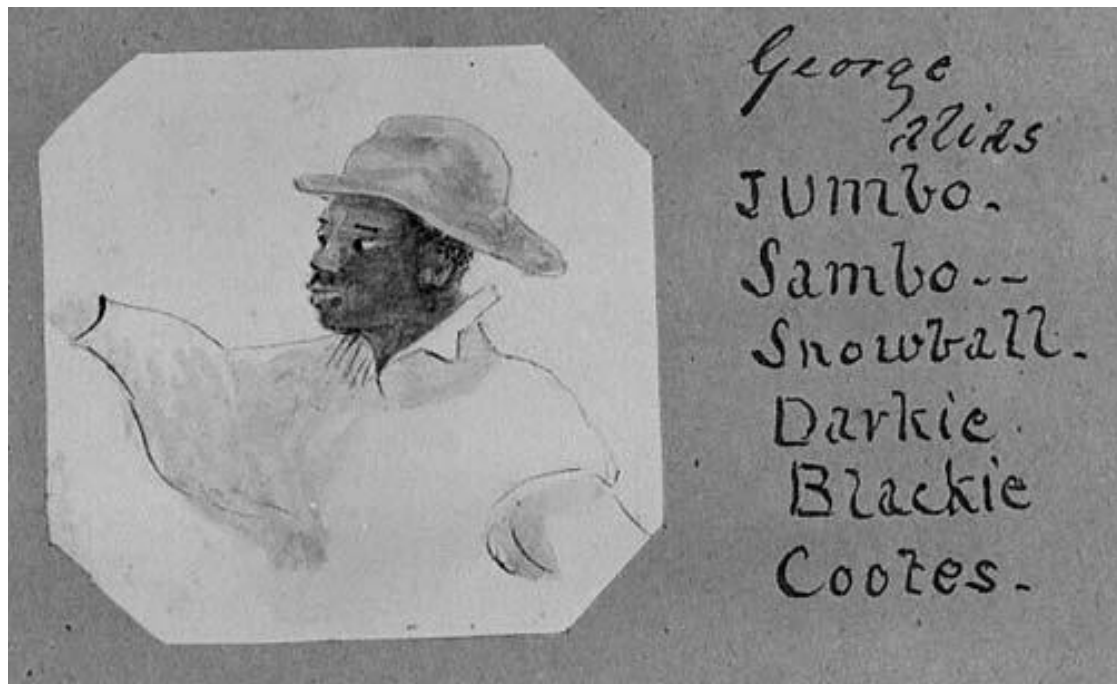
2.2 The Historical Perspective

It is not clear when the first black Africans arrived in New Zealand, however, the first record of a black African being in New Zealand was in 1773. According to the Encyclopaedia of New Zealand, the first black African was a servant of Captain Furneaux who was travelling aboard the ship ‘Adventure’ on James Cook’s second voyage in 1773. He was one of the ten men killed by Māori in Queen Charlotte Sound in December 1773 as reported in Act II of the Second Voyage of Captain Cook:

“However, in gathering wild greens in nearby Grass Cove, all ten crew members of a cutter were savagely attacked and killed by Maori Indians, and their bodies were cannibalized” (NZ-History 2011 p 1).

In both the 1830s and 1851 a few Africans arrived with settlers, especially on the vessel the ‘Duke of Portland’. According to the Encyclopaedia of New Zealand, black Africans were not well received and they faced racism as is evident in the way that one passenger (John Pearse) on the settler’s ship in 1851 depicted ‘George’ in Figure 1 below:

Figure 1: The Sketch of a Black African Named George in 1851



Source: Alexander Turnbull Library (Reference E-455-f-009)

In the 1916 census it was recorded that 95 ‘Negros’ were in New Zealand and of those, six were Abyssinians (Ethiopian) and two were Egyptians, the rest were black Americans. The Special Commonwealth African Assistance Plan provided hundreds of scholarships for African students in the early 1960s and by 1972 around 266 African students had completed their studies. The photographs from the Archives of New Zealand (Figures 2 & 3) below are examples.

Figure 2: Ghanaian Dental Nurse Trainees with the Mayor of Wellington, Francis Kitts in 1963



Source: Archives New Zealand - Te Rua Mahara o Te Kawanatanga (Reference: A84264)

Figure 3: A Tanzanian international student at the National Publicity Studios looking at a patu with Mrs J. Carlyon in Wellington in 1968



Source: Archives New Zealand - Te Rua Mahara o Te Kawanatanga (Reference: A84264)

Although black Africans were able to study in New Zealand before 1990, immigration policies did not allow people from outside the United Kingdom and Ireland to immigrate to New Zealand. As noted by Belich (2001 pg 223), “New Zealand immigration policy discriminated positively in favour of Britons; it discriminated negatively against most other groups”. Beaglehole (1988 pg 6) argues that the pro-British immigration policy was racist in nature as it maintained that “Refugees should be of a racial type considered to be readily assimilable namely from the Baltic States of Estonia, Lithuania and Latvia”. As a result of this policy, the New Zealand Government declined numerous applications from Jews who were fleeing the Nazi persecution in Europe (Beaglehole 1988).

The number of black Africans rose dramatically in the early 1990s due to political instabilities in Somalia, Ethiopia, Congo, Rwanda, Burundi, Eritrea, and in recent years, Zimbabwe. Changes to immigration policies also provided opportunities for

Africans to migrate to New Zealand as skilled migrants as well as international students. In the 2006 Census, people were asked to identify their ethnic group and 7,398 people indicated that their ethnicity was African (Statistics-NZ 2007). Of the 7,398 who indicated that they were African, 2316 were Somalis and the rest were from other African countries.

2.3 The Differences Between Refugees and Migrants

Africans in New Zealand come as either migrants or refugees. Migrants are often in New Zealand temporarily as workers, students or visitors. Long term migrants are those on resident visas or who have become citizens. It is important to note that there is a difference between a migrant and a refugee. Refugees are people who flee their country of origin and cross national borders. Migrants choose to leave their homeland and are able to go back if they wish. The following definition of a refugee was adopted in 1951 by UNHCR assembly as:

Owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his/her own nationality and is unable or, owing to such fear, is unwilling to avail himself/herself of the protection of that country; or who, not having a nationality and being outside the country of his/her former habitual residence, as a result of such events, is unable or, owing to such fear, is unwilling to return to it (UNCHR 1951).

New Zealand accepts refugees for permanent resettlement through three main avenues: the United Nations High Commission for Refugees (UNHCR) quota, asylum seekers, and immigrants who wish to be reunited with their families. Under the UNHCR quota system, New Zealand has accepted 750 refugees per year from UNHCR since 1987 (Kizito 2001). Refugees are selected within three main categories: the women at risk, medical/disabled and other (Worth, Reid et al. 1997). The women at risk category comprises women who are recognised as refugees by UNHCR and who are in a refugee camp and are either alone, or alone with dependent children, and who are at risk from harm within the refugee camp (for example, from other rival factions from their country of origin). The medical/disabled category comprises people recognised as refugees by the UNHCR and who have a medical condition or a disability, for example due to polio or amputation, which cannot be adequately treated in the country of refuge, and it is considered they can be treated or

helped in New Zealand. The total number of medical/disabled category refugees accepted is approximately 75 per year (Mortensen 2008).

The 'Other' category comprises people regarded as a high priority by UNHCR. They include those in need of protection, those in an emergency situation, and those who would formerly have entered under the family reunification quota or people recognised as refugees and who have immediate family links in New Zealand. A second less formal, system operates whereby refugees may be accepted as asylum seekers. Asylum seekers are refugees who have fled their homeland and made their own way to New Zealand. Most enter New Zealand legally on a visitor's visa or work permit and subsequently apply for refugee status. Some seek refugee status on arrival at the border. Claims for refugee status are confirmed or rejected by the New Zealand Immigration Service depending on whether their circumstances meet the criteria set out in the United Nations Convention Relating to the Status of Refugees (Mortensen 2008). Those who are successful are then eligible to apply for permanent residence, and later New Zealand citizenship.

As discussed earlier in this chapter, in 1991 New Zealand adopted an immigration policy that allowed immigrants from countries other than the United Kingdom and Ireland to immigrate. Migrants and refugees may have different health needs because migrants tend to be more educated, speak English and are more able to secure employment when compared with refugees (Mortensen 2008). In addition, refugees may suffer from a range of psychological problems because they may have experienced torture, rape, imprisonment and displacement. Table 1 below summarizes the differences between migrants and refugees.

Table 1: The Differences Between Migrants and Refugees

Migrants	Refugees
<p>Migrants choose to leave their homeland and settle in a country of their choice. They arrange the most suitable method of travel and pack the possessions they wish to take. They can sell or dispose of possessions they don't wish to take.</p>	<p>Refugees do not choose to leave their homeland. They flee in response to a crisis. They have little choice about where they go and by what means they will travel. They have no time to pack or to distribute possessions. Almost everything is left behind.</p>
<p>Migrants have time to prepare emotionally for their departure and to farewell friends and family appropriately.</p>	<p>Refugees, due to their hurried, often secret departure, are unprepared emotionally for leaving, and may not have time to farewell loved ones.</p>
<p>Migrants take with them their travel documents, passports, and other documentation, including educational qualifications.</p>	<p>Refugees often flee without any documentation whatsoever.</p>
<p>Migrants usually emigrate with their families.</p>	<p>Refugees must often leave family members behind.</p>
<p>Migrants depart for their new country knowing that they can return to their homeland for visits, or return permanently if they cannot settle.</p>	<p>Refugees, although they dream of returning home, know that this is unlikely to happen.⁷</p>
<p>Migrants are usually well prepared and well motivated to settle in a new country. Many will have found out about schools, employment and local conditions before they left their homeland.</p>	<p>Refugees arrive in their new country ill-prepared and often traumatised. They have little in the way of possessions and financial resources. They are often debilitated by a pervading sense of loss, grief, worry and guilt about the family left behind.</p>
<p>Migrants, due to their better levels of health, education and economic independence, are less likely to encounter negative attitudes in their resettlement country.</p>	<p>Refugees may experience stigma and prejudice in their resettlement country in relation to cultural differences, disease prevalence, low education levels and perceived burdening of the welfare system.</p>

Source: 2001 Ministry of Health New Zealand (Refugee Handbook pg 5)

2.4 Immigration Policies on HIV/AIDS

2.4.1 International Policies

One thing which has been notable about HIV/AIDS is its ability to give rise to fear and panic in the mind of individuals and policy makers. When HIV was discovered, little was known about the way it was transmitted and prevented. According to Wiessner and Lemmen (2008), the earliest and most enduring response by many governments was the imposition of restrictions on entry for people with HIV/AIDS. Governments established travel restrictions believing that they could stop HIV from crossing their borders. These restrictions included mandatory HIV testing and refusing entry to those with HIV (UNAIDS/IOM 2004). Some countries, according to Amon (2009), first denied the existence of HIV, and second, blamed foreigners for bringing the disease.

Countries that impose HIV-related travel restrictions use two arguments to support their policies. The first is that they want to protect the health of their citizens, and the second is to avoid the potential economic burden on the health care system and the related costs that may be generated by HIV infected non-citizens (UNAIDS/IOM 2004). However, the WHO opposes such measures because HIV in itself is not a threat to public health in relation to travel because it cannot be transmitted by casual contact or by the mere presence of the person (WHO 1987). It is transmitted through specific and private behaviours and HIV is already present in every country in the world. Screening foreigners may not stop the HIV from entering the country concerned because people can still show a negative test result if they have been infected and their body has not yet made antibodies against HIV. This is called the 'window period'. Regarding the cost to the health system, most people with HIV can live a long and productive life if they get the appropriate treatment and may therefore spend many years as productive citizens. In addition, WHO (1987) argues that implementing a screening programme for all visitors would cost nations more than it would cost to implement prevention campaigns.

Another concern raised about excluding foreign nationals with HIV is the possibility of giving a false sense of security to the host nation. The public can be led to believe that HIV is for 'others' or a foreign problem, thus increasing xenophobia and intolerance (WHO 1987; UNAIDS/IOM 2004; Amon 2009). The International AIDS

Society (IAS) argues that in the mid-1980s, the global response to HIV was marked by ignorance and fear and policy makers today are still ill-informed in believing that deporting people with HIV will protect their countries from HIV/AIDS (IAS 2009). Despite our advanced understanding and knowledge about HIV/AIDS transmission, most countries around the world still have discriminatory policies that exclude or discriminate against people with or feared to have HIV/AIDS. A survey by a German based AIDS organisation, Deutsche AIDS-Hilfe (DAH), of German embassies abroad and foreign embassies in Germany found interesting results (Wiessner and Lemmen 2008). This survey asked a series of questions on their HIV/AIDS policies including residence and entry requirements, and whether a positive HIV test result affected the granting of entry or residence permits, rules about deportations and whether the import of HIV medication for personal use was allowed. A total number of 370 questionnaires were sent to different embassies and those representing 198 countries responded.

The results of this survey showed that 70 countries had restrictions on the entry, length of stay and residence for people with HIV, nine countries stated that all people with HIV are inadmissible for any reasons or length of time, five countries denied visas for short-term stays, 28 countries deported individuals with HIV once their status was discovered and 107 countries had no HIV-specific restrictions. Nine countries that barred entry for any reason or length of stay included Brunei, China, Oman, Qatar, South Korea, Sudan, United Arab Emirates (UAE), United States of America (this policy has been modified by President Obama in 2011) and Yemen. The five countries that denied visas for a short stay included Egypt, Iraq, Singapore, Tunisia Turks and Caicos Islands. Thirty countries deported people who tested HIV positive and the examples of such countries are Bangladesh, Hungary, Jordan, North Korea, Kuwait, Malaysia, Qatar and Russia (Wiessner and Lemmen 2008). Although the response rate for this study (Wiessner and Lemmen 2008) was rather low (53.5%), it is surprising to find that countries that pride themselves on upholding human rights were in the company of countries they accuse of violating human rights.

Deportation or removal is the most common option that is used by countries that have HIV restrictions. For example, from 1986-2006 Egypt identified 722 cases of HIV among foreigners and deported them all: 90% of those deported were black African

(NAP 2006). South Korea reported that 546 foreigners were identified with HIV over the years and 521 (95.4%) of those were deported (UNAIDS/IOM 2004). According to Haerry (2008), anecdotal evidence suggests that a number of migrant workers with HIV have died in prison while awaiting deportation. Countries or states have a right and the discretion to exclude, admit, expel and place conditions on entry and stay for non-nationals under international law (UN 1998). Therefore countries deporting people with HIV/AIDS can claim that they are merely exercising their sovereignty.

2.4.2 New Zealand's Immigration Policies

As already discussed in page 24, there are differences between migrants and refugees. The New Zealand policy for refugees is underpinned by humanitarian concerns because unlike many other resettlement countries that take refugees, New Zealand offered places to refugees based not on their “integration potential” but according to their vulnerability, health and social needs (Worth, Reid et al. 1997). Before 2005, medical screening tests, including HIV, for all refugees accepted for resettlement in New Zealand were done in New Zealand at the Mangere Refugee Centre (Worth, Reid et al. 1997). The aim of the screening was to identify those who needed medical care and not exclusion on the basis of test results. In 2005, a new policy was introduced and all refugees “provisionally” accepted for resettlement in New Zealand underwent medical screening offshore for HIV and tuberculosis (Gray 2008). Those diagnosed with tuberculosis were not declined but had to be treated before coming to New Zealand. In this policy 20 places were established under medical/disabled category for refugees found to be HIV positive (Gray 2008).

For migrants, before November 2005, New Zealand Immigration Service (NZIS) policy did not require mandatory HIV testing for individuals applying for permanent residence or short-term permits such as work permits and student visas (NZIS 1995). However, it was stated that “any person found to be suffering from AIDS, an AIDS-related condition, or who is HIV positive, may have their application denied, on the basis of the potential burden placed on the health system” (NZIS 1995 p 2). During that period, the NZIS medical forms asked if the applicant was suffering from AIDS-related conditions or AIDS using a simple yes/no tick box. The identification of immigrants with HIV/AIDS occurred therefore if they revealed that information by self-report. From November 2005, the NZIS introduced a policy of mandatory HIV

testing for all persons aged 15 years and above coming to New Zealand for twelve months or longer (NZIS 2005). This policy also took into account that some pre-existing medical conditions in would-be migrants (including treatment of HIV infection and AIDS) are classified as “expensive to treat”. The current medical forms require that an applicant undergo an HIV blood test and results must be attached. If the first test is positive then the Western Blot test is also required. It has been seven years since this HIV testing policy came into effect and there is no information available from the NZIS on how many people have tested positive and what the outcome of their immigration applications has been. It is unclear how many people have been deported because of HIV from New Zealand because normally such deportations are done in such a way as to avoid publicity. However, I know from my contact with the African community that it is indeed the case that some people’s applications for work permits or residency have been denied and they have been ordered to leave New Zealand because of their HIV positive status. In the box below is the story of one African woman with whom I was involved as a friend and as a community member in trying to help her to stay in New Zealand. Her case was reported on One News (one of the national television channels) and the Otago Daily Times newspaper (with her photograph). Her HIV status was therefore revealed to all who knew her during the news broadcast.

An African woman on a work permit was diagnosed with HIV by her General Practitioner who was concerned about her general health. When she came to New Zealand, HIV testing was not compulsory and she had no idea she carried HIV. She was found to have advanced HIV and started treatment from the specialist. She responded very well to treatment and with time her viral load was undetectable. She had to renew her work permit one year after her diagnosis and she declared her HIV status on the health forms. Due to that declaration, her application was denied. The NZIS kept her passport and ordered her to leave New Zealand. She went through all legal appeals to remain in New Zealand including applying for waiver on humanitarian grounds. Her local Member of Parliament tried to seek a waiver but was not successful. At that time, NZIS was actively looking for her in order to deport her.

When all her appeals failed, she went to hide on a farm and worked in milking. Her aim was to continue with treatment and support her daughter and family back in Africa. She stated that she would not have HIV medicine back home and was afraid to die of AIDS. Her doctor [specialist] stated that if she stopped taking her medication, she would probably die within two to four years. Her treatment cost the health system around \$ 10,000 per year but her doctor anticipated that that cost would drop as she would be taken off some of the medication as her condition continued to improve. She worked normal and overtime hours and her HIV status did not in any

way interfere with her work. She told me several times that going back to Africa was not an option for her because she did not want to die. Her young daughter needed her and she was able to support her from here and she was able to attend school in Africa (she was 11 years old). One early morning in 2009 she was killed instantly when the farm quad bike she used to round up cows for milking fell on her. Her co-worker found her and gave her mouth to mouth resuscitation. That is when her HIV status was revealed because her co-worker was informed by the police that she was HIV positive. He went on national television and spoke on his fear of contracting HIV as the results of the first aid he provided to the “overstayer”. He added that he did not know that she was HIV positive and did not know that she was illegally in New Zealand (Porteous 2008 p 1).

This case was particularly sad because at the same time as she was fighting to stay in New Zealand, on the 30th of August 2006 the then Ministers of Health and Immigration, the Honourable Peter Hodgson and the Honourable David Cunliffe, made an announcement about an HIV amnesty for Zimbabweans who tested positive for HIV. This policy applied to all Zimbabweans who came to New Zealand before October 2004, and stated that they could apply for permanent residence and if they tested positive for HIV, they would get a medical waiver (Beston 2006). There were concerns that Zimbabweans with HIV were avoiding applying for residence because of fear of being sent home. It was also believed that 800 Zimbabweans had not applied for residence and 8.4% of the 500 who had applied tested positive for HIV (Beston 2006). Extrapolating from the Zimbabwean country HIV prevalence of 20%, they anticipated that 160 people may be infected and this amnesty would have encouraged people to test for HIV. During the press conference the Minister of Health said:

We are doing this because it's the right thing to do to protect the health of New Zealanders and of those Zimbabweans seeking to become New Zealanders. When people know about their HIV status, we can be much more successful at containing the spread of the virus (Honourable Peter Hodgson, Minister of Health, 2006)

This announcement was interesting because if indeed the aim was to protect all New Zealanders, it is unclear why the amnesty was not extended to all migrants living in New Zealand who might be HIV positive and who were afraid to test. They only gave amnesty to Zimbabweans and sought to deport Congolese, Zambians and other people who had tested positive for HIV. Surely if Zimbabwe was unsafe because of political instability, so was the Congo. The African woman with HIV who died in the farm

accident was not Zimbabwean and could not benefit from this offer. In her case, where you came from determined whether you lived or died as has always been the case for many health and social inequalities. I was involved in trying to secure her passport from the NZIS so that her body could be transferred home. Those who knew her story and were involved in her battle with the NZIS, could not help but think that had her work permit been approved, she might still be alive. Since she was a single mother, her 11 year old daughter, for whom she worked hard, became an orphan and joined millions of other children orphaned by AIDS.

It could be argued that New Zealand has taken a step backwards by introducing mandatory HIV testing and possible exclusion of people diagnosed with HIV on the bases of economic burden to the health system. People with HIV can live a long and a productive life, they should not all be perceived as an “economic burden”.

2.5 Conclusion

This chapter has focused on the historical context of Africans in New Zealand and on HIV and immigration policies. Most international policies on HIV are based on fear and not evidence, as HIV is already present in all countries around the world and people cannot be protected by excluding foreigners with HIV. In spite of New Zealand’s humanitarian reputation internationally, the introduction of mandatory HIV testing and possible exclusion of HIV positive migrants raises questions that need to be addressed because people with HIV can live longer and be productive. The next chapter will address the epidemiology of HIV/AIDS and factors that determine its spread in human populations.

Chapter 3 HIV/AIDS Epidemiology

3.1 Introduction

Globally, HIV prevalence continues to rise with the number of people estimated to be living with HIV to be 33.4 million (UNAIDS 2009). The total number of people living with HIV in 2008 was more than 20% higher than the number in 2000, and the prevalence was nearly three times higher than in 1990 (UNAIDS 2009). This chapter looks at the epidemiology of HIV/AIDS. The first section focuses on the epidemiology of HIV/AIDS globally, in Africa and in New Zealand. The second section looks at different scenarios of HIV and the different dynamics of HIV spread in different parts of the world.

3.2 Global, African & New Zealand HIV/AIDS

The increasing prevalence of HIV globally could mainly be due to two factors. The first is the availability and the accessibility of antiretroviral (ARV) therapy which means that more people are living longer with HIV than ever before (UNAIDS 2008). Indeed, WHO/UNICEF/UNAIDS (2009) estimated that the number of people receiving ARV therapy in low-and middle-income countries is around four million. This increase in people receiving ARVs is estimated to have been ten times greater over the past five years than previously. The second factor contributing to global HIV prevalence is that, despite concerted efforts to prevent HIV transmission, more people are still becoming infected. For example; UNAIDS (2009) estimated that around 2.7 million people were newly infected in 2008 alone. In addition, two million people died of AIDS-related illness worldwide. The latest data also show that the spread of HIV seems to have peaked in 1996, when three and a half million new infections occurred (UNAIDS 2009). The number of new infections in 2008 was nearly 30% lower than at the epidemic's peak thirteen years ago (UNAIDS 2009). Table 2 below presents recent HIV and AIDS statistics from UNAIDS.

Table 2: Regional statistics for HIV and AIDS, 2010

Region	Adults & children	Adults & children	Adult prevalence
---------------	------------------------------	------------------------------	-------------------------

	living with HIV/AIDS	newly infected	
Sub-Saharan Africa	22.9 million	1.9 million	5.0%
North Africa & Middle East	470,000	59,000	0.2%
South and South-East Asia	4 million	270,000	0.3%
East Asia	790,000	88,000	0.1%
Oceania	54,000	3,300	0.3%
Latin America	1.5 million	100,000	0.4%
Caribbean	200,000	12,000	0.9%
Eastern Europe & Central Asia	1.5 million	160,000	0.9%
North America	1.3 million	58,000	0.6%
Western & Central Europe	840,000	30,000	0.2%
Global Total	34 million	2.7 million	0.8%

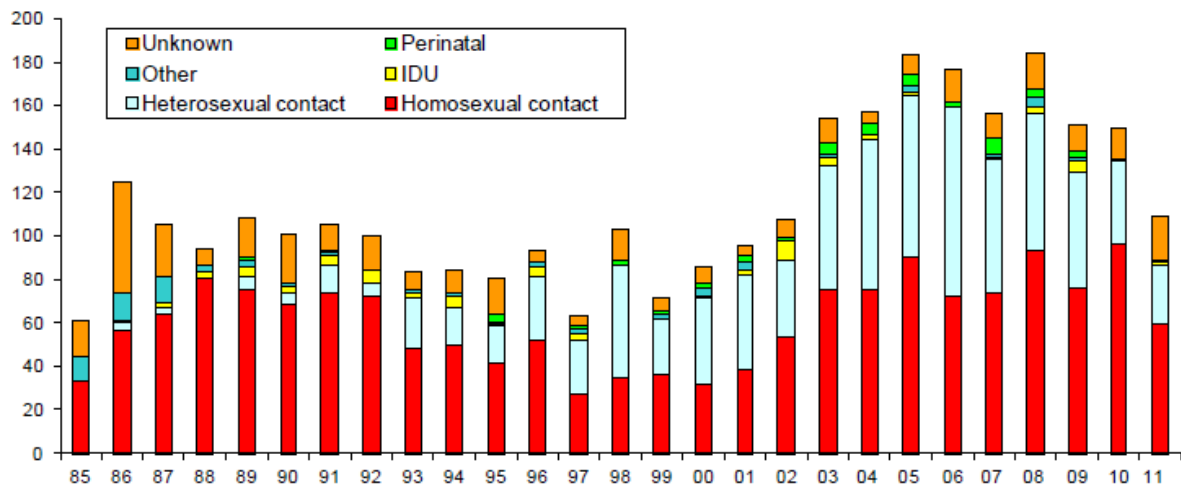
Source: UNAIDS Global Epidemic Report, 2010 Edition

Sub-Saharan Africa remains the region of the world worst affected by HIV/AIDS. For instance, by the end of 2009, Sub-Saharan Africa accounted for 68% of the 34 million adults (aged 15 years and above) living with HIV worldwide (UNAIDS 2011). Similarly, 68% of the 1.9 million new infections; 91% of the 390,000 newly infected children and 72% of the 1.4 million AIDS deaths were from Sub-Saharan Africa (UNAIDS 2011). It is estimated that over 14.1 million children in Africa have lost one or both parents to AIDS and life expectancy in countries like Swaziland has fallen by half to 37 years between 1990 and 2007. Heterosexual contact is believed to be the main mode of transmission in Sub-Saharan Africa accounting for 94% of new infections (UNAIDS 2009). In addition, recent data show that stable heterosexual relationships including marriage are the main source of transmission. For example, in Kenya 44% of the new infections in 2006 occurred among people who were in a union or regular partnership and in Ghana 30% of the new infections in 2008 were among people who were ‘low risk’ heterosexual (UNAIDS 2009). The practice of multiple concurrent partnerships (MCP) which will be discussed later may explain the heterosexual transmission of HIV among couples in seemingly stable relationships.

HIV in New Zealand has historically affected men who have sex with men (MSM). Data from AIDS New Zealand show that 3689 people have been diagnosed with HIV since 1985 to June 2012 (AIDS-NZ 2012). Of the 3689 diagnosed 3,044 (82.7%) are men and 645 (17.3%) are women. As Figure 4 below shows, there “was a steep rise of HIV diagnosis from 1999-2003 and then the stable period at the higher level”

(AEG 2012 pg 1). In 2011, the number of HIV diagnoses was lower and closer to the 2002 level as shown in Figure 4.

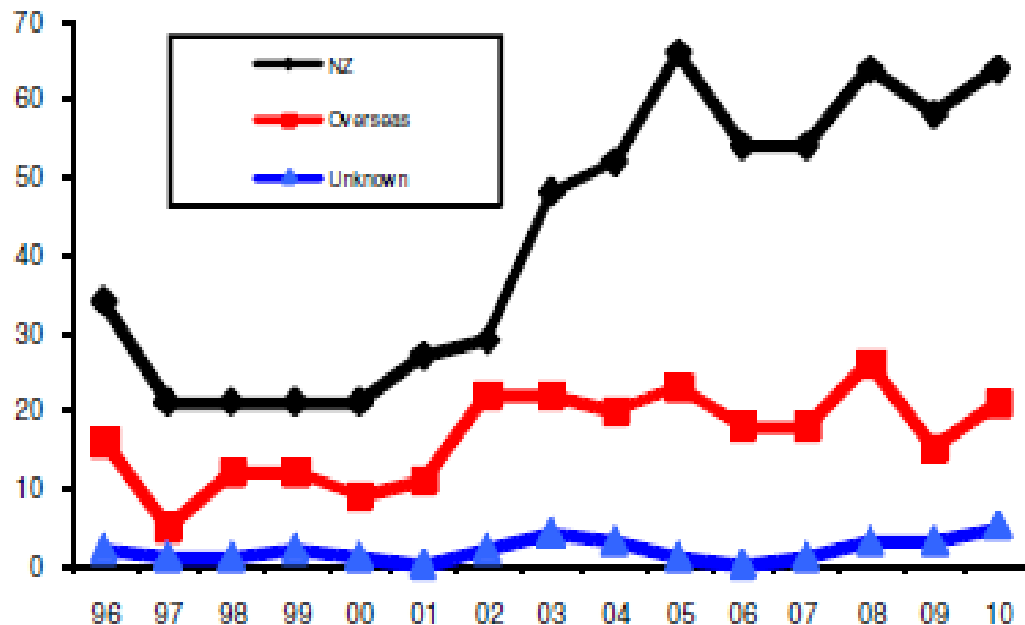
Figure 4: Number of People Diagnosed with HIV by Year and Mode of Infection



Source: AIDS-New Zealand, 2012

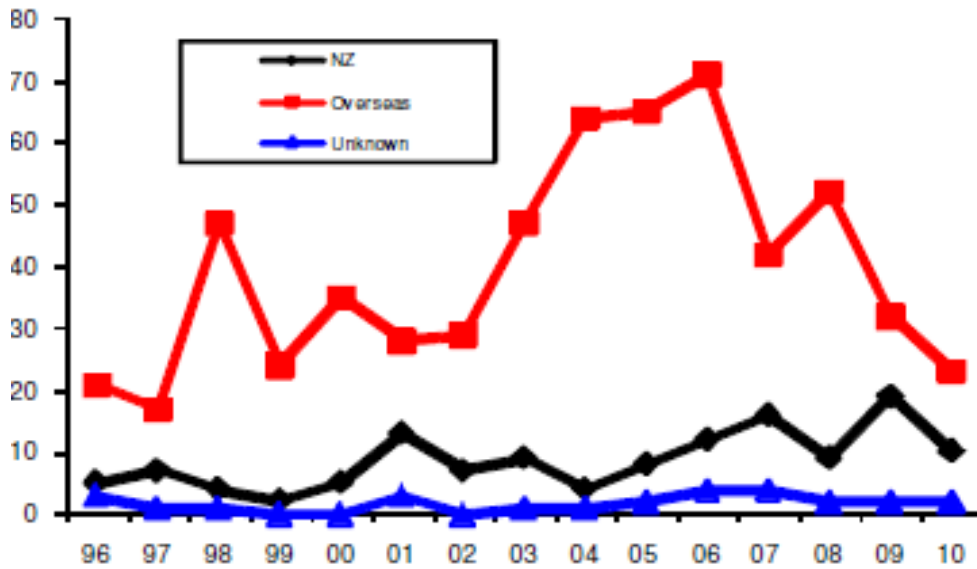
According to Saxton, Dickson et al (2010), the HIV epidemic in New Zealand has two distinct sub-components with different characteristics: one among MSM that is locally acquired (Figure 5) and the other among migrants and refugees from countries of high prevalence especially Sub-Saharan Africa (Figure 6) that was acquired overseas.

Figure 5: Place of Infection of MSM by Year of Diagnosis



Source: AIDS Epidemiology Group: 2011

Figure 6: Place of Infection of those Infected through Heterosexual Contact by Year of Diagnosis



Source: AIDS Epidemiology Group: 2011

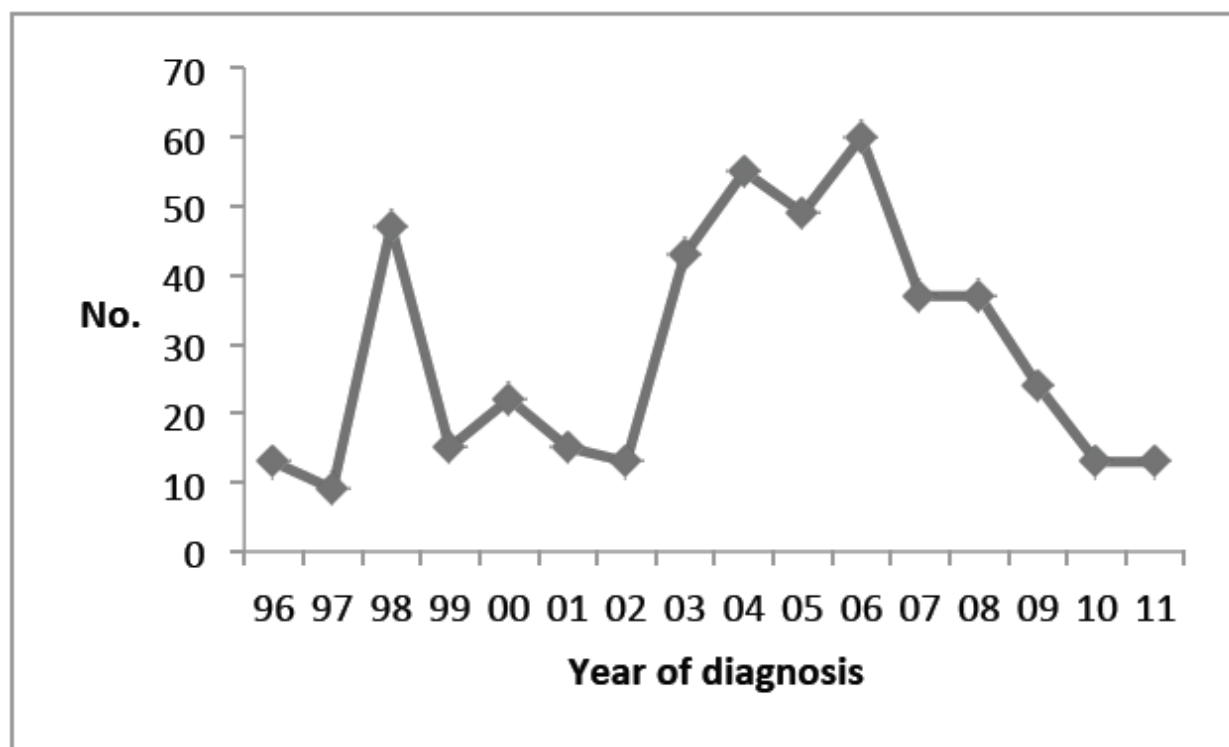
In New Zealand, as in other resource rich countries, there is a higher incidence of heterosexually acquired HIV among Sub-Saharan Africans than in the local heterosexual population. Data from the AIDS Epidemiology Group (AEP) show that Africans are the second largest ethnic group most affected by HIV (AEG 2012). For example, of the 2543 people diagnosed with HIV since 1996 when ethnicity data were collected, 505 (248 men and 257 women) are African. This is nearly 20% (505/2543) of the total (Table 3). Despite the higher incidence, annual diagnoses of HIV among Africans in New Zealand continue to fall (Figure 7). This could be due to the tighter immigration HIV policy implemented in 2005 (NZIS 2005). Although the drop in annual diagnoses of HIV among Africans is welcome news, it is uncertain how many Africans remain undiagnosed. Dickson, Hendrickson et al (2012) estimated that the number of black Africans living in New Zealand to be around 12,500. Based on the number of black Africans diagnosed with HIV in New Zealand, they estimated that the adult HIV prevalence in this group is around 5%. Depending on the precision of this estimate up to 660 Africans in New Zealand may be HIV positive and, taking into account the numbers of newly identified cases recorded to date, up to 110 may remain undiagnosed.

Table 3: HIV Diagnosis by Ethnicity since 1996

	Ethnicity	HIV Infection*							
		1996-2003		2004-2011		2012 (to end of June)		Total	
Sex		N	%	N	%	N	%	N	%
Male	European/Pakeha	513	50.0	667	43.4	35	43.2	1215	46.0
	Maori†	60	5.8	110	7.2	3	3.7	173	6.5
	Pacific Island	19	1.9	36	2.3	4	4.9	59	2.2
	African	96	9.4	151	9.8	1	1.2	248	9.4
	Asian	91	8.9	124	8.1	16	19.7	231	8.7
	Other	19	1.9	78	5.1	3	3.7	100	3.8
	Unknown	20	1.9	59	3.8	6	7.4	85	3.2
Female	European/Pakeha	53	5.2	44	2.9	2	2.5	99	3.7
	Maori†	7	0.7	13	0.8	2	2.5	22	0.8
	Pacific Island	13	1.3	13	0.8	1	1.2	27	1.0
	African	88	8.6	164	10.7	6	7.4	258	9.8
	Asian	44	4.3	45	2.9	1	1.2	90	3.4
	Other	1	0.1	16	1.0	0	0.0	17	0.6
	Unknown	1	0.1	13	0.8	1	1.2	15	0.6
Transgender	Total	1	0.1	3	0.2	0	0.0	4	0.2
TOTAL		1026	100.0	1536	100.0	81	100.0	2643	100.0

Source: AIDS-New Zealand, 2012

Figure 7: Number of Africans Diagnosed with HIV in New Zealand since 1996



Source: AIDS-New Zealand, 2012

Heterosexual transmission (Table 4) remains the main mode of infection among Africans (80% for men and 83.3% for women). Although only 2.4% were infected

through homosexual contact, nothing is known about them and there are no prevention activities targeting MSM in the African community.

Table 4: Mode of Infection for Africans with HIV

Mode of Infection	Males		Females	
	N	%	n	%
Heterosexual	200	81.0	210	83.3
Perinatal	17	6.9	16	6.3
Homosexual	6	2.4	0	0.0
Other	4	1.6	8	3.2
Unknown	20	8.1	18	7.1
Total	247	100.0	252	100.0

Source: AIDS Epidemiology Group, 2012

Although most infections occurred in Africa, around 28 Africans were infected in New Zealand, most of them in the past five years (20/28) as shown in Table 5 below.

Table 5: Place of Infection for Africans by Year of Diagnosis

Year of diagnosis	Infected overseas	Infected in New Zealand	Unknown	Total
1996	11	1	1	13
1997	9	0	0	9
1998	43	2	2	47
1999	14	0	1	15
2000	21	1	0	22
2001	15	0	0	15
2002	13	0	0	13
2003	41	1	1	43
2004	54	1	0	55
2005	45	2	2	49
2006	56	2	3	61
2007	30	5	2	37
2008	35	1	1	37
2009	12	8	4	24
2010	10	2	1	13
2011	11	2	0	13
Total	420	28	18	466

Source: AIDS Epidemiology Group 2012

3.3 HIV Epidemic Scenarios

The World Health Organization (WHO) and UNAIDS categorize the HIV/AIDS epidemic by low, concentrated and generalized scenarios for the purpose of epidemiological surveillance (WHO/UNAIDS 2007). Epidemics are considered low-level scenarios if the HIV prevalence is less than 1% and where HIV has not spread to significant levels within any population sub-group. According to UNAIDS (2007a p 20) a low level epidemic may suggest that “networks of risk are diffused with low levels of partner exchange or use of non-sterile injecting equipment or that the virus has been introduced only very recently”. Countries characterised as having low-level epidemics include Fiji at 0.1% and Turkey at less than 0.2% (UNAIDS 2007a). Concentrated scenarios are those where HIV transmission occurs mainly among defined vulnerable sub-populations such as sex workers, injecting drug users and men who have sex with men and their sexual partners. Concentrated epidemics can be found in Latin America, the Middle East, Europe and Asia. Equally, epidemics are

considered generalised if the “HIV prevalence is between 1-15% in pregnant women, indicating that HIV prevalence is present among the general population at sufficient levels to enable sexual networking to drive the epidemic” (WHO/UNAIDS 2007 p 1). By applying this definition, 30 out of 32 countries in Sub-Saharan Africa that administered population surveys which included HIV testing in their questions between 2001-2008 had a generalised epidemic (UNAIDS 2009).

Two countries in Sub-Saharan Africa that had lower prevalence were Senegal and Niger, both with a prevalence of 0.7%. Epidemiologists are unclear if the Caribbean, central Africa, west Africa, and parts of the Pacific have concentrated, generalised or mixed epidemics (Pisani 2000; Galvin and Cohen 2004; Shelton, Halperin et al. 2004; Chin 2007). Halperin and Wilson (2008 p 423) state that in generalised epidemics “transmission is sustained by sexual behaviours in the general population and would persist despite effective programmes for vulnerable groups”. Another recognised category is ‘hyperendemic’ which refers to those areas where HIV prevalence exceeds 15% in the adult population and is driven through extensive multiple concurrent sexual partnerships with low and inconsistent condom use (WHO/UNAIDS 2007). According to the latest report by UNAIDS (2009) all countries that have explosive epidemics or which exhibit hyperendemic characteristics are in southern Africa (Botswana 25.0%, Lesotho 23.4%, South Africa 16.9%, Swaziland 25.9% and Zimbabwe 18.1%).

Researchers argue that it is important to distinguish between concentrated and generalised epidemics because they determine “who gets infected and how” (Halperin and Wilson 2008 p 423). They argue that the era of standard global prevention is over because of the diversity of the HIV/AIDS epidemic which cannot be contained by a single prescription. They also comment that there is no single global HIV/AIDS epidemic but a multitude of diverse epidemics. In 2007, UNAIDS introduced the ‘know your epidemic, know your response’ approach in the acknowledgement that within countries and regions, drivers of the epidemic are different (UNAIDS 2007a). According to UNAIDS (2007a p 10) the drivers of the epidemic are “structural and social factors for example poverty, gender inequalities and human rights violations that are not easily measured and that increase people’s vulnerability to the epidemic”.

Structural and social factors relevant to HIV/AIDS in Africa include socio-cultural

factors, gender inequalities, stigma, discrimination, poverty and lack of treatment and care. Risk factors include multiple concurrent partnerships, unprotected sex, lack of male circumcision, presence of sexually transmitted infections and lack of or low condom use (UNAIDS 2007a). However, some researchers challenge the so-called risk and structural factors approach. For example, they argue that in Africa, it is the richest not the poorest, the more educated not the less educated and the ones who respect human rights not those who do not, that are more likely to be infected or have higher prevalence of HIV/AIDS. The current HIV prevention approach recommended by UNAIDS and WHO (2007) states that within countries and regions, different scenarios may exist and that the epidemic may evolve with time. For example, it is emerging now that in Africa, men who have sex with men are increasingly at higher risk of HIV than was previously acknowledged (UNAIDS 2008). Equally, in Europe, North America and in New Zealand where HIV/AIDS historically affected MSM, HIV is beginning to move into the heterosexual populations especially among migrants (Manfred, Calza et al. 2001; Geduld, Gatali et al. 2003; PHAC 2006; Davidson and Birukila 2007; HPA 2008; AEG 2009).

The heterogeneity of HIV in Africa has become a focus of interest in recent years because the epidemic appears to spread differently in different regions (Halperin and Wilson 2008). Buve (2006) argues that the HIV difference between regions in Sub-Saharan Africa cannot be explained by time of the introduction of the virus into a population. For example, Swaziland had nearly zero prevalence in the 1980s when HIV was devastating Uganda, but now it has the highest prevalence in the world with 25.9% of the adults living with HIV while Uganda's prevalence has declined dramatically (UNAIDS 2009). West African countries such as Senegal remain the least affected despite the introduction of HIV at the same time as Uganda and earlier than Swaziland.

3.4 Conclusion

This chapter has given an overview of HIV/AIDS epidemiology and epidemic scenarios globally, in Africa, and in New Zealand. This demonstrates that Africa continues to carry a disproportionate amount of the global burden of the HIV/AIDS epidemic. Although New Zealand is considered a low prevalence country, Africans in New Zealand are disproportionately affected by HIV/AIDS. HIV epidemic scenarios

are heterogeneous and affect people and countries differently.

The following chapter examines the determinants of HIV spread in populations.

Chapter 4 Determinants of HIV Spread

4.1 Introduction

In order to understand the growth of an HIV epidemic and how HIV infection can move from one infected individual to other uninfected individuals and eventually to the population, we need to look at the determinants of the HIV spread. This chapter examines the principles of transmission. The first part of the chapter looks at the concept of the reproductive rate followed by patterns of sexual mixing and duration of infection. The second part examines the role of socioeconomic factors such as education, poverty and gender play in HIV transmission. The third part focuses on the measures that are used to attempt to control the spread of HIV such as voluntary HIV testing, male circumcision and the ABC approach.

4.2 The Concept of Reproductive Rate

The basic reproductive rate (denoted R_0), is important in the study of the HIV epidemic because it determines whether an infection can establish and spread in the population or not (May and Anderson 1987). According to Giesecke (2002 p 15) the basic reproductive rate or R_0 can be defined as “the potentiality of a disease to spread from an infected individual to others in a population”. Another definition offered by May and Anderson (1987 p 137) states that “ R_0 is the average number of secondary infections produced by one infected individual in the early stages of an epidemic when essentially all contacts are susceptible”. For HIV and other sexually transmitted infections, R_0 depends on three factors namely; the average probability that infection is transmitted from an infected individual to susceptible partner (per partner contact) (denoted β), the average rate at which new sexual partners are acquired (referred to as c) and third, the average duration of infectiousness (referred to as D) (May and Anderson 1987; Giesecke 2002). The following discussion will not directly address D as people with HIV are infectious throughout their lives. However, lowering viral load is crucial to transmission and this will be discussed further.

The basic reproductive rate R_0 has therefore been expressed as the following equation:

$$R_0 = \beta cD$$

Where:

R_0 = Basic reproductive rate

β = Average probability of HIV transmission per exposure to an infectious partner

c = Number of exposures of susceptible persons to infectious partners per unit of time

D = Duration of infectious period.

According to Giesecke (2002 p 122) if R_0 is greater than one then an epidemic of the infection will emerge. On the other hand, if R_0 is less than one an epidemic will not emerge and the infection will gradually decrease or die out, and if R_0 equals one, the infection will be endemic. In order to control HIV infection, attempts are made to reduce R_0 to below one, although it becomes complicated because the HIV epidemic is heterogeneous, as will be discussed later in this chapter. The following section is therefore restricted to heterosexual HIV transmission in Africa. Each of the three elements of the reproductive rate and its importance to HIV/AIDS in Africa will be discussed.

4.3 The effect of β (Infectivity)

The risk of HIV transmission per sexual contact depends on several factors that can be classified as biological and behavioural. Biological factors that determine whether infection will occur include viral load, treatment, male circumcision, condom use and the presence of ulcerative sexually transmitted infections (STI), while behavioural factors include types and frequency of sexual activities. Some types of sexual activities may be influenced by cultural practices and beliefs, for example dry sex and female genital mutilation. The following sections will look at both biological and behavioural factors that may increase the risk of HIV transmission per sexual contact. The first section will look at the stage of HIV disease and treatment while the second will look at the cultural sexual practices that may influence infectivity.

4.3.1 The Stage of HIV Disease and Treatment

Although all people infected with HIV are considered to be infectious at all times, biologically there is evidence to suggest that their level of infectivity varies during different stages of the HIV infection. For example, it is hypothesised that people are

more infectious during the first three weeks to two months following the acquisition of HIV (Pilcher, Tien et al. 2004; Pinkerton 2008; Green, Mah et al. 2009). Evidence from Rakai, Uganda and other studies suggest that the probability of transmission per sex act during acute infection increases from 10-fold to 43-fold compared with a much later asymptomatic stage (Wawer, Gray et al. 2005). According to Galvin and Cohen (2004), what makes people more infectious during the first two months after contracting HIV is that viral replication is almost unchecked by the host immune response and that this increases viral loads in both blood and semen. It is therefore believed that the uninfected partner is more likely to be infected during this acute phase compared with phases when the viral load is low. Compounding this issue is that newly infected people are not necessarily aware of their infection and as Motloun, Myres et al (2004) argue, they may be responsible for spreading HIV because of their higher infectivity.

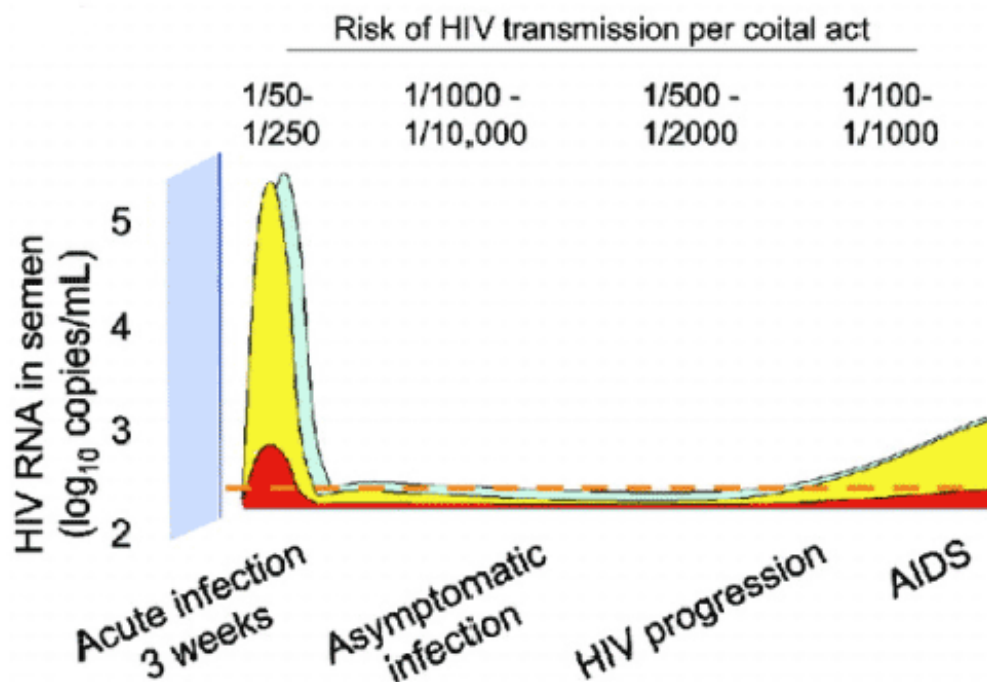
In order to reduce infectivity, there is need to identify those infected and then commence treatment. World Health Organization researchers found that transmission rate for an individual on treatment differs significantly compared to an individual not on treatment (0.5 per 100 person-years vs. 5.6 per 100 person-years) (Attia, Egger et al. 2009). Studies on serodiscordant couples also show that early antiretroviral therapy had a clinical benefit for both HIV-1-infected patients and their uninfected partners (Cohen, Chen et al. 2011). A good example of the effect of treatment on HIV transmission is the prevention of mother to child transmission (PMTCT). HIV positive pregnant women take antiretroviral drugs to lower the risk of HIV transmission to their unborn babies. Without treatment, it is estimated that there is a 25-30 percent chance that a baby with born of HIV positive mother will be infected (UNAIDS 2011). It can therefore be argued that access to treatment may reduce HIV incidence at the population level because of decreased viral load at an individual level.

Certain types of sexual activities were also found to be associated with higher levels of transmission. For example, a study of heterosexual couples in the United States found that for women the odds of HIV transmission during receptive anal intercourse was approximately ten times that of vaginal sex (Seidlin, Vogler et al. 1993). Other researchers estimate that men who are newly infected can infect around 7-24 percent

of their female sex partners during the first two months of infection and the rate can be more than 50 percent if either partner has a sexually transmitted infection (Pilcher, Tien et al. 2004).

Apart from viral load, the frequency of exposure to HIV during the different stages of HIV disease progression has also been found to be important. For example, a team of researchers studied the probability of HIV-1 transmission per coital act in monogamous heterosexual, HIV-1 discordant couples in Rakai, Uganda (Gray, Wawer et al. 2001). Their study included 174 monogamous couples and found that the mean frequency of intercourse was 8.9 times per month. The overall unadjusted probability of HIV-1 transmission per coital act was 0.0011 (95 CI 0.0008-0.0015). Transmission probabilities per coital act increased from 0.0001 per act at viral loads of less than 1700 copies/mL to 0.0023 per act at 38500copies/mL or more (p=0.002). Transmission probabilities increased with genital ulceration at 0.0041 vs 0.0011 without genital ulceration (p=0.02). Figure 8 below shows the risk of HIV transmission per coital act.

Figure 8: The Risk of HIV Transmission Per Coital Act



Source: Gavin and Cohen, 2004

Like most findings in HIV/AIDS research, this finding poses problems in terms of its implications for health education. It may be difficult to convince people that having sex less frequently is a viable way to reduce their risk of HIV transmission. It is also important to note that using this study as a benchmark for coital frequency among couples may be inappropriate because a known discordant couple's sexual frequency may be different from those who are HIV negative or who are unaware of their HIV status.

4.3.2 Ulcerative STIs

According to the World Health Organisation (WHO 2006), sexually transmitted infections (STIs) cause significant morbidity and negative health consequences especially in women and children. Despite the burden caused by STIs, it was the advent of HIV/AIDS that forced both developed and developing countries to give more priority to the control of STIs (WHO 2006). Studies show that people who are infected with STIs such as syphilis, gonorrhoea and herpes are at least two to five times more likely than uninfected individuals to acquire HIV if they are exposed to the virus through sexual contact (Wasserheit 1992; Laga, Manoka et al. 1993). Epidemiologists and scientists believe that STIs increase susceptibility to HIV infection by two mechanisms. First, genital ulcers, for example syphilis, herpes, or chancroids result in breaks in the genital tract lining or skin. These breaks create a portal of entry for HIV. Second, non-ulcerative STIs like chlamydia, gonorrhoea and trichomoniasis increase the concentration of cells in genital secretions that can serve as targets for HIV (Centre for Disease Control and Prevention 2007). Therefore, both WHO and UNAIDS advocate for the control and treatment of STIs as one of the ways to reduce the likelihood of HIV transmission (UNAIDS 2001a; WHO 2006).

Community randomised control trials on the effect of STI treatment on HIV transmission at the population level were conducted in Uganda and Tanzania and found contradictory results. The first trial was conducted in Mwanza, Tanzania and found a 40% reduction in the incidence of HIV infection (Moshia, Grosskurth et al. 1995). The second trial was conducted in Rakai, Uganda (Wawer, Sewankambo et al. 1999) and evaluated the effect on HIV incidence of mass treatment for syphilis, gonorrhoea, chlamydia, and chancroid versus mass treatment for helminth infections. While STI incidence declined in the communities where mass treatment for STIs took

place, the rate of new HIV infections did not (Wawer, Sewankambo et al. 1999). The investigators suspected that the lack of effect in the Rakai study was due to the maturity of the epidemic and the increased role in HIV transmission of untreatable STIs such as genital herpes when compared with the Mwanza trial.

This explanation was supported by Grosskurth, Gray et al. (2000) who evaluated both these studies and found that the stage of the HIV epidemic determined whether the control of STIs reduces the incidence of HIV. For example, they found that when the prevalence of HIV is low in a community, transmission is dependant on a 'core group' infected with HIV who have multiple partners. They added that if this core group is also infected with STIs, then that would increase the spread of HIV. In the Mwanza trial, the HIV epidemic was in an early stage with a prevalence around 4.1% and an incidence less than 1 per 100 person-years, and interventions may have reached the core group and could have led to the success observed. But in the Rakai study, the HIV epidemic was more mature, with a prevalence of 15.9% and an incidence of 1.5-2.0 per 100 person-years. In that study, infection occurred primarily among discordant couples, especially soon after infection was acquired and infectivity might have been higher due to elevated viral load. They concluded that the role of STIs as a factor for HIV transmission may have been of less importance in this particular scenario.

The second explanation put forward by Grosskurth, Gray et al (2000) for the contradictory results of the Mwanza and Rakai community trials is that different STIs may increase HIV transmission differently. For example, the prevalence and biological mechanism of the herpes simplex virus (HSV) suggests that this particular infection may increase HIV transmission more than others. In the Rakai study for example, the HSV-2 prevalence was 31.2% among men and 60.9% among women while in the Mwanza study, the prevalence was much lower in both men and women at 12.1% and 35.6% respectively. In addition, in Rakai, 45% of genital ulcers were caused by HSV, while in Mwanza, less than 10% of genital ulcers were caused by HSV. Grosskurth, Gray et al (2000) concluded that such differences may have affected the outcome of both studies because neither of them provided treatment for viral STIs such as herpes.

Other researchers have challenged the association of STIs and HIV incidence because

of lack of conclusive evidence from the randomised controlled trials. They state that although observational data show a strong association between STIs and HIV, none of the randomised controlled trials, apart from the Mwanza study, have been able to confirm the association (Potts, Halperin et al. 2008). Despite the lack of evidence from randomised controlled trials on the effect of STIs on HIV incidence, prevention and treatment of STIs still provides the opportunity to promote condom use generally and to individuals diagnosed with an STI. The following section will look at behavioural factors, especially African cultural sexual practices, that may influence the risk of HIV transmission per contact namely; dry sex and female genital mutilation.

4.3.3 Sexual Behaviours (Dry Sex)

Dry sex is the practice of removing vaginal secretions by drying and tightening of the vagina before sexual intercourse (Kun 1998). Dry sex is relevant as far as HIV/AIDS is concerned because there are concerns that drying of the vaginal mucosa may increase HIV transmission. However, studies of the association between dry sex and HIV have so far been inconclusive. The hypothesis that dry sex practices may increase the risk of HIV infection comes from the evidence that drying practices can produce inflammatory reactions and epithelial damage in the vagina, resulting in ulceration, sloughing of the vaginal wall and necrosis. According to Alexander et al (1990) dry sex substances are used primarily to treat or mask vaginal discharge which may be a sign of an ulcerative or non-ulcerative sexually transmitted disease, which is a cofactor for HIV transmission. By dehydrating the vaginal mucosa, there could be a probability of traumatic sex which may in turn increase HIV acquisition in women (Hira, Mangrola et al. 1990; Siraprapasiri, Thanprasertusuk et al. 1991).

Another concern is that drying agents may alter the normal level of alkalinity and acidity (PH) of the vagina which may be protective against HIV (Kaminsky and Willigan 1982). Forrest (1991) argues that drying agents can impair the vaginal mucosal immunity which protects against HIV. Evidence shows that genital lesions caused by STD increase the risk of HIV transmission. It is because of such links that some health care workers in Africa believe that lesions arising from dry sex may pose a similar risk to the lesions arising from STIs (Dallabetta, Miotti et al. 1995).

Research shows that cultural beliefs and practices influence the practice of dry sex. Studies on the practice of dry sex have been carried out in South Africa (Beksinska,

Rees et al. 1999), Zaire (Brown, Ayowa et al. 1993), Kenya (Schwandt, Morris et al. 2006) Zambia, Zimbabwe, Haiti, Costa Rica (Kun 1998), South East Asia and the Caribbean (Brown and Brown 2000). Methods used in drying and tightening the vagina in Africa differ from country to country, region to region, and from tribe to tribe. In the Zimbabwean study, participants used soil mixed with baboon urine (locally called mutendo wegudo) obtained from traditional healers and leaves from the Mugugundhu tree (Rungara, Pitts et al. 1992). After grinding the leaves, the powder is mixed with water, wrapped in a nylon stocking and inserted into the vagina for ten to fifteen minutes. The leaves from the Mugugundhu tree cause swelling of the soft tissue of the vagina and make it hot and dry.

In the Zambian research, women who participated in the study drank porridge believed to produce a drying effect and also used toilet paper and wiping cloths to dry the vagina (Nyirenda 1992). Female participants in the Zairean study (Brown, Ayowa et al. 1993) used leaves, powder, stones, pharmaceutical products, wiping cloths and hot water for drying and tightening the vagina. Leaves from the calabash plant were crushed in the hands and rolled into a ball about 3-4 cm. The leaf ball was inserted in the vagina in the morning for ten to twelve hours until evening; other women inserted the leaf ball overnight. Women were ready for intercourse any time after removal of the leaf ball. Another drying agent popular in Zaire was grey or brown powder from bark, stems or plant roots. Salt, pepper or fine sand was added to the powder. The powder was used by wetting a forefinger with saliva and rolling it in the powder until covered and then inserting the finger into the vagina. The powder is not removed before intercourse. The third method used in Zaire is the use of pharmaceutical products such as talcum powder, Vicks, alum or vaginal medications purchased at a pharmacy which are inserted into the vagina before intercourse. Hot water was also used by splashing on the external genitalia and then a finger was inserted to clean out and dry the vagina. Cloths were used by wrapping around a finger and wiping between repeated acts of intercourse with the same or different partners.

Preference for dry sex varies, however; one common reason is that dry sex makes the vagina dry, tight and very hot which are desirable qualities that are thought to ensure pleasure for both women and men (Nyirenda 1992; Rungara, Pitts et al. 1992; Brown, Ayowa et al. 1993; Kun 1998; Brown and Brown 2000). The Zairean study reported

that a wet and large vagina is considered to be a result of bad luck and the noise made during wet sex was equated to the noise made during diarrhoea, which is also called lobelobe or mud river. In Zambia, girls who were wet during intercourse were teased by boys and were compared to swimming in the Chambeshi River which is one of the largest rivers in Zambia. Men complained of swimming around during intercourse and used the term 'drowning' to describe the effect of an excess of vaginal fluid.

For sex workers, dry sex was commonly used as a way of ensuring that their clients would return to them. A study of South African sex workers reported that sex workers charged more for dry sex than for wet sex and on some occasions they were not paid if the sex was wet (Baleta 1998). Another reason reported in a focus group discussion in the Zairean study was that a dry and tight vagina made a man with a small penis feel 'big'. In South Africa, men reported that a wet vagina was an indication that a woman had had sex with other men or as sign of infidelity. They also associated lubricated sex with sexually transmitted infections and the use of contraceptives (Baleta 1998).

Other culturally mediated reasons given for dry sex are beliefs about vaginal fluids. For example, in the Shona culture of Zimbabwe, female vaginal fluids are considered unclean and removing them creates a clean environment for fertilization. Others use dry sex agents to treat vaginal itchiness which could be an indication of sexually transmitted infections. In a Malawian study (Dallabetta, Miotti et al. 1995), 45% of 6,603 women who participated in the study investigating the reasons for practising dry sex reported that they used drying agents for self-treatment of vaginal discharge and itchiness. Only 13% reported using drying agents for tightening purposes. Mann et al (1988) found that 77% of a group of prostitutes in Kinshasa used drying agents for personal hygiene, menstrual care, pregnancy prevention and disease prophylaxis, as well as for tightening the vagina.

Most studies on dry sex in Africa, which were mostly led by non-Africans, sensationally highlighted the use of drying agents as a means to increase sexual pleasure. They did not highlight the use of the practice as a preventive measure against STIs and other factors. In their review of the past 50 years' reports on the use and effects of traditional intravaginal substances and practices, Brown & Brown (2000) recommended that spermicides and microbicides that give a sensation of

dryness and warmth should be designed to meet this need. They also recommended that male and female condoms should be designed to increase friction, and be advertised and marketed by stressing dryness, tightness and warmth. This review did not propose any measures that might be used to stop women from using drying agents for other reasons for example; treatment and control of sexually transmitted infections and to address the fear of women losing clients or partners if they did not practice dry sex. Forms of bodily modification to appear more 'sexy' are not confined to African women who engage in these drying practices. Women in other cultures go to what might be seen as extremes to appear 'sexy', for example having breast implants and plastic surgery. Most of the studies mentioned here were conducted among sex workers and clients of STI clinics and may not therefore be representative of the general population. Despite the controversy around dry sex, non-lubricated sex may indeed increase the risk of HIV transmission but more evidence is needed. The following section will look at another cultural sexual practice, namely female genital mutilation (FGM), and its effect on the risk of HIV transmission.

4.3.4 Female Genital Mutilation

Female Genital Mutilation (FGM), sometimes called female circumcision, is a very controversial practise that has been practised for centuries. According to Brady (1999), FGM can be dated back to 200 BC because evidence from mummies from Egypt shows that they were circumcised. The World Health Organisation (WHO 2010 p 1) refers to FGM as comprising "all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for non-medical reasons". WHO (2010 p 1) classifies female mutilation into four types:

1. Clitoridectomy (Type I): partial or total removal of the clitoris (a small, sensitive and erectile part of the female genitals) and, in very rare cases, only the prepuce (the fold of skin surrounding the clitoris).
2. Excision (Type II): partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora (the labia are "the lips" that surround the vagina).
3. Infibulation (Type III): narrowing of the vaginal opening through the creation of a covering seal. The seal is formed by cutting and repositioning the inner or

outer labia, with or without removal of the clitoris.

4. Other (Type IV): all other harmful procedures to the female genitalia for non-medical purposes, e.g. pricking, piercing, incising, scraping and cauterizing the genital area.

The practice of FGM is very prevalent in North Africa, East Africa, West Africa and some parts of the Middle East (Brady 1999). WHO (2010) estimates that worldwide, 140 million girls have undergone FGM, and 92 million of those are in Africa. In addition, it is estimated that around 2 million aged 10 and above, undergo FGM every year. Most African refugee women and girls in New Zealand come from countries where FGM is common. For example 99% of all Somali and Djibouti women and 90% of Ethiopian and Eritrean women have undergone FGM (Denholm 2003).

Although there is no documented evidence about current practice of FGM in New Zealand, most women underwent FGM before arriving in New Zealand (Denholm 2003). In anticipating that FGM may be performed in New Zealand, in January 1996, the government made it illegal to perform FGM in New Zealand or to send girls overseas for FGM (Crimes Act Amendment (Section 204A), 1961). The Act states that it is against the law to perform “any medical or surgical procedure or mutilation of the vagina or clitoris of any person for reasons of culture, religion, custom or practice”. According to this Act, if anyone performs or helps someone to perform FGM, she/he may be imprisoned for up to seven years.

Reasons for performing FGM differ, but the most common is to prevent the woman from being ‘oversexed’ (Denholm 2003 p 5). Since virginity is important in many cultures, FGM is usually perceived as a better way to preserve virginity because some forms of FGM prevent vaginal sex. Women who are not circumcised are usually regarded as undesirable, and are socially isolated and ridiculed by others especially other women or girls. For example, a study conducted among Igbos in Nigeria of women who had undergone FGM found that participants felt feminine and desirable to men because of the practice (Egwatu and Agusa 1981). Another study in Kenya (Oyugi 1998) found that women who had undergone FGM increased the social status of their families and generated more income in dowry payment. In some countries, speaking out against circumcision can bring down a politician, and many argue that therefore some government officials keep quiet about issues related to FGM. The

social status attached to FGM puts pressure on girls and women to be circumcised. In a story reported by BBC news, a young girl bled to death in Kenya after she tried to perform FGM on herself (BBC 2006). Her mother refused to have her circumcised but she was teased by other girls who called her a *mukenye*, a derogatory name given to a woman who is not circumcised.

FGM is a controversial custom because it has severe health consequences for women and it is usually performed on young girls who cannot consent to the practice (Brady 1999; WHO 2010). The most common complications are bleeding, infections, tetanus and gynaecological complications later in life (WHO 2010). Some researchers suggest that FGM increases HIV transmission because of shared circumcision equipment and painful sexual intercourse that can cause wounds and bruising. For example, a study of 7,350 girls under 16 years of age found that 97% of the time, the same circumcision equipment could be used on 15-20 girls (Mutenbei and Mwesiga 1998). Others argue that FGM indirectly predisposes girls and women to HIV because of the increased need for blood transfusion due to haemorrhage during childbirth or at the time of the procedure (Oyugi 1998). However, a link between FGM and HIV is not strongly supported by evidence because some countries with nearly 100% FGM prevalence have lower HIV prevalence when compared with Southern African countries which have the highest HIV prevalence but where the practice of FGM is uncommon.

4.4 Pattern of Sexual Partnerships

Pattern of sexual partnerships is the second parameter (c) in the reproductive rate equation. The growth of the HIV epidemic depends on how fast it can be transmitted from one person to another. Since there is no vaccination or immunity against HIV, every person who is not infected is regarded as susceptible to the infection (Anderson, May et al. 1991). As noted by Brunham (1991), for a sexually transmitted disease to persist in a population, it must infect a person who is capable of transmitting it to others. In Africa, certain social groups were identified in the mid-1980s and early 1990s as the 'core' groups who acted as an 'epidemiological pump' and drove the HIV through the population (Carswell, Lloyd et al. 1989 as cited in Epstein 2007 p 54). Such groups included truck drivers, sex workers and their clients, migrant workers and military personnel. These groups were identified because they were more

likely to have multiple sexual partners and they had higher HIV prevalence compared with other social groups (Carswell, Lloyd et al. 1989).

Although it is believed that the more sexual partners people have, the more they are likely to be at risk of HIV, evidence shows that concurrent multiple sexual partnerships are more risky when compared with serial partnerships (Halperin and Epstein 2004; Epstein 2005; Epstein 2007; Epstein 2008; Halperin and Mah 2008; Mah 2008a; Mah 2008b; Mah and Halperin 2010). The following section will look at two forms of cultural sexual partnerships namely; multiple concurrent partnerships (MCP) and widow inheritance. MCP practice is believed to be linked to the amplified HIV transmission and prevalence in Africa, therefore more attention will be paid to this particular practice. The first section will discuss MCP and the second section will look at widow inheritance.

4.4.1 Multiple Concurrent Partnerships

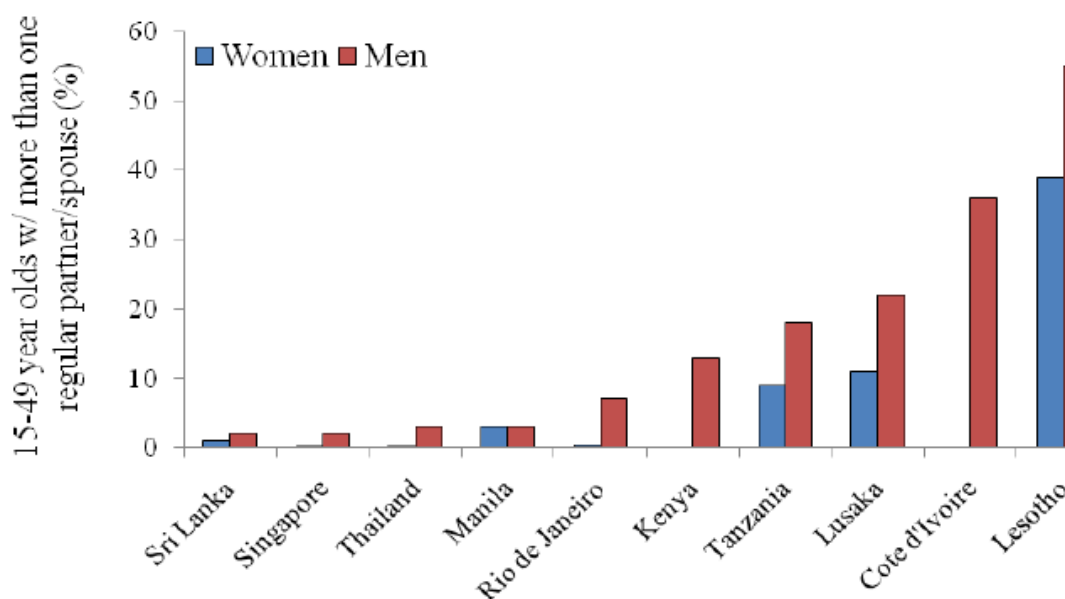
Multiple and concurrent sexual partnerships (MCP) can be defined as the situation where sexual partnerships overlap in time, either where two or more partnerships continue over the same period, or where one partnership begins before the other terminates (Jana, Nkambule et al. 2007). Halperin and Epstein (2004) define multiple concurrent sexual partnerships as having more than one sexual relationship at the same time. The opposite of MCP is serial partnerships, a situation whereby an individual has a sexual relationship with only one partner or with no overlap in time with subsequential partners (Mah and Halperin 2008). Forms of MCP include polygamy, spouse sharing, having a steady partner and a 'side' partner and having casual sexual partners concurrently (Chingandu 2007).

The prevalence of MCPs in Africa has been documented in many studies. A study on sexually active young men aged 18-24 years in Kisumu, Kenya (Mattson, Bailey et al. 2007) found that 63% of participants had at least one concurrent partnership in their lifetime. Of those, 49% had three or more instances of partnership overlap. In South Africa, a 1995 survey in rural KwaZulu Natal found that 40% of sexually active men reported having more than one partner during the past three months, but it is unclear whether those relationships were serial or concurrent (Colvin, Abdool et al. 1998). In the Eastern Cape Province, a 2005 study of young men aged 15-26 years found that 55% of this age group reported having one or more concurrent partners (Jewkes,

Dunkle et al. 2006). In Swaziland, a country with the highest HIV prevalence, a 2006 study found that 70% of males and 62% of females reported having two or more partners in the last three months (James and Matikanya 2006). Although this study did not measure the overlap between relationships, the findings show that a large proportion of the population engage in MCP (Mah 2008a). In Botswana, a 2003 population survey found that 23% of sexually active respondents reported having a concurrent partnership in the last 12 months (Carter, Kraft et al. 2007).

A survey conducted by the Global Programme on AIDS (GPA) in the early 1990s among 15-49 year old men found that Sub-Saharan Africa had a higher percentage of men who reported having more than one regular sexual partner for at least one year compared with other parts of the world (Carael 1995). In that survey, the rate was 36% in Ivory Coast, 55% in Lesotho and 22% in Zambia. Asian countries had the lowest percentage for MCP, for example, Manila, Philippines 3%, Singapore 2% and Thailand 3%. A summary of the findings is presented in Figure 9 below.

Figure 9: Global Reporting of Two or More Regular Sexual Partners



Source: Demographic Health Survey 1990 as reported in Carael 1995

According to UNAIDS (2007b) Southern Africa accounted for 32% of all new HIV infections and AIDS-related deaths globally. The most affected countries in Southern Africa are Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland,

Zambia and Zimbabwe (UNAIDS 2007b). In both Asia and Europe, HIV transmission is strongly associated with high-risk activities and is confined to certain groups more than others, for example, men who have sex with men, injecting drug users and sex workers, and in China, paid donors of plasma (Halperin and Epstein 2004). Epidemiologists are now suggesting that something unique to Sub-Saharan Africa must be driving the epidemic there (Mah and Halperin 2008).

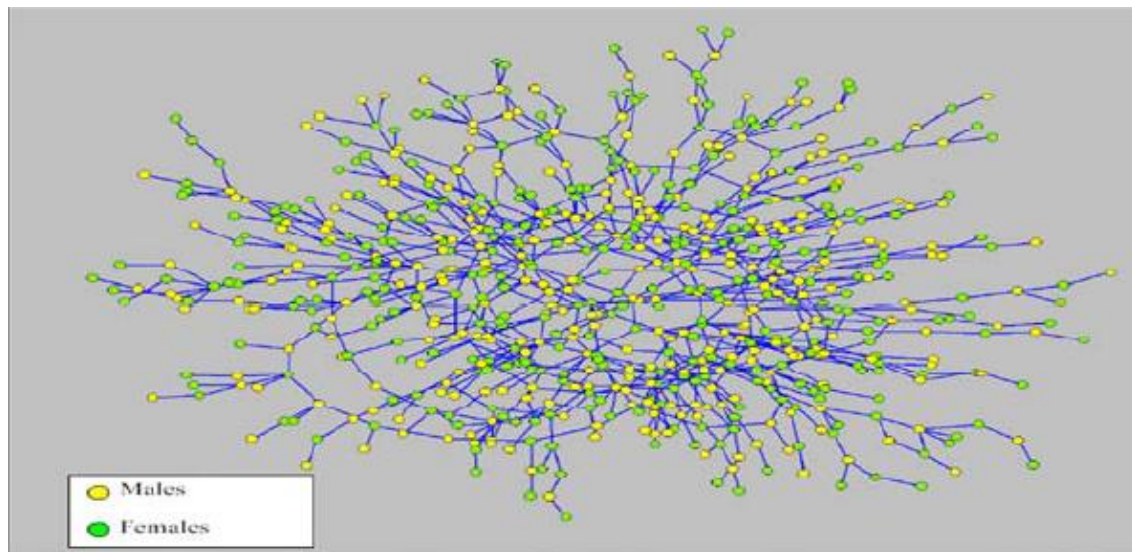
Demographic surveys show that African men do not have higher numbers of sexual partners than men from other parts of the world (Carael 1995; Halperin and Epstein 2004). What is different though, is that in Sub-Saharan Africa, men and women reported more than one sexual partner concurrently and this phenomenon is specific to Africa (Smart 2006; Mah and Halperin 2008). Indeed, a sexual networks study in Uganda, Thailand and the USA by Morris (2002) found that Ugandan men reported fewer lifetime sexual partners than Thai men. The main difference she observed in the sexual networks was that Thai men had one-off encounters with sex workers while Ugandan men's relationships with women tended to be longer in duration. Another important finding from Morris's study is that many Ugandan women reported concurrent multiple partnerships while very few Thai women did, except for sex workers. Halperin and Epstein (2004) argue that the existence of multiple concurrent sexual relationships among women and men in Uganda helped maintain the interlocking sexual networks which could facilitate the spread of HIV in the general population. According to these researchers, what makes MCP so risky as far as HIV transmission is concerned, is that MCP relationships are more intimate, long lasting and trusting when compared with casual sexual relationships. The building up of trust may lead to people ceasing to use condoms and therefore, allowing HIV to spread more easily and rapidly (Halperin and Epstein 2004; Timberg 2007; Mah and Halperin 2008). Epstein (2004) argues that it is more difficult and challenging for people in on-going longer-term sexual relationships to consistently use condoms, whether in heterosexual or same-sex relationships.

Although it is only in recent years that MCP studies have received wide attention, Mah and Halperin (2008) observed that the term "concurrent partnerships" was first mentioned in the epidemiological literature by Watts and May (1992) over 18 years ago. By using a mathematical model they were able to show that the rate of spread of

infection was faster in concurrent relationships than non-concurrent ones. Their mathematical model was based on transmission per partnership (Watts and May 1992). Morris and Kretzschmar (2000) discovered that if one half or 50% of the partnerships in a population are concurrent, the size of the epidemic after five years is ten times as large as under conditions of sequential monogamy. The authors concluded that the main cause of this amplification is the growth in the number of people connected to the network at any point in time. Concurrency makes the infectious agent spread beyond one partnership to others connected to the network because, as soon as one person in the network becomes infected, everybody in the network is automatically at risk of HIV infection (Halperin and Epstein 2004). Sequential monogamy on the contrary, traps the infectious agent within one partnership (Morris and Kretzschmar 1997).

This analysis of the nature of MCP shows that people can be linked sexually with many others even if they have few sexual partners. Helleringer and Kohler (2006) surveyed everyone in seven villages in Likoma Island in Lake Malawi who were in a sexual partnership. They found that because of MCP, 65% of the 1070 people surveyed were connected to each other in a sexual network. Some of these people had only two to three partners, but because of the integrated sexual network they were still at risk even if they considered themselves at low risk. Figure 10 below shows the sexual networks in Likoma, Malawi. Although this study is the first to document MCP sexual networks in an effective way in Africa, their findings cannot be generalised to other populations as the island culture (Likoma Island) might be different from the general population of Malawi and other parts of Africa.

Figure 10: Sexual Networking in Likoma, Malawi



Source: Helleringer and Kohler 2006

According to Mah (2008a), the effect of higher viral load (which was discussed earlier in 4.3.1) makes concurrent partnerships dangerous because it increases the probability that uninfected partners will be exposed to an infected partner during the acute infection. If this happens, the virus can enter an interlinked concurrent partner network and spread rapidly. Spread can also be accelerated due to the fact that in regular partnerships, condom use is low and people are likely to have a higher number of coital acts with one regular partner compared with casual partnerships (Epstein 2004; Halperin and Epstein 2004). The main difference in serial relationships, regardless of the frequency of coital acts, is that the only person at risk during the acute infectious phase is the uninfected partner (Mah 2008a).

People who support the theory that MCP is responsible for the increase of the HIV epidemic in Africa argue that countries in Africa that report a decline of HIV infection at the population level have one thing in common: a significant decline in the number of men and women who reported having more than one sexual partner or casual partners (Green, Mah et al. 2009). A study in Manicaland, Zimbabwe reported a decline of HIV among women attending antenatal clinics from the prevalence rate of 25.5% in 1998-2000 to 18.1% in 2004 (Gregson, Garnett et al. 2006). The researchers attributed this decline to a general decline in casual sex among young people and delayed sexual debut. They also suggested that the reduction of HIV incidence could be the result of natural dynamics, because epidemics can be self-limiting. High

mortality decreases the prevalence and the incidence as well because it reduces the number of infectious individuals who can spread the infection (Gregson and Murungi 2006). However, researchers in the Zimbabwean study did not mention that millions of Zimbabweans fled that country from 2000 to 2004 and beyond, due to political instability (Smart 2006). Some of those who fled Zimbabwe were sexually active and may have contributed to the increase of HIV prevalence in their host countries, although this possibility has not been fully investigated. Hayes and Weiss (2006) argue that despite the mass emigration, substantial decreases in prevalence were still observed when analysis was restricted to longer-term residents. Another strength which was also cited by Hayes and Weiss (2006) is that the study had a higher coverage rate and was based on population surveys. It was therefore less susceptible to bias than other sentinel surveillance data that are used to measure trends in HIV prevalence.

Reasons for practising MCP in Africa include a culture that allows men to have multiple partners, transactional relationships, lack of peace at home, sexual boredom and a need for a change, and lack of sexual satisfaction (Chingandu 2007). Most of the studies in Africa blame men for being responsible for MCP. This assumption is common in Africa among human rights groups, donors and the feminist movement. Although that may be the case in some areas, empirical evidence shows that women too play a role in MCPs. For example, De Walque (2007) noted that a substantial source of HIV vulnerability among men and women in long term relationships is due to extra-marital affairs. De Walque (2007) analysed the Demographic Health Surveys (DHS) data from five countries on HIV discordance and discovered two unexpected results. The first finding was that at least two-thirds of the infected couples in the five countries were discordant that is only one person per couple was infected. The second finding was that across the five countries, in 30 to 40 per cent of the infected couples, it was only the woman who was infected.

According to De Walque (2007), such findings are at odds with the common assumption among the public and a large part of the HIV/AIDS community, who believed that unfaithful males were responsible for bringing HIV from high-risk groups to the general population, not unfaithful wives. For example, Pisani (2000) suggested that female discordance can be caused by women becoming infected during

premarital sex, especially transactional sex with older men, a practice which is very common in Africa. However, Ruark (2008) argues that the premarital HIV infection assumption does not hold because De Walque's (2007) analysis showed that it is extremely difficult to explain the higher numbers of couples in which the woman is the one who is infected on the basis of premarital sex alone, and that women having extra-marital sex must also contribute to the observed rates of infection in married women. Similarly, another study in South Africa measured HIV-1 discordance among 168 couples (migrant and non-migrant men and their rural partners) and found that contrary to what was believed, the direction of the spread of HIV infection was not only from returning migrant men to their wives, but also from women to their migrant husbands (Lurie, Williams et al. 2003). Another study in Lusaka Zambia, found that among 8,500 cohabiting couples who sought HIV testing between 1994 and 2000, nearly half were discordant with HIV-positivity equally distributed between men and the women (Chomba, Allen et al. 2008). This apparent oversight of women's sexual behaviours is likely to have several different explanations. Firstly, African women are less likely to report risky behaviours than men (Nnko, Boerma et al. 2004; Ruark 2008). For example, a study in Kisumu Kenya and Ndola, Zambia (Glynn, Carael et al. 2001) reported that 11.9 % of 67 women in Kisumu and 7.5% of 107 of women in Ndola who denied any sexual activity were HIV positive and some had STIs. Secondly, the lack of in-depth understanding of African culture and stereotypes that portray African women as 'victims' and 'vulnerable' has led many researchers to fail to appreciate that women's extra-marital sex is culturally driven and predated the advent of HIV/AIDS (Olowo-Freers and Barton 1992).

Although the evidence for MCP being a factor in HIV transmission is compelling, caution still is needed, as many people who support the theory that MCP is responsible for HIV transmission also give the impression that condoms are not effective in controlling the epidemic. Since the rate of serodiscordancy is high in Africa, the role of condoms cannot be underestimated. The problem is not that the condoms do not work, but that people do not want to use them correctly, consistently or at all (as will be discussed in a subsequent chapter). The following section will discuss another form of sexual partnering, namely wife inheritance and sexual cleansing. This practice is believed to have contributed to the spread of HIV in some parts of Africa.

4.4.2 Wife Inheritance and Sexual Cleansing

Wife inheritance and sexual cleansing are intertwined terms used to describe the process of ‘taking care’ of a wife whose husband is deceased. Wife inheritance refers to the long term sexual relationship between a widow and a male relative of her deceased husband, while sexual cleansing refers to a one-off sexual encounter between the widow and a cleanser or a man paid to cleanse her before she is inherited (Colson 1962; Ntozi 1997). This practice can influence factor c in the reproductive rate because it is a form of sexual partnership that can potentially introduce a new infection into an existing sexual network if the widow or the inheritor is infected with HIV. In order to understand this practice, we need to look at the purpose of marriage in many African cultures.

According to Caldwell and Caldwell (1987) “the purpose of marriage in Sub-Saharan Africa is reproduction, and marriage is defined as a transfer of a woman’s rights from her father to her husband” (1987 p 420). In addition, a marriage cannot be recognised by both families unless the dowry (bride wealth) has been paid. If a man dies without paying the dowry, his brother must pay the dowry or the woman may go back to her parents. In this case the children become ‘illegitimate’. If the woman dies, the man must pay the dowry before he can be allowed to bury her. As Caldwell and Caldwell (1987) observed, the dowry signifies recognition, acceptance, and the legitimacy of the union. A woman acquires permanent residence at her husband’s homestead and she is therefore inherited if her husband dies. In most African cultures, a woman cannot divorce her husband once the dowry is paid (Caldwell and Caldwell 1987). Male mortality was and still is high in Africa; for example, men are more likely to be killed in war than women, and in the past, they faced dangers from diseases, wild animals and working in dangerous places such as factories and mines. As a result many women were often widowed at a very young age (Caldwell and Caldwell 1987).

Being inherited was a way to keep a woman in the family to continue looking after the children, producing more children and to retain “legitimacy” with respect to rights to her husband’s land, because women could own land. In most African cultures where this practice is common, the inheritor must be a male relative of the deceased husband, usually his brother (Colson 1962; Potash 1986; Ntozi 1997). Being inherited by a relative accomplishes two purposes. The first is that it stops an ‘outsider’ who is

not related to the deceased man from looking after his children and is similar to the concept of the step-father as it is known in other parts of the world. In African culture, your brother's children are like your own. Secondly, being inherited by a male relative ensures that the children born from this subsequent relationship will also come from the same family or clan as their siblings. Since the children born belong to the deceased husband, the children are also closer biologically if they are fathered by his brother (Potash 1986). In addition, where polygamy is common, women prefer their husbands to marry their own sisters. If they die, then the sister looks after their children rather than a stepmother.

In some cultures, a widow must be cleansed before the inheritor takes over. In Zambia, some cultures believe that a widow is still connected to her husband by a 'cord' and his spirit stays with his widow unless she is cleansed (Malungo 2001). For this cleansing to occur, someone must have penetrative sex with the widow to 'chase' the spirit of the husband away (Malungo 2001). The person who does the sexual cleansing is supposed to inherit the woman permanently. The Luo tribe in Western Kenya follow four main steps in sexual cleansing, as described by Tony (2002). First, there is non-sexual wife inheritance, whereby the coat of an inheritor is placed in a widow's house overnight to symbolically cleanse her. This generally applies to widows beyond childbearing age. Second, there is inheritance involving long-term sexual relations, typically with a brother of the deceased, in what amounts to a marriage. Third, there is a combination of cleansing and inheritance, whereby a widow first has sex with a social outcast known as a *jater* (in a local language) who is paid to have sex with her to cleanse her of her dead husband's spirits, and she is then inherited by a male relative of the dead husband. Fourth, there is cleansing alone, where a widow has sex with a *jater* to cleanse her but is not inherited permanently. The Luo practice is a little bit different from the one in Zambia because the first act of sex in the Luo is done by an 'outcast' or someone who is a 'loser' or despised and it is believed that the bad spirit is transferred to him. He clears a way for the relative to take over and permanently inherit the widow.

Women who are not cleansed face isolation and can lose everything if they do not agree to the practice. For example in some parts of Zambia, it is believed that a woman who is not cleansed can suffer from mental illness and may be isolated until

the practice is carried out (Malungo 2001). In Kenya, if a widow is not inherited she will be chased out of the husband's home and lose her children because of fear that another man outside the husband's family may inherit her. Women's property rights closely relate to wife inheritance and cleansing rituals, in that many women cannot stay in their homes or own their land unless they are inherited or cleansed (Ntozi 1997). According to Amnesty International (2004) women have to be inherited to keep any property after their husbands die. The advent of HIV/AIDS has rendered the practice of widow inheritance potentially deadly because either the inheritor or widow may transmit HIV to the other and to anyone else involved in the sexual network. One man who worked as a jater or a wife cleanser in Kenya, mentioned that he cleansed at least seventy-five widows in two years and had never been tested for HIV (Tony 2002). The jater was either paid around USD 30 per widow or he was given cows or sheep. The following story from the Washington Post highlights the dangers of wife inheritance.

It was the summer of 1990 and [A] faced the deadly scenario. Her husband had just succumbed to AIDS. She knew he had infected her, now her in-laws clamoured for her to allow one of her husband's brothers to make her his personal responsibility, as a tradition here has long dictated. [A] then 28, could scorn the tradition, be driven from her community and face starvation with her three children. Or she could marry her brother in law, feed her offspring, protect her property-and pass on the virus. She chose her brother in law, he died two years later but not before he infected two other women-they both died. Another man has since inherited [A] since she was interviewed and she is nine months pregnant with his child (Buckley 1997 p 1).

Although this story was sensationalised for a Western audience, it does highlight the challenges women face with the practice of inheritance. It is unlikely that the inheritor and his two wives got HIV from [A] and all died within two years, unless they were infected earlier before [A]. Human rights campaigners argue that these practices oppress women because men are not subjected to such rituals if their wives die. Indeed, a man is free to marry anyone at any time. Others argue that men benefit not just from their inherited wife's labour and childbearing potential, but also from the property the deceased husband leaves behind. Wife inheritance is a very common way

to access property. If women resist, they are sent out of the household (Tony 2002). For those who are infected like the woman [A] mentioned above, their main priority is to stay on the land so that when they die, their children can have a home. In addition, wife inheritance is often portrayed as an act of generosity in that the widow will have a man to ‘look after’ her and confer the status of being in a male-headed household. Contrary to the belief that the practice of wife inheritance puts widows at risk of HIV, most Africans in rural areas believe that women who are not inherited are the ones who are vulnerable to HIV because they may resort to prostitution if there is no man to look after them (Frank 2009). There are, therefore, contradictory views between those campaigning against and those practising widow cleansing. Despite the reports that this practice is in decline, it seems that the underlying issues such as economic dependence and cultural beliefs that promote widow cleansing are far from being resolved in many parts of Africa.

4.5 Socioeconomic Status and HIV Spread

4.5.1 Poverty and Education

Globally, there is evidence to show that poverty causes ill health because it forces people to live in environments that increase their susceptibility to disease (WHO 2002). Indeed, life expectancy is higher in richer countries compared to poorer ones and maternal and child mortality is higher in poor countries. According to Gillespie (2008) in the early days of HIV/AIDS, the prevailing belief was that poor individuals were more vulnerable to HIV infection and HIV was called a “disease of the poor” (2008 pg 1). Although infectious diseases affect the poor more than those with higher incomes, when it comes to HIV, the evidence is mixed. Indeed, population-based surveys show that wealthier African countries such as South Africa and Botswana have a higher HIV prevalence than poorer countries such as Niger (Mishra, Asscheb et al. 2007; Potts, Halperin et al. 2008). Examination of Demographic Health Surveys (DHS) for eight countries in Sub-Saharan Africa found that there was a positive association between asset-based wealth and HIV status especially among women (Mishra, Asscheb et al. 2007). In the same study they also found that there was no association between low wealth status and HIV. A study in Zimbabwe found that what puts educated and higher income men and women at increased risk of HIV transmission and acquisition is that they are more likely to have higher rates of partner

change, live in urban areas where HIV is more prevalent, and to be very mobile (Gregson, Garnett et al. 2006). Other scholars argue that although early in the epidemic, people with higher socio-economic status were more affected, the trend has changed because they tend to adopt safer practices than those of lower socio-economic status once AIDS-related morbidity and mortality become more visible (de-Walque, Nakiyingi-Miiri et al. 2005).

Although the notion that poverty influences HIV infection may be too simplistic, it can be argued that poverty indirectly increases the risk of HIV acquisition and transmission in Africa. For example there is evidence to show that HIV positive individuals on ARVs or HIV treatment are less likely to infect their sexual partners compared with those with untreated HIV (WHO/UNAIDS/UNICEF 2010). Millions of Africans living with HIV are unable to access ARVs due to poverty; this increases their chances of passing on the HIV. In this instance it can be argued that poverty therefore increases HIV risk. Another example is the possibility of transactional sex especially among women who must sell sex to survive or feed their children and hence increase their risk of HIV. In addition, studies that have purported to show that poverty is not linked to HIV (Mishra, Asscheb et al. 2007) were cross-sectional, not longitudinal and were unable to track new infections among people moving out of poverty.

4.5.2 Gender

UNAIDS (1998 pg 3) broadly defines gender as “what it means to be male or female, and how that defines a person’s opportunities, roles, responsibilities and relationships”. Gender is very relevant to HIV/AIDS because research shows that being a woman or man shapes how an individual experiences and responds to the HIV/AIDS epidemic (UNAIDS 1998). Since the 1990s there has been a growing concern and recognition that gender is central to HIV progression largely due to the fact that women are disproportionately affected by the epidemic (Parker 2001; UNAIDS 2006). For example; physiologically the large mucosal surface area of the vagina and the high concentration of the virus in semen put women at a much higher risk of acquiring HIV during unprotected sexual intercourse (Centre for Disease Control and Prevention 2005). Age may be another factor. Young women tend to begin their sexual experiences with older men, who are more likely to have HIV

(Dunkle, Jewkes et al. 2004b). In addition, women often have difficulty negotiating safer sex with partners for a variety of reasons, including lower social status, economic dependence on men, and fear of violence (Dunkle, Jewkes et al. 2004a).

Although it is important to address gender in HIV/AIDS intervention and research, as with the issue of poverty, the evidence shows that gender equality is positively associated with HIV prevalence. A closer look at the World Economic Forum (WEF) gender gap report shows that for Sub-Saharan Africa, countries ranked higher in gender equality (some ahead of developed countries) have the highest HIV prevalence (WEF 2010). For example; Lesotho is ranked 8th for 2010, ahead of the United Kingdom ranked 15th, USA 19th, Germany 13th and Australia 23rd. Next is South Africa ranked 12th and then Botswana ranked 66th. All of these African countries have amongst highest HIV prevalence in the world (UNAIDS 2011). African countries with the lowest rank in gender equalities such as Chad (ranked 133rd) and Mali (ranked 131st), have the lowest HIV prevalence in Africa and also in the world (UNAIDS 2011).

4.6 Other HIV Determinants (Conflict and War)

When people flee their homelands, their protection cannot be guaranteed by host countries who themselves may already be overburdened by the impact of HIV. Whether conflict and war increase the transmission of HIV or not, there is a general agreement that the members of uniformed services are vulnerable to both contracting and serving as an agent of transmission (UNAIDS 2005). Although many people assume that conflict leads to HIV transmission, Spiegel (2004) argues that historically refugees have often migrated from countries with low prevalence to countries that have higher HIV prevalence. This view is in contrast to that of Mills, Singh et al (2006) who argue that HIV and conflict are interrelated because conflict creates conditions that can lead to exploitation and sexual violence. Factors that increase vulnerability to HIV during war are breakdown in social structures, lack of income, lack of basic needs, sexual abuse, increased drug use and lack of health infrastructure and education (UNAIDS/UNHCR 2007).

Although war can render affected populations vulnerable to HIV transmission, Spiegel (2004) pointed out that factors that may decrease HIV transmission in conflict

situations are never considered. Such factors are reduced mobility, less accessibility to high-risk urban areas and provision of better health care in refugee camps (Spiegel 2004). For example, studies that showed lower than expected prevalence in conflict zones include Sierra Leone (Kaiser, Spiegel et al. 2002) which only had 0.9% prevalence in 2002 while neighbouring countries such as Guinea, which was not involved in the war, had a prevalence of around 2.1 to 3.7% (Kaiser, Spiegel et al. 2002; Spiegel 2004; Spiegel, Bennedsen et al. 2007). These findings are puzzling because there is enough evidence to suggest that rape and sexual violence do accompany wars in Africa (Becker, Theodosis et al. 2008). Those who think that conflict increases HIV transmission, focus on troops and peace keepers who may contribute to HIV transmission among displaced populations. In most African countries, military personnel have a higher HIV infection rate than the civilian populations (Fleshman 2001; Newman, Miguel et al. 2001). Soldiers are often blamed for spreading disease because most of them are typically in a young, sexually active group, they spend long periods away from their families, they face stress related to war that can result in risky sexual behaviours, the culture of the military esteems sex, and they have money, power and opportunities for casual sex (Fleshman 2001).

Despite such compelling assumptions about the relationship between HIV and conflict, Spiegel (2004) argues that such assumptions are not supported by empirical evidence and that data collection during conflict may be difficult. Other researchers such as Becker, Theodosis et al. (2008) claim that the relationship between soldiers and HIV is not supported by data and studies have failed to show that there is a higher prevalence among military recruits. However, the prevalence of HIV is much higher in the military than in the civilian population. Although military HIV prevalence statistics are not readily available, in 2005 the Kaiser Foundation Fund (KFF) estimated that HIV prevalence was between 20% and 22% for the South African Army, approximately 50% for the military forces of Angola, Congo and Malawi, 48% for the Swaziland Army, 55%, for Zimbabwean Army and 60% for the Zambian Army (KFF 2005).

In conclusion, biological, behavioral, cultural and social factors all contribute to HIV transmission. The following sections discuss control measures and approaches that have been found to limit the spread of HIV both at an individual or population level.

4.7 Measures Used to Control the Determinants of HIV Spread

Several approaches have been found to limit the risk of HIV transmission per contact. They include condom use, voluntary counselling and testing (VCT) and male circumcision. Another approach called ABC (abstain, being faithful to one partner and condom use) is also promoted.

4.7.1 Voluntary Counselling and Testing

Due to the effect of viral load on HIV transmission, identifying those infected is crucial in limiting the further spread of HIV. UNAIDS (2000 p 8) defines Voluntary Counselling and Testing (VCT) as “the process by which an individual undergoes counselling and testing enabling him or her to make an informed choice about being tested for HIV”. The overall aim of VCT is to enable people to be aware of their HIV status which in turn enables them to make informed choices about their behaviour. Different approaches to VCT in Africa include; home based VCT (Were, Mermin et al. 2006), couple VCT (Bunnell, Nassozi et al. 2005), same day mobile VCT (Morin, Khumalo-Sakutukwa et al. 2006), routine VCT (Bassett, Giddy et al. 2007) and health care facility-based VCT (UNAIDS 2000). VCT for HIV is believed to be essential for both prevention and care of those with HIV/AIDS. One of the key successes of the provision of VCT for HIV is the prevention of mother to child transmission (PMTCT). In countries where antiretroviral treatments, elective caesareans and milk formula are available, the rate of mother to child transmission is below 2% (UNAIDS 2000). In Brazil, the provision of VCT to pregnant women reduced HIV infection in children from 809 in 1996 to 41 in 2001 (Goldani, Giugliani et al. 2003). In order to stop babies from being infected with HIV, mothers must first know their HIV status (UNAIDS 2000).

Despite the different approaches and multiple benefits of VCT for HIV, the uptake remains very low, especially in Sub-Saharan Africa. Indeed, some studies have found that the uptake of VCT among the general public and couples varies widely from 12% to 56% (Were, Mermin et al. 2006 ; Bassett, Giddy et al. 2007). The Demographic Health Surveys of twelve countries (Botswana, Cameroon, Ethiopia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Nigeria, Demographic Republic of Congo, Tanzania and Uganda) which account for nearly half of the HIV/AIDS infections in Africa,

found that among the general population, the median percentages of men and women who had been tested for HIV and received their results were 12% and 10% respectively (WHO/UNAIDS/UNICEF 2007). In addition, population-based studies in the same countries found that the percentage of women and men living with HIV who were aware of their HIV positive status was 12-25% and 8-24% respectively (WHO/UNAIDS/UNICEF 2007). It is concerning that most people infected with HIV in Africa are not aware of their infection status. For example, WHO/UNAIDS (2007) estimates that the proportion of people who are infected with HIV and are not aware they are infected is around 80%. It is against that background that VCT for HIV is widely promoted in many countries in Africa.

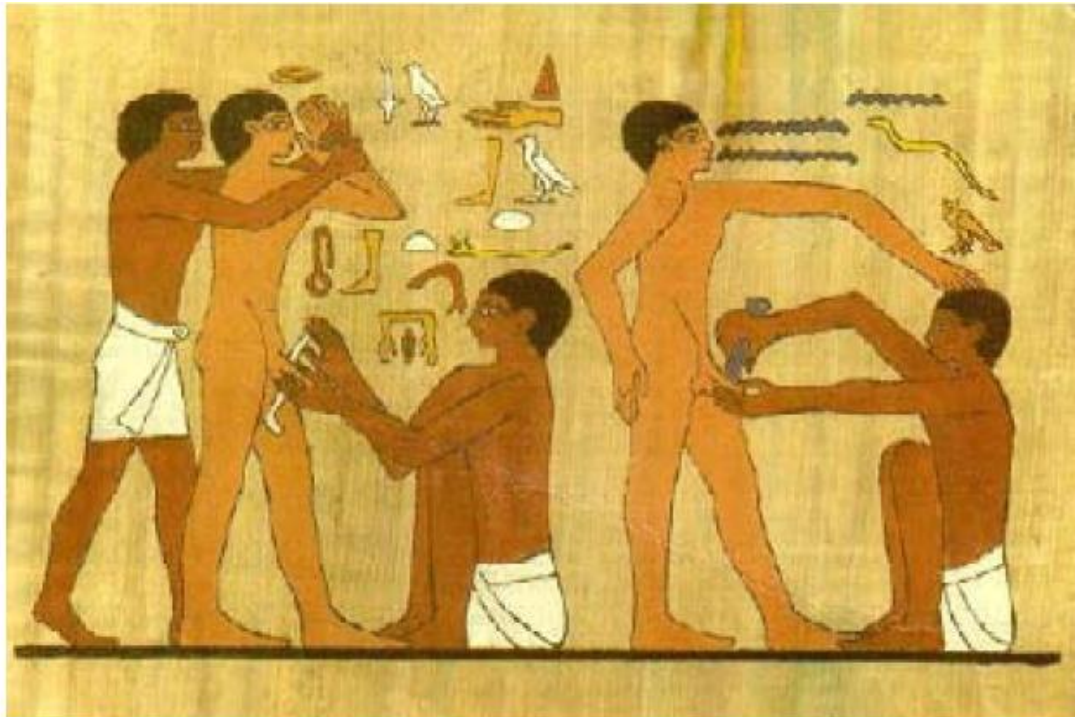
Evidence suggest that barriers to VCT in Africa include stigma, low perceived risk of contracting HIV, fear of discrimination, concerns about confidentiality and negative perceptions towards health workers (Kalichman and Simbayi 2003; Matovu, Gray et al. 2005; Nakanjako, Kanya et al. 2006; Were, Mermin et al. 2006). Low uptake of VCT for HIV is not the only problem facing those who promote VCT in Africa. Also studies on the relationship between VCT and sexual behaviours have found that people who test negative for HIV do not necessarily change their sexual behaviours. One study in Rakai, Uganda (Matovu, Gray et al. 2005) found that VCT had some effect on sexual behaviours for those who tested HIV positive and on serodiscordant couples when the male was HIV negative but no significant sexual behaviour changes were observed for those who tested HIV negative. Another study in Harare, Zimbabwe (Corbett, Makamure et al. 2007) found that higher uptake of VCT did not reduce HIV incidence and participants who tested negative engaged in higher risk sexual behaviours after the VCT because they felt immune to HIV infection. In Tanzania, Sweat, Gregorich et al (2000) found that women who tested positive for HIV experienced domestic violence and psychological distress . In addition, there are limitations of studies used to measure the effect of VCT on sexual behaviours. For example, studies that reported the advantages of VCT used participants who self-selected or who volunteered to be tested and relied on self-reported sexual behaviours as a measure of behavioural change. Their findings cannot be generalised to other populations because those individuals may have characteristics that are different from the general population.

Although the findings on the effect of VCT on sexual behaviours are mixed, knowing one's HIV status remains important in accessing care, treatment and the prevention of HIV transmission, especially from mother to child. The next section looks at male circumcision and its advantages in controlling the risk of HIV transmission per sexual contact.

4.7.2 Male Circumcision

Some researchers have argued that male circumcision (MC) may offer a protective effect against HIV infection. The evidence for an association between MC and HIV infection includes biological plausibility, the results of observational studies, a systematic review and meta-analysis, plus randomised controlled clinical trials. Other diseases associated with being uncircumcised include sexually transmitted genital ulcer disease, chlamydia, infant urinary tract infections, penile cancer, and cervical cancer (Alanis and Lucidi 2004). MC can be defined as the process of surgically removing some or all of the foreskin from the penis (Alanis and Lucidi 2004). According to UNAIDS and WHO (2007), the determinants of MC are religious practices and ethnic identity. Auver, Taljaard et al (2005) found that the earliest documented evidence of circumcision was from Egypt, where tomb art work from the Sixth Dynasty around 2345-2181 BC shows the rite being performed on standing adult men, as Figure 11 below shows.

Figure 11: Circumcision in Egypt Around 2345-2181 BC



Source: http://en.wikipedia.org/wiki/Image:Egypt_circ.jpg

In the Bible, the author of the book of Genesis (in Chapter 17, verse 11) documents the practice of circumcision in the times of Abraham. In Judaism, male babies are circumcised on the eighth day of life, as an outward sign that the Jews were set apart by the covenant between God and Abraham (UNAIDS and WHO 2007).

According to the Centers for Disease Control (2008), it is biologically plausible that MC can indeed act as a protective factor for HIV infection. Laboratory studies show that the inner mucosa of the foreskin has less deposition of fibrous protein (keratinisation) and a higher density of target cells for HIV infection (Langerhans cells) compared with the dry external skin surface (Patterson, Landay et al. 2002). Another argument for biological plausibility is that the foreskin is more susceptible to traumatic epithelial tears during intercourse, which can provide a portal of entry for pathogens including HIV (Szabo and Short 2000). Alanis and Lucidi (2004) suggested the preputial sac between the unretracted foreskin and the glans penis can provide a microenvironment that increases viral survival in uncircumcised men.

The first paper suggesting a protective effect of MC against HIV according to Auver,

Taljaard et al (2005) was published in 1986. In that paper the author proposed that MC could be a possible explanation for heterosexual male infection (Fink 1986). Observational studies have found that men living in the parts of Africa with the highest HIV prevalence, for example Southern African and East Africa, are not circumcised (Bongaarts, Reining et al. 1989; Moses, Bradley et al. 1990; Caldwell and Caldwell 1996). Another observation from ecological studies is that African and Asian countries with less than a 20% MC rate, have HIV infection prevalence rates several times higher than those in countries or regions with an 80% MC rate (Halperin and Bailey 1999). A systematic review and meta-analysis that focused on male circumcision and heterosexual transmission of HIV in Africa found that the relative risk for HIV infection was 44% lower in circumcised men, and the adjusted relative risk was 71% lower for circumcised men who attended sexually transmitted infection clinics (Weiss, Quigley et al. 2000). This study included 19 cross-sectional studies, five case-control studies, three cohort studies and one partner study.

Three randomised controlled clinical trials were conducted in South Africa (Auver, Taljaard et al. 2005), Kenya (Bailey, Moses et al. 2007) and Uganda (Gray, Kigozi et al. 2007) to determine if there was a causal relationship between MC and HIV protection. Researchers in these studies found that men who were randomly assigned to the circumcision group had a lower incidence (60% South Africa, 53% Kenya and 61% Uganda) of HIV infection compared with men assigned to the uncircumcised group.

Only the South African trial will be discussed further below because the other two trials (in Kenya and Uganda) have similar findings. The South African trial took place in the Orange Farm area near Johannesburg from July 2002 to February 2004 (Auver, Taljaard et al. 2005). A total of 3,274 uncircumcised men, aged 18-24 years, were randomised to control or intervention groups with follow-up visits at months 3, 12, and 21. Male circumcision was offered to the intervention group immediately after randomisation and to the control group at the end of follow-up. The men were tested for HIV at the start of the trial and at all follow-up visits, but both participants and investigators at the trial site were blinded to the results. Participants were offered the opportunity of establishing their HIV status on a voluntary basis. After the 12-month clinic visit, an interim data analysis indicated that there were 20 HIV infections in the

intervention group and 49 infections in the control group, giving a relative risk of 0.40 (95% CI: 0.24%-0.68%; p value < 0.001). This rate represents a reduction of 60% in the risk of HIV infection and the study was terminated at this stage as it would have been unethical to deny the uncircumcised men the benefits of reducing their risk of HIV through circumcision. The conclusion was that MC provides a degree of protection against acquiring HIV infection and also an important way of reducing the spread of HIV infection in Sub-Saharan Africa. This study was the first randomised control trial investigation of the effect of MC on HIV. The level of protection it found was conferred by MC is attractive but this study did have some problems from the selection of the population to the interpretation of the results. For example, this study could not apply double-blinding which is considered to be the gold standard in trial research, because of the nature of the intervention. It was impossible for men to be circumcised and not know and those who were not circumcised to be unaware of it (Muula 2006).

Randomised controlled studies require that subjects in both the intervention and non-intervention groups should be given the same instructions and all other conditions (beside the intervention) should be the same. In this study, men from the intervention group were instructed not to have sexual contact until six weeks after surgery, and if they did, they were advised that it was absolutely essential to use a condom. The control group did not receive any instruction about sexual behaviours. According to Young (2006), such instructions could have led to the difference between the two groups as the time they spent waiting to recover from surgery could have exposed them to more safer-sex information than was the case for the control group.

Another potential confounder of the results is the selection process for the participants. According to Farmer and Miller (1983), recruiting volunteers for a study brings about self-selection of individuals who might not be representative of a parent population. Dowsett and Couch (2007) questioned the external validity (generalisability) of this study because men who volunteered to take part were all HIV negative and it is likely that they were also more careful than others with regard to sexual risk. It is therefore inappropriate to generalise the findings of this study to the general population, due to the potential problems for external validity caused by having volunteers as trial participants. Participants were also rewarded for taking part,

which might attract a group of people belonging to one social class, and thus also not be representative of the general population.

Dalton (2008) pointed out that the number of study participants lost to follow-up far outweighed the number of participants who acquired the virus. The percentage of circumcised participants lost to follow-up was 6.5% for South Africa, 10% in Kenya, and 3.5% in Uganda. The concern is that those who were lost to follow up may have been HIV positive and their numbers are high enough to cast doubt on the internal validity of the findings. Other factors most associated with HIV in Africa were not controlled for in this study, although the randomisation process should have resulted in their being evenly distributed between the control and intervention groups. Such factors include blood exposure, for example in the use of traditional healers, anal intercourse and the relationships between condom use and HIV incidence (Potterat, Brewer et al. 2006). If these potentially confounding exposures were not documented then it is not possible to be assured that they did not differ between the control and intervention groups. For example, the number and nature of coital acts in each group should have been investigated. There remains the possibility that men who were HIV negative during the trial period were not infected because they did not have sex, or they had only protected sex.

The effectiveness of MC in HIV transmission presents a dilemma to African nations about the cost needed to implement MC. The question is whether it is wise to divert the scarce resources to new interventions such as MC, or to continue with what is already known to work to prevent spread of HIV, such as a focus on having one faithful uninfected partner, abstinence, providing treatment for people who are infected and encouraging condom use. Caution is also needed because promoting MC may cause harm in the settings where medical equipment is not safe (because sterility of equipment cannot be maintained) and medical workers are few or non-existent.

The above sections have looked at the means used in Africa and in other parts of the world to limit HIV transmission from one person to another. The following section will pay attention to factor c of the basic reproductive rate, namely patterns of sexual partnerships and the approaches that have been used to reduce this.

4.7.3 The ABC Approach

Different forms of sexual partnership can contribute to the speed and extent of HIV spread in the population (or factor c) in the basic reproductive rate. MCP and widow inheritance customs introduce the HIV infection into the existing partnerships or sexual networks as already discussed. The ways that have been used to counter these phenomena in Africa are encapsulated in the ABC approach. The ABC slogan probably started in Uganda where HIV ravaged the country in the mid-1980s and early 1990s. Many African countries adopted the ABC approach (abstinence, be faithful condom use) (Green 2003). This slogan captures two angles that can be used in HIV prevention, namely risk avoidance and risk reduction. The risk of contracting HIV can be avoided altogether by avoiding any sexual activities by practising abstinence, and risk could be reduced by having one faithful uninfected partner, being faithful, or through correct and consistent use of condoms (PEPFAR 2005). Abstinence includes also delaying sexual debut and practicing abstinence until marriage, which has proved to substantially reduce the risk of HIV in young people. “Be faithful” is sometimes referred as partner reduction or ‘zero grazing’.

At the heart of the ABC approach is the tension between two groups, one that promotes abstinence and the other that promotes condoms. Those who support the abstinence-only approach claim that in countries where the HIV prevalence is high, risk avoidance or abstinence is the only way young people can be protected from HIV (Green 2003). Those who oppose abstinence until marriage argue that marriage cannot ensure safety or protection from HIV infection, especially in a climate of gender inequalities (Murphy, Greene et al. 2006; AVERT 2009). Others argue that the problem is not the ABC approach but the AB without a C (Duflo 2009). Shelton, Halperin et al (2004) argue that partner reduction or B has become the neglected middle child of the ABC approach. Since most of the AIDS funding in Africa came from the US government, some argue that Ugandans, for example, were forced to trim their AIDS policy to fit the view of the American Christian right, especially during President Bush’s era (Barnett 2005; Epstein 2005). Human Rights Watch argue that Africans were forced to adopt the ABC approach because only proposals that included abstinence education for youth received funding from USAID (Cohen and Tate 2006).

The view that the ABC approach was forced on Africans is, however, incorrect as this

approach became very popular in Africa mainly because it appealed to both religious, and traditional Africans who opposed condom use as the only way to prevent HIV. In fact, some Africans blame the Western AIDS experts for the high HIV rates in Africa because they used their financial power to change the African approach to ABC, and promoted condom use as the only way to prevent HIV (Ruteikara 2008). Indeed the condom as a means of contraception or HIV prevention has met stiff opposition from Africans who view this approach as condoning promiscuity (Coast 2007). According to Ruteikara (2008), Africans recognised in the early 1980s that HIV spread in the population was caused by sex with multiple regular partners. He claims that it was at that time that the slogans of 'stick to one partner' or 'zero grazing' emerged and condoms were marketed as the last resort.

Uganda is regarded as one of the few African countries that has managed to reverse their HIV/AIDS epidemic. The estimated HIV prevalence in adults in Uganda fell from 15% in 1991 to 5% in 2001 (UNAIDS 2002). This success was credited to the ABC approach. However, Shelton, Halperin et al (2004) argue that the main reason for the Ugandan success was the B element of the ABC, which represents partner reduction. They believe that Ugandans dramatically reduced their numbers of sexual partners compared with those abstaining or using condoms. At the population level this was significant because even a small reduction in the number of sexual partners can dismantle the sexual networks that facilitate HIV transmission.

Abstinence too occurred in Uganda and other parts of Africa where HIV prevalence has been reduced. For example, data from the Demographic and Health Surveys (DHS) show that there is an increase in the age at sexual debut for women who were born after 1970 of two years (Slaymaker, Bwanika et al. 2009). The previous DHS data between 1985 to 1995 showed that age at sexual debut increased by less than one year (Bessinger, Akwara et al. 2003). These findings have epidemiological significance because public health researchers believe that changes in the median age at first sex, even by one or two years, can alter the epidemic at a population level (Gregson, Todd et al. 2009).. Studies in Zimbabwe and Uganda clearly showed that delays in reported age at sexual debut coincided with a decline in the prevalence of HIV (Asiimwe-Okiror, Opio et al. 1997; Stoneburner and Low-Beer 2004; Gregson, Garnett et al. 2006). However, Shelton, Halperin et al (2004) argue that although

abstinence was important in the decline of HIV in Uganda, abstinence alone cannot explain the overall national HIV decline across all age groups. Although the DHS data show that young people, especially women, are delaying their first sexual experience, the data do not tell us why that is happening. A study in Uganda among youth discovered that the strongest motivator factor for delaying sexual debut is education and hope for a brighter future (Herling 2004), as hope is slim for young women if they become pregnant. It is important to note that some of the young people who completed the survey in Rakai, Uganda were probably AIDS orphans of the 1980s and 1990s and that would have affected how they viewed both sex and HIV.

Partner reduction is a plausible reason why HIV incidence declined because many people reacted to the HIV/AIDS threat by reducing the numbers of sexual partners. This occurred not only in Africa but also among gay men in Europe and the United States (Shelton, Halperin et al. 2004; Epstein 2008). According to Epstein (2008) the role of multiple concurrent partnerships was not recognised at the time as a key factor in HIV transmission. Apart from Uganda, Thailand is also credited with reversing their HIV epidemic by promoting and adopting a 100% condom use policy in brothels. All commercial sex workers and their clients were required to use condoms for every act of sexual intercourse. That policy led to an increase in condom use from 14% in 1989 to 94% in 1994 and a decrease in cases of bacterial STIs from 410,406 in 1987 to 29,362 in 1994 (McNeill 2001). Although the Thai approach reduced HIV incidence, Shelton, Halperin et al (2004) observe that this approach was followed by a twofold decline in the proportion of men who reported having sex with prostitutes and engaging in casual sex.

Since HIV transmission in Africa seems to occur in stable and long term relationships, where condom use is rare, the best approach to prevention may be promotion of partner reduction. What can be learned from the results of use of the ABC approach to date is that different approaches are needed to prevent the transmission of HIV/AIDS in Africa. Insisting on one way over another might put other people at risk. For example, those who claim that condoms are not the answer, ignore the fact that two thirds of couples with HIV are discordant (De-Walque 2007). To date, the only method we have to prevent the infection of the uninfected partner is the correct and consistent use of condoms. The most conclusive evidence of condom effectiveness in

reducing HIV/AIDS transmission has come from studies of serodiscordant couples. They found that consistent condom use reduced the risk of HIV transmission by 90% (Weller and Davis 2003). Another evidence that may address the effectiveness of condoms is that of Thailand where the government introduced the mandatory 100-percent condom policy, which required commercial sex workers and their clients to use condoms for every act of intercourse. According to McNeill (2001) the Thai government policy led to the increase of condom use from 14 percent in 1989 to 94 percent in 1994 and the decrease in cases of bacterial STIs from 410,406 in 1987 to 29,362 in 1994. The fact that people find it hard to use condoms does not mean that they do not work, although the uptake of condoms is further complicated by people's view about their roles in sex. This is explored in Chapter Ten (see 10.4). The ABC approach also ignores other important strategies that may have an impact on HIV incidence such as voluntary testing and counselling, and the use of HIV treatment (ARV) that can lower the viral load and hence reduce infectivity, treatment and control of other sexually transmitted diseases and mother to child transmission. As Duflo (2009) has suggested, different groups should advocate for solutions that are in line with their principles and refrain from undermining public health solutions that are not in line with their beliefs but that can nonetheless save lives.

4.8 Conclusion

This chapter has used the concept of reproductive rate to structure a discussion of the ways by which HIV can spread from one person to the population and evidence for the effectiveness of interventions that address the factors β and c in the equation. The spread of HIV is dependent on several factors such as the stage of disease, the presence of ulcerative STIs, behavioural and socioeconomic factors. Sexual behaviours that increase HIV transmission include the practice of MCP and unprotected sex. Interventions used to prevent the spread of HIV include the ABC approach, VCT and male circumcision. Although both biological and behavioural factors have been found to increase the risk of HIV transmission, other contextual factors have been found to influence both biological and behavioural factors. However, as Chersich and Rees (2008) observe, most research and preventive programmes in Africa have largely ignored the social contexts of HIV vulnerability

and have focused on only biomedical and behavioural risk factors.

The next chapter reviews the literature on HIV among black Africans living in diaspora.

Chapter 5 Africans in Diaspora and HIV/AIDS

5.1 Introduction

Epidemiological data show that migrants and refugees from high HIV prevalence regions are, after MSM, the next most common group affected by HIV/AIDS in most Western countries, and generally are at greater risk of HIV infection than members of the general ‘host’ population (UNESCO and UNAIDS 2000). It is believed that migrants’ vulnerability to HIV acquisition and transmission may be due to lack of protection after leaving their homeland and lack of HIV information at the point of destination (IOM 2005), but of course it may also be a reflection of the prevalence in their sexual partners. This chapter presents a literature review on HIV/AIDS among recent migrants and migrants in the African diaspora. The word “African diaspora” comes with political and historical connotations as it involves the slave trade, forced migrations and dispersions of Africans to other parts of the world especially in the Americas and Europe. Harris (1993) defines African diaspora as the:

Global dispersion (voluntary and involuntary) of Africans throughout history; the emergence of a cultural identity abroad based on origin and social condition; and the psychological or physical return to the homeland, Africa. Thus viewed, the African diaspora assumes the character of a dynamic, continuous, and complex phenomenon stretching across time, geography, class, and gender (1993 pg 3).

In this study the words “African diaspora” will be used to refer to black Sub-Saharan Africans living outside Africa, especially in western countries.

Most of the studies identified have been conducted in Western Europe, North America, and Australasia. The first section starts by discussing the epidemiology of HIV/AIDS among Africans in diaspora with respect to prevalence, modes of transmission and the place of HIV infection. The second section looks at the major risk behaviours for HIV among African migrants and refugees, particularly multiple sexual partners and condom use. The third section looks at the risk factors for HIV

among migrants and refugees, namely late diagnosis, low risk perception, and lack of HIV knowledge. The final section comments on gaps in the literature.

5.2 Destination Countries Data

In North America, both Canadian and United States data show that black Africans carry a greater burden of HIV infection when compared with the local population. For example in Canada, people who identify themselves as black Africans make up 2.2% of the total Canadian population, but they account for 7-10% of all HIV infections in that country (Geduld, Gatali et al. 2003). In the six year period from 1998-2004 women, of African heritage represented 52% of HIV infections and 42% of AIDS cases in Canada (PHAC 2006). Furthermore, around 80% of Africans with HIV/AIDS in Canada are under the age of forty (Geduld, Gatali et al. 2003). It is important to note that the data from Canada include both Africans from Africa and the Caribbean.

In the United States, researchers (Kent 2005; Kerani, Kent et al. 2006) classified HIV and divided data for foreign-born black Africans and native-born African Americans and found that African-born blacks had higher HIV prevalence compared with African Americans. For example, they found that in one county in the state of Washington, HIV was 2.8 times more frequent among foreign-born blacks than native-born blacks (1.7% and 0.6 % respectively). However, an earlier study conducted in Los Angeles among clients of a sexually transmitted infection clinic found that African-born blacks were no more likely to be HIV positive than US-born clients (Harawa, Bingham et al. 2002). They also found that HIV prevalence was higher among clients from North Africa (3.3%) and the West Indies (2.9%) compared with 0.4% for all foreign-born clients (Harawa, Bingham et al. 2002).

In Western Europe where most studies among Africans in diaspora have been conducted, the data show that HIV prevalence is higher among Sub-Saharan Africans. For example in Sweden, two thirds of the new HIV/AIDS infections are among migrants and refugees from countries with higher HIV/AIDS prevalence especially Sub-Saharan Africa (UNAIDS 2006). In Italy, 51% of those people from non-European Union countries with HIV/AIDS were of African origin (Manfred, Calza et al. 2001). In the United Kingdom, although black Africans make up only 1% of the total population, they account for almost half of all new HIV diagnoses (Morris 2008;

HPA 2009). The Health Protection Agency (HPA 2008) reported that the diagnosed HIV prevalence among Africans is around 3.7%, which is nearly ten times higher than black Caribbeans (0.4%) and over 40 times higher than in the white population (0.09%). Similarly, a cross-sectional community-based survey among black Africans in three communities in England found that the overall HIV prevalence for those communities was 14% (Sadler, McGarrigle et al. 2007). In New Zealand, the AIDS Epidemiology Group (AEG) data show that Africans are the second largest ethnic group affected by HIV (AEG 2009). For example, of all the 2053 people diagnosed with HIV/AIDS since 1996 when ethnicity information was first collected, 440 (22%) were of African ethnicity.

Modes of HIV transmission for black Africans in the recent diaspora reflect those of Sub-Saharan Africa, namely predominantly heterosexual and mother to child transmission. These modes of transmission contrast significantly with those common in host countries in Western Europe and North America where the majority of infections occur among men who have sex with men and injecting drug users. In the United States, Kent (2005) found that the majority of African-born blacks were infected through heterosexual transmission when compared with American-born blacks. In New Zealand, nearly half (48% of the men and 50% of the women) of all those diagnosed with heterosexually acquired HIV and 68% of all children diagnosed with HIV are African (AEG 2009).

An important question for public health researchers and epidemiologists monitoring HIV transmission is where the infection occurred, because knowing the place of infection may be useful in designing both surveillance and prevention strategies. According to Carvalho, Haour-Knipe et al (2010), there may be conflicting evidence on whether HIV infection among migrants took place in the country of origin, in transit, or in the country of destination. However, studies show that most Africans in diaspora were infected in their countries of origin. For example, a Swiss cohort study of 70% of all people living with HIV examined the clinical data of migrants attending one of the largest participating clinics. By observing the decline of CD4 counts over time and plasma RNA levels, the authors concluded that around 70% of patients from Sub-Saharan Africa had probably been infected before entry to Switzerland (Stahelin, Egloff et al. 2004). In the UK, analysis of data on the presumed country of

HIV infection for Africans up to the end of 2001, found that 21% (9993 of 48, 226) were probably acquired in Africa and 90% of these infections were heterosexually acquired (Sinka, Mortmer et al. 2003).

Although the majority of Africans may have acquired HIV in Africa, there is evidence suggesting that some of them acquired HIV in the country of destination. For example, in Amsterdam a study found that of the 18 migrants who tested positive for HIV, nine had a previous HIV negative test, including six who tested negative after arrival (Gras, Weide et al. 1999). Another study, in Spain, of people with HIV who were foreign-born, (Castilla, Sobrino et al. 2002) found that 15% of them had a previous HIV negative test at the same clinic in Spain. In Germany, an analysis of HIV sero-conversion among immigrants from Sub-Saharan Africa between 2001-2008 found that of the 1,988 Africans with HIV, 276 (14%) sero-converted in Germany (Wambo, Bazing-Feigenbaum et al. 2009). In Australia, those working with Africans including clinicians, reported that some Africans who previously tested negative for HIV become infected in Australia (Lemoh, Grierson et al. 2010). While these studies suggest some infection occurred after arrival in their new country of residence, whether they were infected by a new partner, or one they travelled with, is unknown. A less likely possibility is that some of these studies overestimated the proportion of infections in the new country as migrants may have been in the 'window period' when first tested

Although the studies cited in this section show that the HIV prevalence is generally higher among African immigrants, the data should be viewed with caution. For example, not all studies defined what they meant by black African. Some of those include may have been in diaspora longer than others and Africa is not homogenous. Some studies also included Caribbeans and blacks from outside Africa who may be very different from Sub-Saharan Africans. Carvalho, Haour-Knipe et al (2010 p 19) noted that most studies on migrants and HIV "lack statistically sound comparisons between migrants and native populations, and confidence intervals around point estimates were rarely provided". In addition, these findings cannot be generalised to all host or migrant populations because small samples from selected areas were used, most of them were cross sectional in design and some oversampled certain 'risk groups' such as clients of sexual health clinics and people living with HIV/AIDS. In

addition, some countries have mandatory HIV testing meaning that migrants are more likely to have been tested when compared with the host population. Despite their shortcomings, these studies show that Africans in diaspora are disproportionately affected by HIV/AIDS which reflects in part the higher prevalence in their countries of origin. It is therefore important to investigate what behaviours and practices increase the risk of HIV among Africans in diaspora and whether these are the same or different from those in their countries of origin. The following sections will discuss both risk factors and risk behaviours for HIV among Africans in diaspora.

5.3 Risk Factors for HIV among Africans in Diaspora

Studies among Africans in diaspora highlight both risk behaviours and other factors that increase vulnerability to HIV infection. The prevalence in the population from which their sexual partners are drawn is also important, as is the pattern of testing among these people and the prevalence of infected but undiagnosed people is particularly relevant. Both HIV vulnerability factors and risk behaviours have been reported by studies on HIV among black Africans in diaspora. Risk behaviours reported include having multiple sexual partners and having sex without a condom (Gras, Weide et al. 1999; Chinouya, Davidson et al. 2000; Yewoubdar 2000; Sinka, Mortmer et al. 2003; Chinouya and Davidson 2004; Tharao, Massaquoi et al. 2006; Sadler, McGarrigle et al. 2007; Lemoh, Grierson et al. 2010). Other factors include frequent visits to the country of origin, late HIV diagnosis, low risk perception, lack of HIV knowledge, stigma and discrimination. (Gras, Weide et al. 1999; Fenton, Chinouya et al. 2001), (Chadborn, Baster et al. 2005; Biggs, Hellard et al. 2006; Chadborn, Delpech et al. 2006; Ibrahim, Anderson et al. 2008; Anderson 2010; Lemoh, Grierson et al. 2010).

5.3.1 Risky Sexual Behaviours

The practice of having sex with multiple partners was identified by studies in Western Europe, North America and Australia as the main risk factor for Africans, along with lack of condom use (Chinouya, Davidson et al. 2000; Castilla, Sobrino et al. 2002; Chinouya and Davidson 2004; Foley 2005; Biggs, Hellard et al. 2006; Tharao, Massaquoi et al. 2006; Carvalho, Haour-Knipe et al. 2010; Lemoh, Grierson et al. 2010). Although most studies did not elaborate on the forms of multiple sexual partnerships, one study in Canada suggested that these may take the form of

polygamy (Tharao, Massaquoi et al. 2006). They reported that Africans practised polygamy secretly because it is illegal in Canada. African men found other ways to deal with this by having one partner in Canada and another in their country of origin or by having several wives in Canada who lived in different places and visiting them regularly. Other sexual practices reported in this study (Tharao, Massaquoi et al. 2006) included dry sex and female genital mutilation.

Qualitative studies have also reported that Africans avoided having sex with 'bad' people to avoid HIV infection (Yewoubdar 2000; Biggs, Hellard et al. 2006; Tharao, Massaquoi et al. 2006). They avoided prostitutes and people who 'sleep around'. A qualitative study of Black African women and Caribbeans in Toronto found that condom use was low in stable and long-term relationships. The reasons participants gave for not using condoms included interference with sexual pleasure, dislike of condoms and linking condoms to unfaithfulness (Tharao, Massaquoi et al. 2006). Condom use often happened at the beginning of the relationship but stopped once trust was established (Yewoubdar 2000). The Mayisha I study reported that 58% of women and 56% of men did not use condoms at their last sexual intercourse (Chinouya, Davidson et al. 2000). These findings are consistent with findings in Africa where condom use is low despite higher HIV prevalence.

5.3.2 Frequency of Visits to Country of Origin

Frequent visits to their country of origin have been found to increase the risk of HIV acquisition in Africans living outside Africa. A study in the Netherlands found that the risk of HIV infection among Surinamese, Antilleans and Africans living in the Netherlands was associated with travelling and having sex in their country of origin (Gras, Weide et al. 1999). In the UK, a study by Fenton, Chinouya et al (2001) reported that of the 756 respondents (396 men & 352 women), half had visited their country of origin and 40% of men and 21% of women had acquired a new sexual partner while travelling abroad. The same trend was observed in the Canadian study of Haitians which found that the prevalence of HIV doubled for Haitians who visited their country of origin compared with those who did not (Adrien, Leane et al. 1999).

5.3.3 Late HIV Diagnosis

Despite advances in HIV treatment and therapy, Africans continue to be diagnosed late for HIV. Late HIV diagnosis is a concern because it usually means that there is

undiagnosed HIV in the population that may be spreading silently. According to Bernard (2003), late HIV diagnosis can be defined by “either being diagnosed with both HIV and an AIDS-defining illness within 30 days of each other, or being diagnosed with a CD4 count < 200 within 30 days of testing HIV antibody positive” (2003 p 1). The majority of the studies (Bernard 2003; Biggs, Hellard et al. 2006; Chadborn, Delpech et al. 2006; Tharao, Massaquoi et al. 2006; HPA 2008; Burns, Arthur et al. 2009; Anderson 2010; Lemoh, Grierson et al. 2010) were conducted among Africans living with HIV and late diagnosis emerged as a very strong theme. For example, in Australia, 60% of HIV positive Sub-Saharan Africans were diagnosed with AIDS three months after HIV diagnosis (Biggs, Hellard et al. 2006). Similarly, in 2007 alone, around 42% of new infections among Africans were diagnosed concurrently with HIV and AIDS in the UK (HPA 2008).

Studies indicate that the two main disadvantages of delayed diagnosis are the subsequent short-term mortality among infected individuals and missed opportunities to limit further transmission (Chadborn, Baster et al. 2005; Chadborn, Delpech et al. 2006; Burns, Arthur et al. 2009). Research conducted on men who have sex with men showed that early diagnosis could reduce all mortality by 32% and individuals diagnosed late were 8-10 times more likely to die within a year of diagnosis than those diagnosed early (Chadborn, Baster et al. 2005; Chadborn, Delpech et al. 2006). Similarly, analysis of HIV-related deaths in the UK shows that the majority occur among people who are diagnosed late and do not access treatment early enough (Lucas, Curtis et al. 2008). Several factors were identified as contributing to the late diagnosis of HIV among Africans. They include low risk perception, stigma, fear of testing positive, fear of relationship breaking up and fear of deportation (Bernard 2003; Biggs, Hellard et al. 2006; Chadborn, Delpech et al. 2006; Tharao, Massaquoi et al. 2006; Birukila 2007; HPA 2008; Burns, Arthur et al. 2009; Dodds, Hickson et al. 2009; Anderson 2010; Lemoh, Grierson et al. 2010). However, low risk perception, lack of HIV knowledge, stigma and discrimination seem significant in most studies as discussed below.

5.3.4 Low HIV Risk Perception

Although most Africans in the diaspora know how HIV is transmitted and prevented, they still view HIV as a disease of the ‘other’ and fail to see their sexual behaviours as

risky (Gras, Weide et al. 1999; Yewoubdar 2000; Biggs, Hellard et al. 2006; Anderson 2010; Lemoh, Grierson et al. 2010). For example, Yewoubdar (2000) found that members of the Ethiopian and Eritrean communities in California were aware of HIV/AIDS but did not acknowledge that they were at risk of becoming infected themselves. The first Mayisha study in the UK reported that around 69% of the respondents did not consider themselves at risk of getting HIV (Chinouya, Davidson et al. 2000). Compounding the issue of low risk perception is the lack of HIV information and knowledge at the countries of destination. According to Tharao, Massaquoi et al (2006), HIV information for Africans is usually limited to those living with HIV/AIDS and their caregivers. Africans outside this group have little information about HIV/AIDS and some think that they have 'left' HIV/AIDS in Africa. For example, a qualitative study of 104 black Africans and Caribbeans living in Canada found that lack of information about HIV in Canada was a major issue. Participants stated that they did not hear about HIV in Canada like 'back home' and even when the issue of HIV was raised in the media in Canada, it was about Africans in Africa, not Africans in Canada (Gardezi, Calzavara et al. 2010 p 720). In-depth interviews of 47 Africans in Melbourne, Australia found that participants did not get HIV/AIDS information from the media or public health places as they would in Africa (Biggs, Hellard et al. 2006). According to these studies, some Africans shared the view of mainstream society by assuming that HIV is a homosexual disease (Tharao, Massaquoi et al. 2006).

Since HIV predominantly affects MSM in western countries, some countries did not have a culturally appropriate system in place that supported the needs of heterosexually infected individuals, especially Africans (Tharao, Massaquoi et al. 2006; Anderson 2010). Such needs include the issues that surround pregnancy, breastfeeding, orphans, cultural sexual behaviours and gender violence. The lack of information about HIV was not limited to Africans only, clinicians too failed to diagnose potential clients who presented HIV-related symptoms (Anderson 2010). For example, a study of 263 Africans living with HIV/AIDS in the UK found that in the year before their diagnosis, 76.4% of the respondents had seen a General Practitioner (GP), 38.3% had attended outpatient services and 15.2% had attended in-patient care (Burns, Arthur et al. 2009). Another study on understanding HIV late diagnosis among people of culturally and linguistically diverse (CALD) communities in

Sydney, Australia (Asante, Korner et al. 2009) found that GPs were not addressing the issue of HIV. For example, they found that heterosexual participants presented HIV-related symptoms to GPs but were not diagnosed until later, when they went to hospital (Asante, Korner et al. 2009). The main finding from these studies is that Africans were accessing health services but clinicians failed to use these opportunities to diagnose and prevent HIV. It is not clear from the literature whether GPs were uncomfortable about addressing the issue of HIV or they did not consider HIV as a potential diagnosis, or both.

Policies that require mandatory HIV testing for all migrants may have also led some Africans to believe that only those without HIV were allowed into the country. For example, an Australian study (Biggs, Hellard et al. 2006) found that Africans believed that they were at low risk because those with HIV were not allowed to settle in Australia. Even those who were found to be HIV positive, did not believe in the diagnosis because they thought that they would not have been allowed to enter Australia if they were indeed HIV positive (Biggs, Hellard et al. 2006). The same belief was reported in Canada (Tharao, Massaquoi et al. 2006) where HIV testing is compulsory for those intending to live in Canada permanently. However, the lack of information alone may not explain why Africans deny that there is HIV in their communities. For example, a study of Africans in Philadelphia by Foley (2005) found some contradictions amongst their participants' views. Participants stated that there is no evidence that HIV was a problem while at the same time stating that people with HIV will not disclose their status because of stigma and fear of social isolation (Foley 2005). Indeed, stigma and discrimination were found to affect black Africans in the diaspora in many ways. For example, HIV-related stigma within African communities prevented Africans from seeking HIV testing and even disclosure of HIV status (Gras, Weide et al. 1999; Yewoubdar 2000; Biggs, Hellard et al. 2006; Birukila 2006; Anderson 2010; Lemoh, Grierson et al. 2010). In Melbourne, Biggs, Hellard et al (2006) reported that stigma prevented Africans from attending infectious disease clinics because of the fear of being seen by the members of their own communities. A qualitative study of African migrants and refugees in Christchurch found that stigma and fear of death prevented Africans from accessing voluntary counselling and testing for HIV (Birukila 2007). Stigma and discrimination have also been found to prevent people from accessing voluntary counselling and testing and hence contributing to

late HIV diagnosis in Africa (Mbwambo, Kilonzo et al. 2004; Meiberg, Bos et al. 2008; Mbonu, Borne et al. 2009).

Although stigma and discrimination have been found to prevent people from seeking voluntary HIV testing, I argue that the lack of HIV treatment in Africa and discrimination from countries that do have HIV treatment available may also have contributed to the attitudes towards HIV testing. Until recently, HIV drugs were not available to many Africans in Africa and still millions who need HIV treatment are unable to access such services. Africans therefore associated HIV with death because once a person was infected, death was a guaranteed outcome. Testing for HIV became a frightening experience, as getting HIV positive results caused anguish and anxiety and fear of death because there was no hope of getting treatment (Birukila 2007). This fear of death was not shared in ‘developed’ countries where HIV treatment was cutting down the HIV/AIDS death rates by around 84% by the year 2002 (Porter, Babiker et al. 2003). Western countries then seemed to turn away from the AIDS epidemic in Africa that was devastating the entire continent. Indeed this apparent ‘turning away’ led some people to see it as racist and discriminatory, because by then around 25 million Africans were already living with HIV/AIDS and were unable to access treatment. Those working in the area of HIV/AIDS were both concerned and surprised at how Africa was abandoned by Western countries, especially the lack of life-saving drugs. Dr Piot, the former head of the United Nations Agency for AIDS (UNAIDS) was quoted by the BBC news, stating that “unequal access to life-saving HIV treatments is one of the worst global examples of discrimination” (Piot 2001 as cited by BBC 2001 p 1). During the 2001 World Conference Against Racism in Durban, South Africa, Dr Piot stated:

If the AIDS epidemic had centred on Europe, rather than Africa, and had affected predominantly white people, the response to it would have been faster and more generous... When we think of AIDS, it's Africans, black people and so in that sense there is probably that racist underground (Piot 2001 As Cited by BBC 2001 p 1).

Piot's statement was unsurprising at the time because when the South African Government under President Mandela tried to import cheap generic drugs for HIV to make them more affordable, the US Clinton administration placed South Africa on a sanction watch list (Claude and Weston 2006). Intense campaigning from AIDS

activists including MSM led to the lifting of the ban. Piot's comments were also echoed almost ten years later by Kramer (2011) the head of ACT Up whose organization campaigned vigorously about equal access to HIV treatment for Africans. In his interview with news network CNN, Kramer stated:

Too many people hate the people that AIDS most affects; gay people and people of color. I do not mean dislike, or feel uncomfortable with. I mean hate. Downright hate. Down and dirty hate (Kramer 2011 As Cited by Cooper 2011 p 1).

The belief that HIV/AIDS in Africa was not tackled by wealthy nations because it predominantly affected black people was reinforced by the comments from the then head of the United States Agency Aid agency (USAID) under President Bush, Mr Andrew Natsios. He gave evidence to the Congress as reported by the Washington Post:

Although Natsios agrees that AIDS is "decimating entire societies," when it comes to treating Africans, he says that USAID just cannot get it done. As Natsios sees it, the problem lies not with his agency but with African AIDS patients themselves, who "don't know what Western time is" and thus cannot take antiretroviral drugs on the proper schedule. Ask Africans to take their drugs at a certain time of day, said Natsios, and they "do not know what you are talking about." In short, he argues that there is not a great deal the agency he leads can do to help HIV-positive Africans. Under his guidance, USAID will not offer antiretroviral treatment but will emphasize "abstinence, faithfulness and the use of condoms" as the essence of HIV prevention. He also supports distribution of a drug that blocks transmission of the disease from mother to child, and drugs to fight secondary infections. While this might save some of those not yet infected with the virus, it in effect would condemn 25 million people to death, and their children to orphanhood (Attaran, Freedberg et al. 2001 p A33).

Natsios's comments were labelled racist and many called for his resignation, as they were concerned that his views would influence the USA's HIV policy in Africa.

For Africans in the diaspora and other migrants who do not have permanent residence, HIV treatment is not available and many face deportation. As noted by Anderson (2010) even countries like Britain that campaigned hard for universal access to HIV treatment and care for all, deports people, on the basis of their being HIV positive back to countries with limited or no access to HIV treatment.

Another area that shows unequal access to HIV treatment and hence discrimination

and racism, is the prevention of mother to child transmission (PMTCT). Until now, HIV positive mothers in ‘developed’ countries are advised not to breastfeed because of the risk of passing on HIV through breast milk but those from ‘developing’ countries are advised to breastfeed exclusively for six months (WHO 2009). For ‘developed’ countries, the World Health Organization (WHO) provided the following guidelines:

In highly resourced countries in which infant and child mortality rates are low...HIV infected mothers are strongly and appropriately recommended to avoid all breast feeding (WHO 2009 p 7).

For the ‘developing’ countries, WHO (2009) provided the following guidelines:

Mothers known to be HIV-infected (and whose infants are HIV-uninfected or of unknown HIV status) should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter, and continue breastfeeding for the first 12 months of life (WHO 2009 p 15).

The reason WHO advises HIV positive mothers in ‘developing’ countries to breastfeed is because of the belief that babies are more likely to die from malnutrition because of lack of milk formula, food and hygiene (WHO 2009). This policy that advises ‘strongly’ against breastfeeding for rich countries and encourages mothers from poor countries to feed their babies with HIV loaded breast milk can be perceived by others, especially Africans, as discriminatory and racist in nature. Indeed, breastfeeding is highly discouraged in rich countries to the extent that mothers may be prosecuted for child endangerment if they choose to breastfeed, as stated by WHO (2009);

In some of these countries [high income] infants have been removed from mothers who wanted to breastfeed...In these settings, the pursuit of breastfeeding in the presence of safe and effective alternatives, may be considered to constitute abuse or neglect (2009 p 7).

With maternal mortality being high in Africa, it is interesting to note that WHO did not find out how African orphans survived prior to the advent of HIV/AIDS. For example, a study by Nigerian paediatricians (Ogunlesi, Adekanmbi et al. 2008) provides an insight into African feeding practices and proposed that they should be considered in the HIV era. In most African cultures, when a mother dies or becomes too ill to breastfeed, usually a close relative such as a grandmother takes over by

inducing lactation (Ogunlesi, Adekanmbi et al. 2008). Such traditional methods, and others that were used by Africans to feed motherless babies were not considered. It is also possible that recent African migrants and refugees may practice what they were advised in Africa and breastfeed their babies. According to Anderson (2010), most cases that involved the removal of babies from HIV positive mothers in the UK involved African women.

Despite the challenges of being HIV positive in the diaspora, Africans with legal status in the countries of destination are able to access lifesaving drugs and care that would have not been available if they were living in Africa. None of the literature identified looked specifically at how the lives of many Africans, especially those with HIV, might have improved as a result of being in the diaspora. As an African who worked with people with HIV/AIDS in Africa and witnessed many AIDS deaths, I argue that Africans with HIV in diaspora can potentially enjoy world class HIV treatment and hence long life.

5.4 Gaps in the Literature

Although there are significant numbers of studies among Africans in diaspora, only a few have specifically examined sexual risk behaviours among Africans and none have looked at how culture influences sexual behaviours that increase the transmission of HIV. In addition, most studies have been conducted among people living with HIV/AIDS and the non-infected African population has been overlooked. Evidence from Africa suggests that most people are infected through unprotected sex and addressing the issues of cultural beliefs and sexuality is crucial. This study seeks to fill this gap by examining the influence of culture on sexual practices, and how such practices may increase the transmission of HIV among Africans in diaspora in Christchurch, New Zealand. It is, in effect, a case study and the information and insights obtained may or may not be relevant to Africans in diaspora in other countries.

5.5 Conclusion

A range of issues have been identified in this literature review. First is that Africans in diaspora are disproportionately affected by HIV/AIDS. The risk behaviours identified

are the practice of multiple sexual partners and the lack of condom use. Other risk factors include frequent travel to the country of origin, late HIV diagnosis, lack of HIV knowledge and the feeling HIV/AIDS has been left behind in Africa. The reasons for late HIV diagnosis include low risk perception, lack of HIV information, stigma and discrimination. However, the literature is lacking in information about how culture influences sexual behaviours and risk for HIV. Africans also seem to be perceived as ‘victims’ and the positive aspects of being in diaspora, such as access to HIV treatment, overlooked while negative aspects such as stigma and discrimination were highlighted. Even studies on Africans living with HIV have avoided the issue of sexual behaviour and practices of HIV positive Africans. In order to design appropriate preventive programmes, it is important to explore the sexual behaviours and understandings of the target audience and their cultural and social contexts.

The following chapter discusses the methods and methodology used in this study.

Chapter 6 Methods and Methodology

6.1 Introduction

This chapter focuses on the methodological approaches and methods used to collect and analyse this study's data. In countries like New Zealand where HIV is concentrated in specific populations such as among men who have sex with men and black Africans, policy makers advocate for targeted HIV prevention activities that need specific research. This mixed methods study (social mapping, survey and focus group discussions) sought to explore the HIV-related sexual behaviours, beliefs and sexual behaviours of African migrants and refugees in Christchurch. The survey questions were designed to answer the following questions:

1. What are the HIV-related sexual beliefs, attitudes, and behaviours of black Africans in Christchurch
2. What is the prevalence of sexual behaviours that increase HIV transmission among this group?

Focus group questions were designed to explore the findings of the survey and were designed to investigate:

1. How participants talked about MCPs, risk and condom use
2. How participants talked about migration and sexual behaviours in general
3. The factors that influence the reported behaviours, attitudes and beliefs.

The first section of this chapter discusses mixed research methods and the paradigm debate surrounding the use of both quantitative and qualitative methods in a single study. In the second section the methods of data collection and analysis used in this study are described. This section provides details of the development of the questionnaire, sampling methods, data collection and analysis of the quantitative data.

It also provides information on the focus group discussions and analysis of the qualitative data. The third section identifies the ethical issues for this study.

6.2 Mixed Research Methods and the Paradigm Debate

Mixed research methods have been defined as “the collection and analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially.....and involve the integration of the data at one or more stages in the process of research” (Creswell, Plano et al. 2003 pg 212). This thesis used complementary sequential mixed methods as described in Green, Caracelli et al. (1989) whereby findings from one method are used to complement the findings of the other method. Specifically for this thesis, mixed methods helped in providing a deeper understanding of sexual behaviours and practices of black African migrants and refugees in Christchurch. Social mapping helped to identify where Africans in Christchurch gathered and quantitative methods (a survey in this case) were used to examine the prevalence of cultural sexual behaviours. Qualitative methods (focus group discussions) were used to investigate the meanings given to such behaviours. For example in the survey, it was found that participants reported low condom use; the focus group discussions explored beliefs and attitudes about condoms and found that cultural beliefs influenced this. It would have been impossible to understand the reasons behind low condom use if focus group discussions were not conducted. As noted by Tashakkori and Teddlie (1998), and depending upon the research questions to be addressed, the use of both quantitative and qualitative methods in a single study enriches results in ways that the use of only one form of data does not permit. This view is also supported by Denzin and Lincoln (2000), who argue that mixed methods provide both depth and breadth of the phenomena being studied.

Although data gathering for this study was sequential, data analysis was iterative because some of the findings in the focus groups discussions informed more analysis of the survey data. For example, the focus group data analysis indicated that sexual relationships between black men and white women were reported to be very common in Christchurch. This finding led to more detailed analysis of the demographic characteristics and sexual behaviours of men who reported sexual relationships with white women.

Although mixed research methods have become popular in public health research, the philosophical differences that underlie qualitative and quantitative methods have given rise to debates. Some researchers are concerned that mixed research methods are being adopted without appreciating these philosophical distinctions (Smith and Heshusius 1986; Sale, Lohfeld et al. 2002). According to Lincoln and Guba (1988), the philosophical distinctions between the two paradigms are in reference to epistemology (how we know what we know), ontology (the nature of reality) and methodology (how we come to know). The word paradigm can be defined as a “worldview” which has a “basic set of beliefs or assumptions that guide” a researcher’s enquiry (Creswell 1998 pg 74). According to Tashakkori and Teddlie (1998), paradigms are also potentially opposing worldviews or belief systems. It is believed that this paradigm debate surfaced in the 1960s and 1970s as a direct result of increasing popularity of qualitative research methods (Hanson, Creswell et al. 2005).

According to Creswell (2003), the worldview or paradigm that quantitative methods are based on is positivism while that of qualitative methods is various forms of constructivism. Quantitative or positivist research holds that there is only one truth, and science is seen as the only way to get to the truth and know the world around us. Positivists operate in the world of cause and effect and the only authentic knowledge is that which is based on actual sense experience (Sale, Lohfeld et al. 2002). The researcher is considered external to the actual research and the results can be replicated no matter who conducts the research (Weinreich 1999; Borkan 2004). Positivists also view the researcher and the researched as distinct and separate entities and hold that the researcher is capable of studying a phenomenon without being touched or influenced by it (Sale, Lohfeld et al. 2002; Hanson, Creswell et al. 2005). This school of thought advocates that researchers should eliminate their biases, be emotionally detached, not be involved with the objects of their study and provide empirical evidence of their stated hypotheses (Tashakkori and Teddlie 1998).

Qualitative research, on the other hand, tends to be situated in forms of constructivism which posit that multiple realities exist; local, specific and sometimes conflicting realities constructed by those who have lived experience of those realities (Guba and Lincoln 1994). Meanings are constructed between the researcher and the participants

within the social context of the research (Sale, Lohfeld et al. 2002). Qualitative approaches therefore provide an understanding of how people make sense of their world and both participants and researchers are involved in a process of discovery (Pope and Mays 2000). With such opposing world views, some researchers have argued that the two philosophical paradigms are fundamentally different in relation to what constitutes legitimate truth or knowledge and that they cannot be mixed in a single study (Rocco, Bliss et al. 2003; Hanson, Creswell et al. 2005). While I appreciate these debates, it was clear that both approaches were important for this study. Given that qualitative methodologies do not see the researcher as separate from the research, one of the things that is advocated is the process of reflexivity.

6.3 Reflexivity and Positioning

In this section, I consider how my position in terms of gender, ethnicity, socio-economic status, age and personal feelings may have influenced the research process. Reflexivity can be defined as a process that involves reflecting on the way in which research is carried out and understanding how the process of doing research shapes its outcome (Hardy, Phillips et al. 2001). The main reason for being reflexive in qualitative research is to show how the impact of a researcher may have informed the choice of methodology, the subjects and the results (Breuer, Mruck et al. 2002). Because of the implications of the knowledge we may produce, Edwards and Ribbens (1998) suggest that a high standard of reflexivity and openness about the study is necessary. According to Maton (2003), autobiographical reflection comprises a brief narrative of the researcher's journey to the research. I have taken this approach to show how my own values, experiences, beliefs and commitments may have shaped my research and this process was begun in the preface to the thesis. As Lincoln and Denzin (2000) suggest, reflexivity forces us to come to terms with our choice of research problem, with the people we engage within the research process and above all with ourselves.

The issue of reflexivity in qualitative research also raises an important question of "outsider" or "insider" positioning in relation to researcher and research participants. According to Adler and Adler (1987) a researcher is considered an insider if he or she conducts research in a population group she or he belongs to and may share components of identity such as race and languages (Asselin 2003). Being an insider

may provide a researcher with some kind of legitimacy, rapport and acceptance that may be difficult to achieve by an outsider. Although the insider position may be perceived as beneficial to the researcher, it has been challenged because of what that position may mean in terms of “public interpretation of reality due to corrupt influence of group loyalties on human understanding ” (Merton 1972 pg 19). Kusow (2003 pg 592) notes that insiders have the potential to better understand groups that they are part of and he/she “questions the ability of outsider scholars to competently understand the experience of minority groups” Immigrants researching immigrants however, acknowledge that their insider/outsider positions change depending on the context of their fieldwork (Kusow 2003) and my research was no different. Being an African black woman, I thought that I entered this study as an “insider” but with time, I found that, in some situations, I was completely an outsider. Because I was a woman, men made it a point to remind me that I had no clue what African men go through in New Zealand. In discussing gender roles and domestic violence, most men felt that women were responsible for their problems, and I was a woman and therefore part of the reason why they have problems in New Zealand (refer to Chapter 9). They treated me like a “woman” in the African sense, in that I should know better how women are supposed to behave. When they discussed something about women they used the word “you”, pointing at me. In this case, men saw me as an outsider but at the same time as an insider who needed to hear the other side of the story about marital problems. I thought about the focus group discussions I had with women and felt as if men also had no clue about what women felt or perceived to be the cause of domestic violence, for example. As a woman, I felt the need to defend African women but as a researcher, I needed to remain neutral. Such inner tensions may have been different if I was from a different race.

Another area where I was perceived as an outsider was with the focus group discussions with young men and women (16 -19 years) who were born or came to New Zealand at a very young age. To them, I occupied a position of an adult or a mother. Their accent was different from mine as they had a New Zealand accent and I had an African accent just like their parents. The young people seemed suspicious of me at the start of the discussion and I assured them that I would never talk to their parents about what they discussed. Where I felt that I was perceived as an insider was with African women. They referred to me as “we” not “you” as it was with men and

young people. An outsider would have had some advantages in some areas such as keeping to time. Participants arrived late, were distracted by phones and children and said “you know we Africans we do not keep time”. I think they may have behaved differently if I were non-African.

Being positioned as an “African” provided me with both opportunities and challenges. Participants were able to discuss issues freely that would have been difficult to discuss with someone who was an “outsider”. Some of the information participants shared with me was very personal and in many African cultures, people tend to keep sensitive information in the “family”. We were therefore able to discuss issues affecting us (Africans) without feeling that we were discussing our issues with outsiders. Within this positioning it was assumed that I would not share what was perceived as “embarrassing” with outsiders. I felt the burden of what would happen if any of the information participants shared with me was to be made public and for some reason came to be used against Africans in New Zealand in the future.

I also occupied an outsider position because of my training and work experience. My deeper understanding of HIV/AIDS and its devastation in Africa and among Africans proved to be a challenge during the focus group discussions. I had to control myself when participants discussed inaccurate information about HIV/AIDS and when they talked about being involved in what I regarded as risky behaviours. The need to “teach” and “correct” myths about condoms and other HIV-related subjects was very strong in me. Being a woman, I was particularly affected by the way African women discussed love and condoms and their beliefs that their husbands would always try to protect them by using condoms with “outside’ women. My head was racing with the knowledge of studies on how that was not always the case. To complicate the matter, I had met some of their husbands in the men’s focus groups who admitted having sex without condoms with multiple partners.

In conclusion, my position as an outsider or insider changed depending on the context of the group or the topic I was discussing. Being an African however, provided me with access and acceptance that may not have been possible if I was non-African.

6.4 Setting the Context for the Research

6.4.1 Community Consultation

This study utilised some of the design of the first Mayisha UK study (Chinouya, Davidson et al. 2000) and modified parts to suit the New Zealand context. The Mayisha UK study used three main phases namely; the consultation phase, the social mapping phase and quantitative study phase. The phases in this research were the community consultation phase, the social mapping phase, the quantitative phase (survey) and the qualitative phase (focus group discussions). Community participation was a key component of this study. I approached and invited key African community leaders and African community organisations to participate in the study. This was done directly through both telephone calls and face-to-face discussions. African organisations were identified through personal connections and by asking stakeholders that work with refugees and migrants in Christchurch. Once the identification was done, community leaders and representatives were invited to a meeting to discuss the study in more detail. My main supervisor then (the late Associate Professor Oliver Davidson) and I led the meeting and described in detail the Mayisha I UK study and explained that we intended doing the same study in New Zealand. After answering a few questions about the objectives and possible benefits of doing the Mayisha NZ study, leaders and organisations nominated and recommended ten Africans to work on this study. They represented a wide range of nationalities, ages, religious faiths and backgrounds. This group will be referred to as community researchers throughout this thesis. Invitations (Appendix 1) were then sent out to the community researchers to attend a meeting where the study objectives were again shared.

The community researchers then identified key areas of cultural and sexual practice that they thought were relevant to HIV transmission from within their own communities, and developed the questions required to investigate the attitudes and behaviours associated with these practices. They also identified the sampling frame required to gain access to a representative sample of African communities from the wider Christchurch area, using formal and informal social venues and events (refer to the social mapping exercise in this chapter). The sampling frame included gatherings such as weddings, cultural festivals, ethnic soccer, Churches, Mosques, hair salons

and baby showers. All ten community researchers completed a one-day training course on the survey background, research methods, objectives, methodology, recruitment procedure and administration. The community researchers were not paid for their work but were given fuel vouchers to cover the cost of transport during the fieldwork. On average, each community researcher committed thirty hours in total to this project.

6.4.2 Questionnaire Design

It was important in this study that the questions asked were appropriate, acceptable and appropriately captured relevant sexual behavioural data to inform prevention. The first step in designing the questionnaire was to look at the questionnaire which was used by the first Mayisha UK study (Chinouya, Davidson et al. 2000). The Mayisha UK study was given to the community researchers who took it home and who then sent in their individual suggestions for modification. Following this, a meeting was held to debate different opinions on what should be included. The Mayisha I study questionnaire did not include items on knowledge of HIV and the community researchers did not identify the absence of questions about HIV knowledge as a particular concern, as the focus of the research was on understanding behaviours that may increase vulnerability to HIV. The Mayisha UK study also did not explore cultural sexual practices except the practice of dry sex. It was decided that more cultural sexual practices such as polygamy, spouse sharing, male circumcision, widow cleansing and sexual cleansing should be added to the list in the questionnaire. The ethnicity of sexual partners was thought likely to be different from the UK where the Mayisha 1 was carried out, so this question was modified to include Māori, Pacific Island and mixed race groups. Changes were also made to other questions to investigate whether African cultural sexual practices had been transferred to New Zealand, especially cultural sexual behaviours such as dry sex and MCP

Once the study questionnaire was drafted, the community researchers met again for the purpose of filling in the questionnaire and putting themselves in the shoes of the respondents. We were interested in knowing how long it took to fill in the questionnaire and whether the wording was clear. Length of time taken to complete the questionnaire was crucial because participants were going to be recruited in social venues or events. We anticipated that a long questionnaire might discourage some

respondents. In general it took between five to ten minutes to complete the questionnaire and all questions were fitted on two sides of an A4 sheet of paper.

The final questionnaire was then developed. It consisted of 21 questions (Appendix 2). Questions 1-8 covered demographic characteristics such as age, ethnicity, gender, country of birth, employment status, education, religion and length of time in New Zealand. Questions 9-14 asked about specific sexual behaviours and factors that may increase the risk of getting or transmitting HIV. This included history of sexually transmitted infections, previous HIV test, number of sexual partners in the past year, number of new sexual partners in the past year, whether condoms were used during the last act of sexual intercourse and involvement with same-sex relationships. Questions 15-20 covered risk perception and attitudes towards HIV. Questions 20-21 covered cultural sexual practices that increase or prevent the transmission of HIV. Such practises are dry sex, polygamy, male circumcision, female circumcision, spouse sharing widow inheritance and sexual cleansing.

6.4.3 The Social Mapping Exercise

This research utilised some techniques used in social mapping exercises which are increasingly used in public health research among minority communities and vulnerable groups. Social mapping can also be classified as one type of participatory research and is used to identify areas and venues used by minority groups for the purpose of research and intervention (Chinouya, Fenton et al. 1999). Social mapping involves identifying where people eat, play, meet, socialize and work. In many parts of the world, including Africa, AIDS risk varies considerably on a micro-social level and it is imperative for researchers to tailor public health interventions and research to specific cultural groups (Stopka, Singer et al. 2000). Studies that have used social mapping techniques include those in the North-eastern USA and the Mayisha UK study. In the North-Eastern USA, anthropologists and epidemiologists used social mapping to learn about the variation in AIDS risk among injecting drug users (IDUs) at the neighbourhood level (Stopka, Singer et al. 2000). Maps created by IDUs who live and injected in enclaves of interest, enabled the team to learn about the locations and spatial relationships of people, places and structures that influence sterile syringe availability and consequent AIDS and hepatitis risk. The Mayisha I UK study used social mapping methodology to identify social venues and events used by black

Africans in London (Chinouya, Fenton et al. 1999). Advantages of social mapping in research include rapid assessment of the community structures, facilitation of further qualitative research after identifying key people in the community, provision of an insider's perspective of target communities and establishing target communities as experts in their own neighbourhoods (Stopka, Singer et al. 2000).

The social mapping exercise in this study was carried out by community researchers identifying the Africans in Christchurch, their associations or organisations, venues and events. This information was needed because the survey was to be carried out in social gatherings and events. African associations and organizations were either registered charitable associations or non-registered, and membership was determined by nationality for most of them. Associations identified included the Canterbury Somali Community, East African Association, Ethiopian Association, Eritrea Association, Somali Friendship Association, Woman to Woman Association and Zimbabwe South Island Association. Some Africans may not belong to any formal or informal organisations but may attend other social events and so a number of these were also identified.

Religious groups and gatherings were identified as potential recruitment places for study participants. Religion plays a major part in the everyday lives of many Africans and religious beliefs can provide opportunities or challenges in HIV/AIDS prevention, care and access among African migrants and refugees. A study by the European Centre for Disease Prevention and Control (ECDPC) on migrant health and HIV in 27 European Union (EU) countries listed religion as one of the major barriers that prevents migrants from accessing HIV services (ECDPC 2009). A study on attitudes towards voluntary counselling and testing for HIV among Africans in Christchurch, found that religion was one of the five factors that determined whether Africans would go for an HIV test or not (Birukila 2007). Community researchers reported that religious gatherings occurred more frequently and had higher levels of attendance compared with other events or gatherings. The two main religions practised by Africans were Christianity and Islam. Mosques were identified to recruit Africans, especially Somalis, as around 99% of Somalis are Muslim (Denholm 2003). Other communities with members who are Muslim are Nigeria, Kenya and Ethiopia. Christians were divided into two main groups, namely Catholics and Protestants.

Within Protestantism three main denominations were identified, namely Pentecostal, Methodist and Anglicans. Most religious-related activities were conducted on the weekends.

Other events identified included baby showers, the Drums of Africa, christening, farewell/welcome parties, Miss Africa Christchurch and ethnic soccer. Baby showers are popular among African women of child-bearing age. This event is used as a way to support new mothers by giving them presents and information about childrearing. Usually they have a female speaker who shares her advice about motherhood, sex and family care. Only women attend baby showers. The Drums of Africa is an annual event organized mainly by Zimbabweans. It involves music, dancing and drum beating. This event is usually attended by different African communities. Ethnic soccer is a tournament for different ethnic groups in Christchurch, for example, Africans and Asians. Somalis, Ethiopians, Nigerians and Zimbabweans have a stronger presence in this tournament. Baby christenings were another celebration identified as a potential site for recruitment. This event is more common in the Ethiopian Orthodox community. It involves baptism of the newborn and welcoming the baby to the Christian family. The event starts with a church service which is followed by a celebration at home or at a hired venue.

A farewell party involves saying good-bye to a community member moving out of Christchurch or out of the country while the welcome party involves welcoming new community members to the country, especially those coming through family reunion. Somalis have such events regularly. Another form of gathering linked to the farewell or welcome party, is the barbecue or coffee party. These are often gatherings of people of the same age group and/or gender, for example women, men and young people. Miss Africa Christchurch was another event identified. It is part of the Miss Africa New Zealand contest. The winner joins other winners from Wellington, Auckland and Hamilton to compete for the title of the Miss Africa New Zealand. This event is attended by young people, their parents and other members of the African communities. The social mapping exercise provided valuable information on where people met socially. Table 6 below summarises the associations, organisations and events attended by Africans in Christchurch.

Table 6: African Associations and Social Events in Christchurch

Association or Event	Community
Associations	
Canterbury Somali Community	Somalia
East African Association	Kenya and Tanzania
Ethiopian Association	Ethiopia
Eritrean Association	Eritrea
Zimbabwean South Island Association	Zimbabwe
Woman to Woman Association	Zimbabwe, Malawi and Zambia
Religious Groups	
The Catholic Church	Nigeria, Ghana, Kenya, Zimbabwe,
Forward In Faith Ministries	Botswana, Zimbabwe and Ghana
The African Methodist Church	Zimbabwe
The Orthodox Church	Ethiopia
The Anglican Church	Namibia, Ghana and Zimbabwe
Mosque	Somalia, Nigeria, Kenya and Ethiopia
Community Events	
Baby showers	Women from most African countries
Drums of Africa	Men and women from all over Africa
Christening	Non-Pentecostal Christians
Farewell and Welcome Parties	Somalia and Ethiopia
Miss Africa Christchurch	Young African women and men
Ethnic Soccer	Men from all African countries
Others	
Universities and Colleges	Most African countries
Hair Salons	Ghana, Kenya, Zimbabwe and Nigeria

6.5 The Survey

It was not possible to use a random sample for this study, largely because it was not possible to generate a sampling frame that included all black Africans from which to randomly select a sample for the survey. Participants were recruited from venues identified during the social mapping stage. The quantitative data phase started in September 2008 and continued to February 2009. This time frame was able to cover most of the cultural festivals and events identified in the social mapping exercise. I contacted the venue owners or event organisers about the possibility of conducting the survey on their venue or events. An agreement was made on a suitable time and day. Most venue owners and event organisers had heard about the research through other community members and none of them refused. Within each venue, the community

researchers approached eligible individuals and explained the aim of the survey, the question contents and gave out an information sheet to eligible individuals before they were invited to participate.

Community researchers were asked to record how many questionnaires they gave out and how many were returned, also they were asked to record if respondents refused to participate. Overall, community researchers reported no rejection, the reasons given for this high response was that the participants believed that the questionnaire was anonymous, and they trusted the community researchers. Those who agreed to take part were given the questionnaire, a pen and unmarked envelope. After completing the questionnaire, the participant sealed the envelope and placed it in the community researcher's collection bag. Confidentiality was assured and participants were provided with contact details for HIV and sexual health organisations in Christchurch if they wanted to discuss any HIV-related issues. Respondents were invited to participate in the qualitative study at a later date. Those interested called the community researchers who provided the date and the venue for the focus group discussions. The sealed envelopes with filled-in questionnaires were returned to me. Respondents in this survey were not paid. Community researchers met once a month with me to report the progress and discuss any issues related to the survey.

Community researchers reported that it was easier to recruit from some communities than others because of different events and activities. Events were more useful than organisations because Africans tended to participate in events such as religious attendance and ethnic soccer rather than formal association meetings. This was challenging because except for formal religious attendance which occurs weekly, most events were far apart or happened only once a year. Therefore, the data collection took longer than anticipated to suit the timing of these events.

I also sought biostatistical advice regarding the potential representativeness of the sample. Statistics New Zealand coded people who identified as being of African ethnicity before 2006 as 'other' (Statistics-NZ 2007). Data based on the country of origin are not particularly helpful because not all people who were born in African countries are black African, for example, there are many white South Africans and Zimbabweans living in New Zealand. Since there was no way to gauge exactly how many black Africans lived in Christchurch, it was difficult to know what proportion

had been reached compared with the total number of Africans in Christchurch. However, due to the comparatively small number of Africans and their identifiable physical features, the social mapping exercise was able to identify that the majority of black Africans in Christchurch were Ethiopians, Somalis and Zimbabweans. The biostatistician therefore advised that we put in more efforts to recruit more people from these groups instead of recruiting black Africans from other countries who were fewer in number.

6.6 Data Analysis

Questionnaire data was entered into a Microsoft Excel sheet and then imported into SPSS software (Version 19) for analysis. Each questionnaire had a unique number from 1-250. After the data entry was completed each entry was individually checked for accuracy and incorrect entries were subsequently amended before conducting statistical analyses. Some of the response categories were also aggregated before further analysis since the number of responses in some categories was low. Descriptive analyses were performed by calculating simple frequencies and carrying out cross-tabulations. Associations between categorical variables were tested for significance using the Chi-square test. For categories with expected values less than five, Fisher's exact test was used. Due to the small numbers in individual exposure categories for several response variables, it was not possible to use multivariate analysis to control for potential confounding. Further biostatistical advice was sought about alternative approaches. The biostatistician suggested the use of a Mantel-Haenszel (MH) analysis. This approach examines whether two variables are related by controlling for the third variable. For example, by controlling for marital status, MH analysis was used to examine if there was a relationship between condom use and religion.

6.7 Focus Groups

The qualitative phase of this study involved focus group discussions. A purposive selection of respondents was made to generate a diversity sample. This was achieved by setting quota controls for gender, age, country or region of birth, length of residence in New Zealand and religion. Focus group discussions have become very popular in health research that seek to explore what individuals believe or feel as well

as why they say they behave in the way they do (Rabiee 2004). Kitzinger (2006 pg 20) defined focus group as a “form of group interview that capitalises on communication between research participants to generate data”. According to Krueger (1994), focus group discussions work because they tap into human tendencies, attitudes and perceptions relating to a certain topic. Krueger (1994) also argues that peer interaction provides a social context for participant input that may not be achieved in individual interviews, the cost is lower than that of individual interviews and the open-ended questions allow the moderator to pursue ideas through probes that may not be available in other techniques. The main reason for having focus group discussions for this study was to gain a deeper understanding of the practices, attitudes and understandings related to sexual behaviours of concern that were reported in the survey.

Participants for the focus groups were recruited during the survey phase. Community researchers asked survey respondents if they wanted to take part in the focus groups. Some of those who agreed were then purposively selected to attend the focus group discussions. The venue for the focus group discussions for four groups was the hair salon of one the community members. Although most clients of the salon were women, some men too went there to have their hair cut and to socialise. It was important for this study to conduct the focus group discussions in a relaxed and familiar environment. The owner of the salon was one of the community researchers and was paid for the use of the venue to cover loss of income on the days the salon was used. One focus group for men was conducted in one of the community member's houses. Although the environment was relaxing for participants, it was challenging sometimes because of constant interruptions. Some participants came with their children, who needed attention or had to keep in touch by phone with other children left at home. Culturally it is rude and disrespectful to tell people to switch off their phones, or concentrate on the topic at hand, especially if they are older than you. Since I was African and therefore expected to know the culture, I had to go with the flow and manage these interruptions best I could.

Five focus groups were conducted but recording equipment failed for the first three. I had made field notes during the focus group discussions but this was not enough to replace the lost data. It was agreed with my supervisors that the focus group data for

three groups must be repeated. Participants were informed about the equipment failure but some of them had already left Christchurch. In all only three participants were able to be present for the second group discussion (two men and one woman) and the other participants were new (but had done the survey). New equipment was purchased by the Department of Public Health and I used two recorders per focus group, I transcribed all the data verbatim. English was the language of communication and the average time for each focus group discussion was one and a half hours to two hours and transcribing took on average three hours for each focus group. In total, twenty five people were in the focus groups with each focus group having five participants. All group discussions were conducted on the weekend and in the evenings. Weekdays or mornings were not suitable for participants because of work and family commitments.

At the beginning of each focus group discussion, I reminded the participants of the topic of discussion, and their right to confidentiality, voluntary participation and that they had the right to decline to answer questions or participate in the discussion or to withdraw from the discussion. For the sake of confidentiality, participants will be identified by their sex only. This is because of the small size of the African community in Christchurch. Giving more information such as marital status, country of origin and age could easily identify participants. Questions for focus groups were open-ended and enabled participants to share their views on cultural sexual behaviours and practices among Africans in Christchurch. Topics discussed in the focus groups included attitudes towards condom use, MCP, gender roles, HIV risk, sex and adjusting to the new cultural context. All participants were given a \$10 fuel voucher to contribute to the cost of travel to the venue.

6.7.1 Qualitative Data Analysis

Two different kinds of qualitative data were generated; transcribed data for four focus group discussions and field notes for unrecorded focus group discussions. Both sets of data were analysed together, however, field notes for the unrecorded focus groups could not be used as direct quotations in the thesis because they were not recorded to word for word accuracy. These data have been included where appropriate in paraphrased form. Data analysis employed framework analysis following the approach of Ritchie and Spencer (1994). This provides a clear series of steps that

organises a large amount of data in a structured way. The distinctive aspect of framework analysis is that it allows themes to develop both from the research questions and from the narratives of research participants and it can occur concurrently with data collection (Rabiee 2004).

According to Ritchie and Spencer (1994), framework analysis involves five distinct but highly interconnected stages, namely familiarization, identifying a thematic framework, indexing, charting, mapping and interpretation. Familiarization involves listening to tapes and reading the transcripts several times. The main aim of familiarization is to become immersed in the details and get a sense of the focus group discussion as a whole before breaking it into different parts. In this study, each transcript was read several times and I began looking for patterns. Identifying a thematic framework involves identifying categories by writing memos in the margin in the text in the form of short phrases, these short phrases are then re-analysed and sorted into emerging themes. The final process of mapping and interpretation involves exploring patterns and key issues by making comparisons and explanations across data. In this study, I wrote memos in the margins of each paragraph; for example, men spoke of how women have ‘changed’ as the result of being in New Zealand and are not behaving like they did back home (Africa). Women too spoke of how men are not ‘changing’ to fit into the new culture of New Zealand. In the margins of such text I wrote ‘gender’ or ‘culture’. These two themes were refined into the overarching broad theme of gender and acculturation. This theme was especially important because being in New Zealand challenged and changed gender roles for both African men and women. For example, women found it easier to gain paid employment in New Zealand than they had in Africa and as a result of this employment they became less dependent on men. On the other hand, men found it difficult to find employment and felt ‘disrespected’ by women who were now earning some money. This caused conflict and could lead to domestic violence against women. Other themes that developed included the practice of multiple concurrent sexual partnerships, attitudes towards condom use and other sexual behaviours. The following section describes the ethical considerations for this study.

6.8 Ethical Considerations

Conducting research among migrants and refugees or minority groups on stigmatised

conditions such as HIV/AIDS raises important questions about how the findings will affect the community. HIV/AIDS has historically affected groups that are already disadvantaged, for example commercial sex workers, men who have sex with men, injecting drug users and migrants. The challenge for researchers therefore is to make sure that the findings are presented in a way that will not disadvantage the participants and their communities. The strength of this study is that it was conducted by Africans with Africans and throughout the research process, care was taken to make sure that results were presented carefully but accurately.

The processes and procedure of gaining ethical approval for this study followed the guidelines of the University of Otago Ethics Committee for research involving human participants. Ethical approval for the survey was granted by the Ethics Committee in June 2008. Unfortunately, ethical approval for the focus group phase was not obtained at that time. My initial primary supervisor had prepared the ethics application for the study, and I was not involved in this process. Unfortunately, I did not find out about this oversight until after the focus groups had been conducted and their data analysed. The Head of the Graduate Studies was informed as well as the Ethics Committee. My supervisors and the Graduate Office discussed this issue and came to the conclusion that I was genuinely unaware that we did not have ethical clearance for this phase of the study. They were satisfied that we had informed participants about their rights to participate and that all care was taken to conduct the focus groups in an ethical manner, as I did with the survey, as described below.

The inclusion criteria for participants were as follows:

1. Being of Sub-Saharan black African origin
2. Living in Christchurch
3. Aged 16 years and over

The age of 16 was chosen because it is the legal age of consent in New Zealand and was deemed an ethical constraint for this study. Despite this, some of the younger participants needed to get their parents' permission to attend the focus group discussions and they were concerned that their parents may be told about what they had shared. This placed an additional ethical constraint on the interviewer to ensure their confidentiality was maintained. Consent to participate was based on informed

choice and voluntary response. The information sheet (Appendix 3) was provided to participants before they were asked to fill in the questionnaires. Participants were given the opportunity to withdraw from the study at any time. Due to the nature of the recruitment methods, it was decided that participants would not need to complete a signed consent form. There was concern from community researchers that a requirement to sign a consent form would put off potential participants especially in the social venues. This concern was then raised with the Ethics Committee who agreed that the consent form could be left out and the information sheet would be sufficient. Confidentiality and anonymity were two main concerns raised by the community leaders during the consultation phase. This study therefore followed procedures to maintain confidentiality and anonymity to a high standard. The questionnaire was anonymous; respondents were told not to write any information that may identify them on the form. Study participants were provided with information and contact details of HIV/AIDS and sexual health organisations in Christchurch if they needed help. All data collected, including questionnaires and audiotapes, were stored in a locked filing cabinet at the Department of Public Health and General Practice, University of Otago, Christchurch. Access to the data was limited to me and my supervisors. Community researchers did not have access to the data.

6.9 Conclusion

The use of mixed methods was determined to be appropriate for studying sexual behaviours among African migrants and refugees in Christchurch. Using mixed methods increased this study in a way that was not possible in the Mayisha I UK study where only quantitative methods were used. The qualitative methods used in this study enabled a deeper understanding of participants' beliefs, values and cultural practices that helps to explain why people may be reluctant to, for example, routinely use condoms. This study (utilizing both qualitative and quantitative) components is the first study on HIV/AIDS and sexual behaviours among Africans in New Zealand. It has also demonstrated that it is possible to gather intimate data from Africans when appropriate methods are used. Future research could benefit from the already established trust that was built in the African communities in Christchurch through this research.

The following chapter will look at theories used in HIV prevention as well as the conceptual framework used to analyse this study's qualitative findings.

Chapter 7 Theory in Understanding HIV, Risk and Prevention

7.1 Introduction

This chapter critically analyses a range of theories that have been commonly used in understanding culture, HIV, risk and prevention and concludes that while useful, the shortcomings of these theories make it necessary to extend the range of theories and concepts that are brought to bear on understanding culture, HIV, risk and prevention. The chapter begins by reviewing theories most used in HIV prevention and interventions, namely the health belief model (HBM) and the theory of reasoned action (TRA). The strengths and weakness of each theory will be discussed. The first section will look at the HBM model followed by the TRA. No one theoretical framework was adequate in the analysis of the data generated during the qualitative component of this study, so a range of conceptual tools have been used to analyse these data. Concepts of risk, stigma, culture and acculturation have all been utilised and the third section of this chapter examines these concepts.

7.2 Theories used in HIV Prevention in Africa

Most HIV/AIDS prevention programmes are based on behavioural change models and theories. Health professionals use behavioural change theories to identify, guide and target specific behaviours that put people at risk (Glanz, Lewis et al. 1990). Although these theories have been shown to increase knowledge and awareness of HIV/AIDS, none have been shown to impact and influence behavioural change (Airhihenbuwa and Obregon 2000; Hanan 2006). Indeed many people in Africa know how HIV is prevented, such as by condom use and sexual partner reduction but they still fail to change their sexual behaviours (Akwara, Madise et al. 2003). This discrepancy between knowledge and practice raises the question of whether the behavioural

change theories are effective in non-western cultures. Airhihenbuwa and Obregon (2000) argue that most theories and models used in HIV/AIDS prevention programmes are derived from social psychology and emphasize individualism as opposed to collectivism. These theories assume that individuals are capable of making decisions and do not take into account the influence of both culture and community (Airhihenbuwa and Obregon 2000).

7.2.1 The Health Belief Model (HBM)

The HBM (Becker 1974) was developed in the 1950s to predict individual response to screening and other preventive health services and their use. According to Melkote and Steeves (2001), the HBM is based on value expectancy theory that posits that the individual will take preventative actions (risk-reduction behaviours) when they are susceptible to a disease (self-perception of risk) and acknowledge the consequences are severe and they believe that taking the preventative action will be beneficial in reducing the threat of contracting the disease. In HIV prevention, the HBM posits that people will change their behaviours if they believe that they are at risk of getting HIV and believe that condoms are effective against HIV infection, and that its “perceived benefits will be sufficient to overcome perceived barriers such as cost or inconvenience of undertaking the actions” (Melkote and Steeves 2001 p.132). The key variables or constructs of the HBM as discussed by Rosenstock, Becker et al (1994) are:

Perceived Threat: This consists of two parts, namely perceived susceptibility and perceived severity of a health condition. Perceived susceptibility is based on one’s subjective perception of the risk of contracting the disease, in this case HIV/AIDS. Perceived severity refers to the seriousness of contracting an illness including evaluation of both clinical and social consequences.

Perceived barriers: This refers to the potential negative consequences that may result from taking particular health actions. Barriers can be physical, psychological, financial or in regard to social status.

Perceived benefits: This refers to an individual assessment of positive outcome or consequences of adopting health behaviour.

Perceived self-efficacy: This refers to an individual’s self-assessment of the ability to

successfully adopt the desired behaviours

Cues to action: This refers to external influences that influence or promote the health behaviours. External influences may be environmental such as media publicity or physical symptoms of the diseases may motivate people to change.

There are limitations to the health belief model. Because it was based on individual psychology, it does not take into consideration other factors such as culture, environmental and economic factors that may influence health behaviours (Hanan 2006). This view was supported by Dyk (2000) who stated that many Western-based AIDS education and prevention programmes have failed in Africa because they did not take into account the importance of cultural sexual beliefs and practices. Examples of such beliefs and perceptions include traditional perceptions of sexuality, cultural beliefs inhibiting the usage of condoms, the importance of sex as a symbol of personal immortality and the value of polygamous marriages (Dyk 2000). Furthermore, Freimuth (1992) argues that the HBM assumes that people make rational decisions but this is not always the case, for both adults and adolescents. Because HIV risk depends on one's sexual partner's sexual behaviours, even those who assess their level of risk of HIV/AIDS may still be wrong because their sexual partners may be engaged in risk behaviours. Since the HBM puts emphasis on perceived threats and individualism, it does not offer a strong framework for analysing the findings in this study which demonstrate that cultural beliefs and not perceived threats or vulnerability influence sexual behaviours.

7.2.2 Theory of Reasoned Action (TRA)

The TRA (Fishbein and Ajzen 1975) suggests that a person's behaviour is determined by his/her intention to perform that behaviour. This theory posits that one's actions can only be influenced by one's intentions and provides variables that link between individual beliefs, attitudes, intentions and behaviours (Fishbein and Middlestadt 1989). The constructs of the TRA and possible application in HIV/AIDS as defined by Family Health International (FHI 2004 pg 18) are:

Behaviour: A specific behaviour defined by four components: action, target, context and time for example implementing a sexual HIV risk reduction strategy (action) by using condoms with commercial sex workers (target) in brothels (context) every time (time).

Intention: The intent to perform behaviour is the best predictor that a desired behaviour will occur.

Attitude: A person's positive or negative feelings towards performing the defined behaviour.

Behavioural Beliefs: Behavioural beliefs are a combination of a person's beliefs regarding the outcomes of a defined behaviour and the person's evaluation of potential outcomes. These beliefs may differ from population to population.

Norms: A person's perception of other people's opinions regarding the defined behaviour. This may include normative beliefs or a combination of a person's beliefs regarding other people's views of behaviour and the person's willingness to conform to those views.

Like the health belief model, the TRA is predominantly individualistic by nature and is based on the premise that human beings are rational in the way they make decisions and this perception may not be relevant to HIV/AIDS behaviours which are based on emotion (Kippax and Crawford 1993; Airhihenbuwa and Obregon 2000). According to Kippax and Crawford (1993), the TRA fails to consider the role of environmental and structural issues that may influence certain decisions. Because of the limitations of these behavioural change theories and the complexity of the findings surrounding culture that emerged, a range of concepts were identified that were more effective in making sense of the qualitative data. The following sections will explore the concepts that have been used to analyse these data.

7.3 Theoretical Approach for this Study

As discussed above, three concepts have been used to analyse the themes that emerged from the qualitative data in this study. The concepts of risk, stigma, culture and acculturation were used. The concept of risk is used to analyse how participants viewed and perceived their HIV risk, while the concept of stigma is used to examine how Africans are perceived as 'others' in diaspora, including in New Zealand. The concepts of culture and acculturation are used to examine what happens when cultures meet and the challenges of adjusting one's gender roles and sexual behaviours in New Zealand.

7.3.1 The Concept of Risk

Public health, including epidemiology, has looked at how people perceive risk from different and sometimes conflicting perspectives. Generally, two main approaches have been used to study risk, namely the technico-scientific approach (Slovic and Lichtenstein 1982; Boholm 1998) and those from the perspective of sociocultural theory (Douglas 1966; Douglas 1978; Douglas and Wildavsky 1982; Lupton 1999; Lupton and Tulloch 2002; Lupton and Tulloch 2003). The technico-scientific approach is used in the fields of medicine, epidemiology, engineering, and by actuarial scientists. These groups and disciplines use quantitative methods such as questionnaires and psychometric techniques to measure the difference between lay and expert assessment of risk from certain dangers. The main assumption behind this approach is that risk is quantifiable, objective and predictable (Slovic and Lichtenstein 1982). Critics of the technico-scientific approach such as Lupton (1999 p 2) stated that this approach treats risk as a product of individual choices and actions and tends to ignore other factors such as culture.

Sociocultural approaches to risk, on the other hand, look at the wider context of risk and see risk as a product of many things surrounding an individual, for example culture, social environment, politics and communities (Douglas 1978; Douglas and Wildavsky 1982; Douglas 1996; Lupton 1999). These approaches posit that perceived risk is closely related to cultural adherence and social learning (Douglas and Wildavsky 1982; Douglas 1996). Since risks are socially constructed, individuals or groups may highlight certain dangers and downplay others. Other supporters of sociocultural approaches argue that people choose “what to fear and how much to fear” according to their social interaction and upbringing (Wildavsky and Dake 1990 p 42). Douglas and Wildavsky (1982 p 14) maintained that “some things that we are afraid of, other people do not fear” and what is important is not whether the individual perceives risks accurately but what events an individual identifies as dangerous. By way of illustration, they asked “What are the Americans afraid of? Nothing much really, except the food they eat, the water they drink, the air they breathe, the land they live on, and the energy they use” (Douglas and Wildavsky 1982 p 10). In addition, Douglas and Wildavsky (1982) argue that the debate about risk should therefore not centre on whether risk is accurately or inaccurately perceived but on factors that determine how risks are identified and judged. This perspective therefore

does not see risk perception as ‘irrational’ but acknowledges that groups have different meanings and criteria for what counts as a risk (Douglas 1966; Douglas and Wildavsky 1982). This study will therefore utilise this sociocultural approach to risk because findings from the focus groups show that participants perceived the risk of HIV according to their own cultural interpretation and understanding of risk.

7.3.2 Culture and Acculturation

The concepts of culture and acculturation will be used to examine how the process of migration or coming into a new culture challenged gender roles and sexual behaviours. Acculturation has been defined as “A process of a cultural change experienced by an individual or a group of people as a result of an encounter with a different cultural group” (Redfield, Linton et al. 1936 p.149). According to Dressler (1993), the concept of acculturation is rooted in the behaviour or lifestyle model which posits that culturally based knowledge, attitudes and beliefs influence people to choose behaviours that may result in the observed health patterns (Dressler 1993). Measurements of acculturation that have been used include English language proficiency, and age at migration (Berry 1980; Padilla and Perez 2003).

Padilla and Perez (2003) suggest that the study of acculturation can be traced back to the early 20th century, when social scientists in America sought to understand how new immigrants to America became incorporated into mainstream society. For example, in 1914 Robert Park, a sociologist at the University of Chicago, conducted a study to look at what happens to people from different cultures and languages when they come into contact with each other (Persons 1987; Padilla and Perez 2003). Persons (1987) describes Robert Park’s 1914 study as producing a three-stage models namely contact, accommodation and assimilation. This model emphasised that contact between people from different cultures forced people to find ways to accommodate each other to minimise conflict. This model also stressed that newcomers found ways to accommodate the dominant culture which was followed by the process of cultural assimilation. This contact, accommodation and assimilation process was perceived by Park as progressive and irreversible (Padilla and Perez 2003). However, other authors believe that the concept of acculturation emerged earlier from the field of American anthropology during the European colonial expansion in the 1880s (Kim 1995; Hunt, Schneider et al. 2004). Twenty-two years after Park’s research, anthropologists

became the second group to expand the three stage model (Redfield, Linton et al. 1936). They insisted that acculturation was the main key in the process of accommodation and that acculturation did not mean that assimilation would follow automatically (Redfield, Linton et al. 1936). In 1954, researchers under the umbrella of the Social Science Research Council (SSRC) in the USA, proposed a more comprehensive definition of acculturation that included the psychological perspective of acculturation processes (SSRC 1954). The SSRC definition stated that;

Acculturative change may be the consequence of direct transmission; it may be derived from non-cultural causes, such as ecological or demographic modifications induced by an impinging culture; it may be delayed, as with internal adjustments following upon the acceptance of alien traits or patterns; or it may be a reactive adaptation of traditional modes of life. Its dynamics can be seen as the selective adaptation of value systems, the processes of integration and differentiation, the generation of developmental sequences, and the operation of role determinants and personality factors (SSRC 1954 p. 974).

Padilla and Perez (2003) comment that this definition acknowledges that individuals may choose to surrender or keep some elements of their cultural heritage.

Like many other concepts, acculturation has come under intense criticism from different researchers and authors. Critics of acculturation argue that Berry's (1980) four stages model (assimilation, integration, rejection and marginalisation) has been used excessively on minority groups. Since acculturation involves the contact between two cultures, they question why acculturation researchers have not paid much attention to how the dominant culture adapts or adjusts to the minority culture (Rudmin 2003). Johansen (2002) argues that everybody is subject to acculturation especially in this age of globalization. According to Rudmin (2003) most research on acculturation has portrayed the dominant culture as static and without culture of origin while, in fact, everybody is changing. Other critics like Hunt, Schneider et al (2004) suggest that the problem of acculturation comes from the lack of clarity and failure to define its constructs. They believe that more confusion has therefore resulted about acculturation especially how it is applied in the health care setting. However, some researchers argue that the problem of acculturation lies in the measurements used to assess whether an individual is less or more acculturated (Keefa and Padilla 1987;

Padilla 1987). It has been suggested that if a person has less knowledge of the host culture and more knowledge of their original culture, then that person is less acculturated. Equally, if a person has more knowledge of the host culture, than the original culture then she or he is regarded as acculturated. Researchers therefore use measurements such as English or native language proficiency, knowledge of significant historical cultural events, cultural music ability, length of residence in the host culture and age of arrival, to evaluate whether an individual is more or less acculturated (Berry 1980; Arcia, Skinner et al. 2001). These measurements may not be adequate because they fail to measure attitudes and beliefs.

Another concern raised by Padilla and Perez (2003) is that the measurements of acculturation do not take into consideration other factors that influence the way individuals or groups acculturate. Such factors include family structures, gender balance, religious beliefs, ethnicity, personality factors and power relationships between the host culture and minority groups. Indeed, critics of acculturation research argue that it has failed to explain why differences exist between groups or between individuals in the process of acculturation (Boski and Kwast-Welfeld 1998; Schmitz 1998; Weinreich 1998). For example, a study by Triandis, Kashima et al (1986) reported that immigrants who had more power in their new setting were less likely to accommodate to the new cultural norms. According to Hunt, Schneider et al (2004), studies on acculturation and health seem to ignore or disregard the effect of socio-economic inequalities on new migrants which may explain their poor health and lack of access to health services. This view was also supported by Rudmin (2003) who argues that acculturation research has disadvantaged rather than helped minorities by shifting attention away from their rights to blaming their culture. Escobar and Vega (2000) went further by suggesting that acculturation measures should not be applied because they are cumbersome, have no predictive power and are based on assumptions about culture.

Regardless of the debates surrounding acculturation, the mixing of populations has significant implications for sexual behaviours especially relevant to HIV/AIDS. The focus of this study is not to measure the process of acculturation but to examine the mixing of cultures, more specifically how gender roles and cultural sexual behaviours are negotiated and practised in the new environment of New Zealand.

7.3.3 The Concept of Culture

Mazrui (1986 p 239) defines culture as “a system of interrelated values active enough to influence and condition perception, judgement, communication, and behaviour in a given society”. Historically, the study of culture originated in the field of anthropology. In anthropology, culture involves three key components namely; thoughts, behaviours and products produced by people, therefore “mental processes, beliefs, knowledge, and values are part of culture (Bodley 1999 pg 2). This understanding of culture pays careful attention to the role of symbols in the construction of meanings and understanding. According to Geertz (1973), culture is a system of inherited conceptions expressed in symbolic forms by means of which men [sic] communicate, perpetuate, and develop their knowledge about and attitudes toward life" (1973 pg 89). Miraglia and Law (1999 pg 2) who also take an anthropological view suggested that culture has the following key features:

- **Reproduction:** Culture is learned, taught and reproduced. For the culture to survive, reproduction is necessary
- **Change:** Culture is not static but it is always in a constant state of change. Some of what is learned is lost and new discoveries are learned in different generations
- **Negotiation:** Members of the society usually agree on their system of meanings and symbols, hence negotiations are part of the cultural process
- **Relativistic:** Culture is not universal and meanings and symbols are peculiar only to the group to whom these factors apply. However, Duncan and Duncan (2004), caution that the issue of cultural relativism can be controversial because some cultural concepts can be used to justify unacceptable practices such as rape, violence against women and men’s control over families’ and children’s rights.

In public health, it has long been recognised that culture plays an important role in health outcomes as it can have both negative and positive impacts on health, including sexual behaviours and HIV/AIDS (Airhihenbuwa and Webster 2004). Because culture influences attitudes and behaviours, there is a need to understand how certain beliefs and practices may protect or put people at risk of HIV/AIDS. Olowo-Freers and Barton (1992) reported norms and taboos among the Baganda tribe of Uganda and many African tribes who believed in consequences dictated by the spiritual world,

whereby disobedience is punished by sickness. For example, in many African cultures, pregnant women are required to abstain from sex or it is thought they will face the consequences of difficult childbirth and mental illness. In addition, sex is also prohibited in many African cultures during breastfeeding as it is believed that semen may travel to the baby's milk and cause severe diarrhoea (Olowo-Freers and Barton 1992). A study by Madrama (1996) in Uganda stated that men mentioned the lack of sex during pregnancy and breastfeeding as justification for polygamy and extra-marital affairs. Other authors also found cultural beliefs to be central in influencing the practice of MCPs (Halperin and Epstein 2004; Epstein 2007; Epstein 2008). As Akwara, Madise et al (2003) noted, in the Sub-Saharan Africa context, "...sexual activity appears to be largely influenced by sociocultural beliefs and practices....multiple partnerships for men may be tolerated, while women's infidelity is highly penalized" (2003 p 386).

In this study, multiple cultures are included because Africans come from many different African countries with distinct cultural beliefs and practices, but there is also a shared sense of culture that is held by people united by an identity as black African. Black Africans in Christchurch have formed their own "new culture" which may be different from other Africans in cities like Auckland or Wellington. What makes Christchurch unique is that there are no dominant African groups as there are in Wellington, Auckland and Hamilton where groups like Somalis, Ethiopians, Sudanese and Zimbabweans are larger and dominant. In addition most of the Africans in Auckland, Wellington and Hamilton may have come as refugees not as migrants; this could have implications for socio-economic status, ability to speak English, acculturation, immigration status and even HIV status.

7.3.4 The Conceptualization of Stigma

The concept of stigma was first elaborated by Erving Goffman in his classic book "Stigma: Notes on the Management of Spoiled Identity" (Goffman 1963). Goffman defined stigma as an "attribute that is deeply discrediting" that reduces the person experiencing the stigma "from a whole and usual person to a tainted, discounted one" (1963 p. 3). Goffman also argued that stigma is constructed by society on the basis of perceived 'difference' or 'deviance' and applied through socially sanctioned roles which result in a kind of 'spoiled identity' for the person involved (1963 p 5). Three kinds of stigma were identified by Goffman; the first being the stigma that is derived

from physical deformities. Secondly, he advised that stigma can be associated with a perceived ‘blemish of individual character’, for example mental disorders and in this case HIV/AIDS, and the third was the stigma which was transmitted through lineage for example race, nation and religion otherwise called “the tribal stigma” (1963 p 4-5). According to Wailoo (2006), when racial identity combines with a stigmatized health condition like HIV/AIDS, it contributes to what he called ‘double stigmatization’ (2006 p 531). Thus, it can be argued that black Africans in diaspora may face this double stigmatization because of their racial identity and because of being associated with HIV/AIDS.

7.4 Conclusion

This chapter has reviewed the theoretical concepts used in HIV/AIDS prevention namely the health belief model and the theory of reasoned action. These two theories have limitations because, although they have been found to increase HIV knowledge, programmes based on them have been unable to substantially influence behavioural change. Because of those limitations, this study utilises other concepts that take into consideration the influence of culture and community. The concept of risk will be used to explore how Africans perceive the risk of HIV. The concepts of culture and acculturation will be used to examine what happens when cultures meet, especially the challenges to gender roles and sexual behaviours. The concept of stigma will be used to investigate the association between race and HIV/AIDS. The following chapter presents the findings from the survey component of the study.

Chapter 8 Survey Results

8.1 Introduction

This thesis aimed to investigate the HIV-related attitudes, beliefs and behaviours of African migrants and refugees in Christchurch. This involved using both qualitative and quantitative research methods. A survey was used to capture information on demographic characteristics, HIV-related sexual behaviours, HIV testing and attitudes among the participants, black Africans in Christchurch. This chapter presents the findings of the survey and is organised into major parts. The first section describes the demographic characteristics of the participants such as gender, age, marital status, employment, religion and education status and region of birth by sex. The second section presents findings on sexual and other selected behaviours such as condom use, number of sexual partners, dry sex, previous STD diagnosis, ethnicity of sexual partners, sexual orientation, HIV risk perception and HIV testing. The last section provides a summary of the findings and implications and compares them with those of the Mayisha I study in the UK and other studies of black Africans in diaspora.

8.2 Demographic Characteristics

A total of 250 participants completed the survey questionnaire. Although it was difficult to recruit community members who did not attend social and community events, the community researchers reported that all of the people who attended social venues or events and were invited to fill in the questionnaire agreed to take part, giving a response rate of 100%. The demographic characteristics of participants were described by the following: gender, age, country of birth (grouped into region of birth), length of time in New Zealand, employment status, education level, current partnership status and religious affiliation. Due to small numbers, exposure categories for some variables have been aggregated for the purposes of analysis.

8.2.1 Sex

Sex is one of the key determinants of HIV-related attitudes, knowledge, and behaviours and risk of acquiring HIV. In many parts of Africa, HIV is more prevalent among women compared with men (UNAIDS 2009), indicating greater vulnerability, although counter-intuitively risky behaviours may be less prevalent than among men.

There was a clear sex difference in proportion of respondents to the survey, with more men 150 (61.2%) than women 95 (38.8%) completing the questionnaire. Five participants did not state their sex. As explained in Chapter Seven, the recruitment methods may well explain this sex distribution. Men were more likely than women to attend many of the social venues and events, such as pubs and soccer matches, where recruitment took place.

8.2.2 Participant Age

Participants were asked to state their age in years at the last birthday. Age is a very important variable because internationally, data show that about half of new HIV infections occur among young people under the age of thirty (UNAIDS 2009). In this study, age was initially categorized in five groups as shown in Table 5 below and then collapsed into two groups for the purpose of analysis, namely under thirty and over thirty years (Table 6 below). Of the 95 female participants, 5 (5.2%) did not answer the question on age, and neither did nine (6.0%) of the 150 men. The participant's ages ranged from 16 to 58 years with a mean age of 28.1 (standard deviation 8.4) years. Most participants were in their twenties with the next largest group being in their thirties. This age pattern reflects the age profile in the social venues (such as universities, bars and soccer games) where recruitment took place, with younger females and males more likely to attend than those who were older. Although the recruitment method could explain the age profile of this study's participants, other studies have also shown that migrants tend to be younger compared with the host country population (Chinouya, Davidson et al. 2000; Chinouya and Davidson 2004; Tharao, Massaquoi et al. 2006; Lemoh, Grierson et al. 2010). The age groups, in Table 7 were further combined to form two groups namely 16 – 29 years and 30+ years as Table 8 below shows. When comparison was made of the grouped results, there was no significant difference in the proportion in each category (p value = 0.395).

Table 7: Age Group by Sex

Age in Years	Total	Female	Male
	N	N (%)	N (%)
16-19	36	11 (30.6)	25 (69.4)
20- 29	106	47 (44.3)	59 (55.7)
30-39	68	25 (36.2)	43 (63.8)
40-49	14	5 (35.7)	9 (64.3)
50-59	6	1 (16.7)	5 (83.3)
Total	230	89 (38.7)	141 (61.3)

Table 8: Combined Age Group by Sex

Age in Years	Total	Female	Male	χ^2 (df)	p value
	N	N (%)	N (%)		
16 – 29	142	58 (40.8)	84 (59.2)	0.723 (1)	0.395
30+	88	31 (35.2)	57 (64.8)		
Total	230	89 (38.7)	141 (61.3)		

8.2.3 Marital Status

Participants were asked about their marital status because studies show that sexual behaviours and marital status are related, with single or divorced individuals reporting more sexual partners (Welling, Johnson et al. 1994; Ruark 2008). Participants were asked to tick the box that described their marital status (*married, in relationship, living with partner, single or widowed*) and the results are presented in Table 9 below. Four men and one woman did not answer this question. The responses for marital status were then grouped according to whether an individual was living with a partner or living without a partner. The distribution of relationship status on the grouped data shown in Table 10 demonstrates a difference between men and women in the proportion living without a partner. Men were more likely to be living without a partner than women ($p = 0.001$). A possible explanation for this difference may again be the recruitment methods whereby young and single men were more likely to attend the recruitment venues and events compared with young unmarried women.

Table 9: Marital Status by Sex

Marital Status	Total	Female	Male
	N	N (%)	N (%)
Married	88	43 (48.9)	45 (51.1)
Single	113	32 (28.3)	81 (71.7)
In Relationship	22	13 (59.1)	9 (40.9)
Living with partner	16	6 (37.5)	10 (62.5)
Widowed	1	0 (0.0)	1 (100.0)
Total	240	94 (39.2)	146 (60.8)

Table 10: Grouped Marital Status by Sex

Marital Status	Total N	Sex of Respondent		χ^2 (df)	p – value
		Female N (%)	Male N (%)		
Living with Partner	111	56 (50.5)	55 (49.5)	11.036 (1)	0.001
Living without Partner	129	38 (29.5)	91 (70.5)		
Total	240	94 (39.2)	146 (60.8)		

8.2.4 Educational Attainment

Participants were asked about their highest level of educational attainment. Eight participants (four men and four women) did not answer this question. Most participants had some formal education and only five (2.1%) reported having had no education at all. Nine (3.8%) participants had primary or elementary education, 97 (40.9%) had completed secondary or high school education, 75 (31.6%) had completed university education, 47 (19.8%) had completed professional qualifications and four (1.7%) had completed other qualifications. There was no difference between men's and women's level of education (p value = 0.272) as Table 12 below shows. Recruitment methods could again explain why most participants had relatively higher levels of educational attainment. However, it may also be a reflection of the educational level of migrants who might be expected to be more highly educated than people who do not leave Africa, especially as some come for further education and under the skilled migrant category. It might also have been easier to recruit participants at educational institutions than those who were not affiliated with such institutions.

Table 11: Highest Educational Qualification by Sex

Education	Total	Female	Male
	N	N (%)	N (%)
None	5	1 (20.0)	4 (80.0)
Primary/Elementary	9	0 (0.0)	9 (100.0)
Secondary/High School	97	34 (35.1)	63 (64.9)
University	75	31 (41.3)	44 (58.7)
Professional Qualifications	47	23 (48.9)	24 (51.1)
Other	4	2 (50.0)	2 (50.0)
Total	237	91 (38.4)	146 (61.6)

Table 12: Grouped Highest Qualification by Sex

Highest Qualification	Total	Male N (%)	Female N (%)	χ^2 (df)	p value
Secondary/High School	97	63 (64.9)	34 (35.1)	2.602 (2)	0.272
University	75	44 (58.7)	31 (41.3)		
Professional Qualifications	47	24 (51.1)	23 (48.9)		
Total	219	131 (59.8)	88 (40.2)		

8.2.5 Employment Status

Participants were also asked to indicate their current employment status. Eleven men and six women did not answer this question. Most participants were either employed or students. Again the recruitment methods may be responsible for this. As noted above, it might have been easier to recruit participants affiliated with educational institutions than those who were unemployed or not studying. The social mapping exercise (see Chapter 6), however, also indicated that most Africans are in Christchurch either for work or education. This may be different for other cities in New Zealand where many Africans live. There was no significant difference in employment status by sex (p value = 0.181) as Table 13 below shows.

Table 13: Employment Status of Participants by Sex

Employment Status	Total	Female	Male	$\chi^2(df)$	p- value
	N	N (%)	N (%)		
Employed	97	38 (39.2)	59 (60.8)	4.877 (3)	0.181
Unemployed	18	9 (50.0)	9 (50.0)		
Student	79	34 (43.0)	45 (57.0)		
Other	34	8 (23.5)	26 (76.5)		
Total	228	89 (39.0)	139 (61.0)		

8.2.6 Country of Birth

Participants were asked an open-ended question about the country they were born in. Sixteen men and twelve women did not respond to this question. Naming participants country of birth could potentially identify some participants who had only a few responses. Responses were subsequently grouped for analysis and to avoid possible deductive identification of people from countries with few Africans living in Christchurch, as shown in Table 14 below. Participants came from twelve different Sub-Saharan African countries whose locations are shown in the map in Figure 12 below. Countries of birth were grouped into the five regions of Africa namely, East Africa for participants from Kenya and Tanzania, West Africa for participants from Ghana and Nigeria, Southern Africa for participants from Botswana, Zambia, Malawi and Zimbabwe and the Horn of Africa for participants from Eritrea, Sudan, Somalia and Ethiopia. Most participants were born in Africa (83.0%) with the majority coming from Zimbabwe, followed by Ethiopia and Somalia. Other participants were born in New Zealand (13.8%) and other parts of the world (3.2%) as Table 14 shows. Table 15 below shows that more men (39.6%) were born in the Horn of Africa compared with women (16.9%), and more women were born in the Southern African region compared with men. The observed difference in region of birth by sex was highly significant ($p < 0.001$).

Table 14: Country of Birth

Country of Origin	Frequency	%
America	3	1.4
Australia	2	0.9
Botswana	2	0.9
Canada	2	0.9
Ethiopia	28	12.9
Eritrea	3	1.4
Ghana	13	6.0
Kenya	20	9.2
Malawi	2	0.9
New Zealand	30	13.8
Nigeria	24	11.1
Somalia	26	12.0
Sudan	10	4.6
Tanzania	2	0.9
Zambia	6	2.8
Zimbabwe	44	20.3
Total	217	100.0

Table 15: Region of Birth by Sex

Region of Birth	Total	Female	Male	X² (df)	p value
	N	N (%)	N (%)		
East Africa	22	5 (22.7)	17 (77.3)	23.349	<0.001
Horn of Africa	67	14 (20.9)	53 (79.1)		
New Zealand	30	12 (40.0)	18 (60.0)		
Southern Africa	54	27 (50.0)	27 (50.0)		
West Africa	37	19 (51.4)	18 (48.6)		
Other	7	6 (85.7)	1 (14.3)		
Total	217	83 (38.2)	134 (61.8)		

Figure 12: Map of Sub-Saharan Africa



8.2.7 Length of Stay in New Zealand

Participants' length of stay in New Zealand was assessed by asking how long they had lived in New Zealand. Seventeen men and eleven women did not respond to this question. As shown in Table 16 below, 54.8% participants reported being in New Zealand for less than five years while 45.2% had been in New Zealand for over five years. There was no significant difference between men and women in their length of stay in New Zealand ($p = 0.170$).

Table 16: Length of Residence in New Zealand by Sex

Time in New Zealand	Male	Female	Total	X² (df)	p value
	N (%)	N (%)			
0 - 2.9 Years	41 (30.8)	17 (20.2)	58 (26.7)	3.538 (2)	0.170
3 - 5 Years	33 (24.8)	28 (33.2)	61 (28.1)		
> 5 years	59 (44.4)	39 (46.4)	98 (45.2)		
Total	133 (100.0)	84(100.0)	217 (100.0)		

8.2.8 Religious Affiliation

Information about religious affiliation of the participants was sought and is shown in Table 17 below, grouped into Christian, Islam, other religion and no religion. Three women and six men did not respond to this question. The majority of the participants (74.6%) reported that they were Christians while 21.6% were Muslims, and 2.1% reported no religion and 1.2% belonged to other religions. Again, the survey recruitment methods could have accounted for this distribution as it might have been easier to recruit participants in religious settings, especially in churches, rather than other settings. The difference in religious affiliation between men and women was not statistically significant ($p = 0.648$).

Table 17: Religious Affiliation by Sex

Religious Affiliation	Total	Female	Male
	N	N (%)	N (%)
Christian	176	72 (40.9)	104 (59.1)
Islam	51	18 (35.3)	33 (64.7)
No Religion	5	1 (20.0)	4 (80.0)
Other Religions	4	1 (25.0)	3 (75.0)
Total	236	92 (39.0)	144 (61.0)

The number of responses for the no-religion and other-religions categories was very small and so was excluded from further analysis. Table 18 below shows that there was no gender difference between Christians and Muslims ($p = 0.470$).

Table 18: Religion by Sex (Christian and Islam)

Religious Affiliation	Total	Female	Male	X ² (df)	p value
	N	N (%)	N (%)		
Christian	176	72 (40.9)	104 (59.1)	0.521 (1)	0.470
Islam	51	18 (35.3)	33 (64.7)		
Total	227	90 (39.6)	137 (60.4)		

8.3 Sexual Behaviours

This section examines the respondents' reported sexual behaviours and other factors that increase the vulnerability to HIV infection. In particular, the analysis examines the number of sexual partners in the past year, ethnicity of sexual partners, previous STD diagnosis, condom use at last sex and dry sex.

8.3.1 The Number of Sexual Partners in the Past Year

Participants were asked "How many partners have you had sexual intercourse with in the last year?" Choices given were no sexual partner, one sexual partner, two to four sexual partners and five or more sexual partners. Thirty one (20.7%) men and twelve (12.6%) women did not answer this question. The findings are shown in Table 19 below. Of those who responded, the commonest response was having one sexual partner in the past year, reported by half ($42/83 = 50.6\%$) of the women and 44.0% ($50/119$) of men. Relatively high proportions, 38% of the responding women and 36.1% of the men, reported having no partner over this period. In addition, 32 (33.7%) women and 42 (28.7%) men reported having no sexual partner in the past year, seven (7.4%) women and 21 (14.0%) men reported having sex with two to four

sexual partners in the past year and two (2.1%) of women and five (3.3%) of men had sex with five or more sexual partners in the past year (see Table 19). It should be noted that if someone reported having no sexual partner it does not necessarily mean that she/he had not had sex if the questionnaire’s use of the word “partner” was interpreted to mean one someone they were in a relationship with, and not someone they had casual sex with.

Table 19: Number of Sexual Partners in the Past Year by Sex

Variable	Total	Number of Sexual Partners				Missing
		0	1	2-4	5+	
Sex	N	N (%)	N (%)	N (%)	N (%)	
Female	95	32 (33.7)	42 (44.2)	7 (7.4)	2 (2.1)	12 (12.6)
Male	150	43 (28.7)	50 (33.3)	21 (14.0)	5 (3.3)	31 (20.7)
Total	245	75 (30.6)	92 (37.6)	28 (11.4)	7 (2.9)	43 (17.5)

Again, because of the relatively small numbers in some response categories these were combined into two groups: none/one sexual partner and two or more sexual partners in the past year (non-responders were excluded from the analysis). These groups were chosen as having multiple partners increases the risk of acquiring and transmitting HIV and other STIs (Halperin and Epstein 2004; Mah 2008a). As shown in Table 20 below, there was a significant difference by gender in the number of sexual partners (after grouping) in the past year ($p = 0.042$). About twice as many men as women had two or more sexual partners.

Table 20: Number of Sexual Partners (Grouped) by Sex in the Past Year

Sex	Total	Number of Sexual Partners		X^2 (df)	p value
		0-1	2+		
	N	N (%)	N (%)		
Female	83	74 (89.2)	9 (10.8)	4.134 (1)	0.042
Male	119	93 (78.2)	26 (21.8)		
Total	202	167 (82.7)	35 (17.3)		

Because of the sex difference in number of sexual partners, and as we are interested in exploring factors associated with HIV risk, the association between number of sexual partners and demographic characteristics was examined separately for men and women (see Table 21 below).

Table 21: Demographic Characteristics and Number of Sexual Partners in Women

Socio-demographics	Total	0 or 1 Partner	2+ Partners	X²(df)	p value
Age in Years					
16-29 years of age	50	41 (82.0)	9 (18.0)	6.278 (1)	0.012
30+ years of age	31	31 (100.0)	0 (0.0)		
Marital status					
Living with partner	53	(52 (98.1)	1 (1.9)	12.670 (1)	0.001
Living without partner	29	21 (72.4)	8 (27.6)		
Employment					
Employed	35	31 (88.6)	4 (11.4)	2.002 (3)	0.572
Unemployed	8	6 (75.0)	2 (25.0)		
Student	28	26 (92.9)	2 (7.1)		
Other	7	6 (85.7)	1 (14.3)		
Education					
Secondary	28	20 (71.4)	8 (28.6)	12.569 (2)	0.002
University	28	27 (96.4)	1 (3.6)		
Professional	22	22 (100.0)	0 (0.0)		
Religion					
Christian	62	58 (93.5)	4 (6.5)	2.355 (1)	0.185
Islam	16	13 (81.3)	3 (18.8)		
Region of Birth					
East Africa	4	4 (100.0)	0 (0.0)	13.487 (5)	0.019
Horn of Africa	13	9 (69.2)	4 (30.8)		
New Zealand	8	7 (87.5)	1 (12.5)		
Southern Africa	27	26 (96.3)	1 (3.7)		
West Africa	16	16 (100.0)	0 (0.0)		
Others	5	3 (60.0)	1 (40.0)		

Several demographic factors were associated with having more than one sexual partner in women. The statistically significant findings were that this varied by age ($p = 0.012$), with only women under 30 having multiple partners; marital status ($p = 0.001$) being commoner among women living alone rather with a partner; education ($p = 0.002$), being more common among women who had completed secondary education compared with those with higher levels of education, and region of birth ($p = 0.019$), with those born in Southern and West Africa having fewer partners.

Younger age was found to be strongly associated with multiple partnerships. It is also highly likely that younger women are less likely to be living with a partner and plausible that age and highest level of education are related. If this is true, then the observed relationships between marital status and education and number of sexual partners could have been confounded by age. It is possible that in this sample, age is

associated with place of birth and that age confounded these associations also. To explore this, as there were insufficient numbers in the sample for a multivariate analysis, the associations between marital status, education and country of birth, and number of sexual partners were examined separately in the two age groups: under 30, and 30 years and over, as Table 22 below shows. All the women ($n = 9$) who reported having more than one sexual partner in the past year were aged under 30. Formal testing of degree of association between age and demographic characteristics found to be significant (marital status, education and region of birth) was not appropriate because there were no women over 30 who reported having more than one sexual partner. Although formal testing was not possible, this finding suggests that age could have been a confounder in the relationship between marital status, education, country of birth and marital status.

Table 22: Marital Status, Education and Country of Birth and Number of Sexual Partners Stratified by Age in Years in Women

Demographic Characteristics	Total	Age (16 – 29 Years)		Total	Age (30+ Years)	
		Number of Sexual Partners			Number of Sexual Partners	
		0 - 1	2+		0 - 1	2+
Marital status						
Living with partner	27	26 (96.3)	1 (3.7)	25	25 (100.0)	0 (0.0)
Living without partner	23	15 (65.5)	8 (34.8)	5	5 (100.0)	0 (0.0)
Education						
Secondary	24	16 (66.6)	8 (33.3)	4	4 (100.0)	0 (0.0)
University	15	14 (93.3)	1 (6.7)	12	12 (100.0)	0 (0.0)
Professional	9	9 (100.0)	0 (0.0)	12	12 (100.0)	0 (0.0)
Region of Birth						
East Africa	3	3 (100.0)	0 (0.0)	1	1 (100.0)	0 (0.0)
Horn of Africa	12	8 (66.7)	4 (33.3)	0	-	-
New Zealand	5	4 (80.0)	1 (20.0)	3	3 (100.0)	0 (0.0)
Southern Africa	11	11 (100.0)	0 (0.0)	16	16 (100.0)	0 (0.0)
West Africa	8	8 (100.0)	0 (0.0)	7	7 (100.0)	0 (0.0)
Other	4	2 (50.0)	2 (50.0)	1	1 (100.0)	0 (0.0)

Only marital status was found to be associated with the number of sexual partners in men ($p = 0.031$), with those living alone likely to have more than one sexual partner compared with those living with a partner as Table 23 below shows. Just as for women, age could have confounded the relationship between marital status and number of sexual partners in men. The relationship between number of sexual partners and marital status, controlled for age, was therefore examined using a Mantel-Haenszel analysis. No significant difference was found between number of sexual partners and marital status after controlling for age in men ($X^2 = 2.404$, $df = 1$, $p = 0.121$). This finding indicates that age was a confounder between marital status and number of sexual partners in men.

Table 23: Demographic Characteristics and Number of Sexual Partners in Men

Demographic Characteristics	Total	0 -1 Partner	2+ Partners	X²(df)	p value
Age in Years					
16-29	63	48 (76.2)	15 (23.8)	0.485 (1)	0.486
30+	49	40 (81.6)	9 (18.4)		
Marital status					
Living with partner	48	42 (87.5)	6 (12.5)	4.628 (1)	0.031
Living without partner	68	48 (70.6)	20 (29.4)		
Employment					
Employed	35	31 (88.6)	4 (11.4)	2.107 (3)	0.550
Unemployed	7	6 (85.7)	1 (14.3)		
Student	36	31 (86.1)	5 (13.9)		
Other	16	13 (81.3)	3 (18.7)		
Education					
Secondary	46	34 (73.9)	12 (26.1)	3.377 (2)	0.185
University	37	33 (89.2)	4 (10.8)		
Professional	20	17 (85.0)	3 (15.0)		
Religion					
Christian	82	65 (79.3)	17 (20.7)	4.437 (3)	0.218
Islam	29	23 (79.3)	6 (20.7)		
Region of Birth					
East Africa	15	12 (80.0)	3 (20.0)	10.516 (5)	0.062
Horn of Africa	41	28 (68.3)	13 (31.7)		
New Zealand	13	9 (69.2)	4 (30.8)		
Southern Africa	22	20 (90.9)	2 (9.1)		
West Africa	17	17 (100.0)	0 (0.0)		
Other	1	1 (100.0)	0 (0.0)		

8.3.2 Ethnicity of Sexual Partners

As well as the numbers of sexual partners, participants were asked about the ethnicity of their most recent sexual partner by asking: “Thinking of your most recent or current sexual partner, what ethnicity are they?” The questionnaire provided the choices of black African, Asian, White, Maori, Pacific Islander, mixed race and others as presented in Table 24 below. Most men (60.0%) reported that their recent sexual partner was black African followed by white (21.5%) and mixed race (8.1%). For women, most of them (82.5%) identified black African as their recent sexual partner followed by mixed race (8.1%).

Table 24: Ethnicity of Recent Sexual Partners by Sex

Sex	Total	African	White	Asian	Mixed	Maori	Pacific	Other
Female	80	66 (82.5)	2 (2.5)	1 (1.3)	7 (8.8)	0 (0.0)	1 (1.3)	3 (3.8)
Male	135	81 (60.0)	29 (21.5)	4 (3.0)	11 (8.1)	2 (1.5)	4 (3.0)	4 (3.0)
Total	215	147 (68.4)	31 (14.4)	5 (2.3)	18 (8.4)	2 (0.9)	5 (2.3)	7 (3.3)

Due to the small numbers in some of the response categories, these were then grouped into African, White and others as Table 25 below shows. There was a sex difference in the ethnicity of recent sexual partners. Women were more likely to have a partner who was African than men and men were more likely to report a partner of white ethnicity than women ($p = 0.001$). This finding is important because it shows that there is sexual mixing across ethnic groups, especially between black men and white women. Other ethnic groups as well seem to have sexual interactions with black men compared with black women. Relationships between black men and white women were identified in the focus group discussions and will be discussed in detail in Chapter Ten.

Table 25: Ethnicity of Recent Sexual Partners by Sex (Grouped)

Gender	Total	African	White	Other	X ² (df)	P value
	N	N (%)	N (%)	N (%)		
Female	80	66 (82.5)	2 (2.5)	12 (15.0)	16.633 (2)	0.001
Male	135	81 (60.0)	29 (21.5)	25 (18.5)		
Total	215	147 (68.4)	31 (14.4)	37 (17.2)		

8.4 Condom Use in Last Sex

Participants were asked “*Was a condom used last time you had sex?*” Fourteen men and 19 women did not answer this question and were excluded from the analysis. Half of the women who answered this question ($n = 38$) and 41.2% of men ($n = 56$) did not use condoms in their last sexual encounter. The difference between the proportions of men and women who used condoms the last time they had sex was not statistically significant (p value = 0.215) as Table 26 below shows.

Table 26: Condom Use in the Last Sex

Sex	Total	Condom use at Last Sex		X ² (df)	p value
		No	Yes		
	N	N (%)	N (%)		
Female	76	38 (50.0)	38 (50.0)	1.538 (1)	0.215
Male	136	56 (41.2)	80 (58.2)		
Total	212	94 (44.3)	118 (55.7)		

Cross tabulation of condom use by demographic characteristics in women showed that condom use was significantly associated with several demographic variables such as marital status ($p = 0.003$), education ($p = < 0.001$), religion ($p = 0.027$) and region of birth ($p = 0.042$) as summarised in Table 27 below.

Table 27: Demographic Characteristics and Condom Use at Last Sex in Women

Demographic Characteristic	Total N	Condom Use in Last Sex		X ² (df)	p value
		No N (%)	Yes N (%)		
Age in Years					
16 – 29	50	22 (44.0)	28 (56.0)	3.576 (1)	0.059
30+	22	15 (68.2)	7 (31.8)		
Marital status					
Living with partner	46	29 (63.0)	17 (37.0)	8.946 (1)	0.003
Living without partner	29	8 (27.6)	21 (72.4)		
Education					
Secondary	30	7 (23.3)	23 (76.6)	15.307 (2)	< 0.001
University	26	16 (61.5)	10 (38.5)		
Professional	15	12 (80.0)	3 (20.0)		
Employment					
Employed	29	19 (65.5)	10 (34.5)	7.439 (3)	0.059
Unemployed	8	3 (37.5)	5 (62.5)		
Student	26	9 (34.6)	17 (65.4)		
Other	8	2 (25.0)	6 (75.0)		
Religion					
Christian	57	31 (54.4)	26 (45.6)	4.892 (1)	0.027
Islam	14	3 (21.4)	11 (78.6)		
Country of Birth					
East Africa	5	2 (40.0)	3 (60.0)	11.506 (5)	0.042
Horn of Africa	10	6 (60.0)	4 (40.0)		
New Zealand	10	2 (20.0)	8 (80.0)		
Southern Africa	18	14 (77.8)	4 (22.2)		
West Africa	18	9 (50.0)	9 (50.0)		
Other	5	1 (20.0)	4 (80.0)		

Marital status ($p = 0.003$) is one of the most likely confounders of the relationship between condom use and other demographic characteristics in Table 27 above. As discussed in Chapter Six, a Mantel-Haenszel analysis can be used to determine whether there is a relationship between two variables, controlling for a third variable in this case, to test whether marital status confounded the relationship between condom use and each of the demographic variables; with statistical significance (education, religion and country of birth). If there is still a relationship ($p = \leq 0.05$) between condom use and the demographic variables of interest after controlling for marital status, then marital status was not a confounder but if there is no relationship ($p = > 0.05$) then marital status confounded the observed relationship. However, except for religion, there were insufficient numbers in some responses under

education and country of birth and it was not possible to undertake the Mantel-Haenszel analysis for these. After controlling for marital status, the Mantel-Haenszel analysis found no significant difference between condom use and religion ($X^2 = 1.252$, $(df) = 1$, p value = 0.886). This finding suggests that marital status may have confounded the relationship between condom use and religion in women.

The relationship between demographic characteristics and condom use in men was examined by using the Chi-square test. As Table 28 below shows, several demographic variables were associated with condom use in men. They include age in years ($p = < 0.001$), marital status ($p = < 0.001$), education ($p = 0.003$) and employment status ($p = 0.004$).

Table 28: Demographic Characteristics and Condom Use at Last Sex in Men

Demographic Characteristic	Total	Condom Use in Last Sex		X ² (df)	p value
		No	Yes		
Age in Years	N	N (%)	N (%)		
16 – 29	76	18 (23.7)	58 (76.3)	23.140 (1)	< 0.001
30+	53	35 (66.0)	18 (34.0)		
Marital status					
Living with partner	53	38 (71.7)	15 (28.3)	33.454 (1)	< 0.001
Living without partner	80	17 (21.2)	63 (78.8)		
Education					
Secondary	59	15 (25.4)	44 (74.6)	11.912 (2)	0.003
University	40	21 (52.5)	19 (47.5)		
Professional	21	13 (61.9)	8 (38.1)		
Employment					
Employed	82	50 (61.2)	32 (39.0)	13.140 (3)	0.004
Unemployed	16	7 (43.8)	9 (56.2)		
Student	65	21 (32.3)	44 (67.7)		
Other	33	7 (21.2)	26 (78.8)		
Religion					
Christian	96	39 (40.6)	57 (59.4)	0.069 (1)	0.793
Islam	30	13 (43.3)	17 (56.7)		
Region of Birth					
East Africa	17	7 (41.2)	10 (58.8)	10.133 (5)	0.072
Horn of Africa	50	15 (30.0)	35 (70.0)		
New Zealand	15	4 (26.7)	11 (73.3)		
Southern Africa	22	11 (50.0)	11 (50.0)		
West Africa	18	12 (66.7)	6 (33.3)		
Other	1	0 (0.0)	1 (100.0)		

As for women, marital status (p value = < 0.001) was the likely confounding factor between condom use and other demographic variables with the statistical significance ($p = \leq 0.05$) in men. Mantel-Haenszel analysis was used therefore to determine whether marital status confounded the relationship between condom use and age ($p = < 0.001$), education ($p = 0.003$) and employment ($p = 0.004$). If there is still a relationship ($p = \leq 0.05$) between condom use and the demographic variables of interest after controlling for marital status, then marital status was not a confounder but if there is no relationship ($p = > 0.05$) then marital status confounded the observed relationship. Except for age in years, there were insufficient numbers for level of education and employment to perform the Mantel-Haenszel analysis.

After controlling for marital status, there was a relationship between age and condom

use in men ($X^2 = 5.202$, $df = 1$, p value = 0.023). This result does not support the hypothesis that marital status was a confounder between condom use and age and therefore condom use was age-related with men aged 30 and above reporting lower condom use compared with those who were under 30.

The relationship between condom use and other variables (previous STD diagnosis, previous HIV test and number of sexual partners) for men and women separately was examined by using Chi-square analysis as Tables 29 and 30 below show.

Table 29: Selected Variables and Condom Use in Women

Variable	Total	Condom not Used	Condom Used	X²(df)	p value
Number of Sexual Partners					
0 – 1	57	32 (56.1)	25 (43.9)	1.623 (1)	0.203
2+	9	3 (33.3)	6 (66.7)		
Previous STD Diagnosis					
No	64	33 (51.6)	31 (48.4)	0.396 (1)	0.529
Yes	12	5 (41.7)	7 (58.3)		
Previous HIV Test					
No	12	6 (50.0)	6 (50.0)	0.003 (1)	0.957
Yes	59	30 (50.8)	29 (49.3)		

Table 30: Selected Variables and Condom Use in Men

Variable	Total	Condom not Used	Condom Used	X²(df)	p value
Number of Sexual Partners					
0 – 1	83	44 (53.0)	39 (47.0)	0.396 (1)	0.048
2+	26	8 (30.8)	18 (69.2)		
Previous STD Diagnosis					
No	107	44 (41.1)	63 (58.9)	0.001 (1)	0.980
Yes	29	12 (41.4)	17 (58.6)		
Previous HIV Test					
No	27	12 (44.4)	15 (55.6)	0.064 (1)	0.801
Yes	103	43 (41.7)	60 (58.3)		

There was a statistically significant relationship between condom use and number of sexual partners but no relationship between a previous history of STD and condom use. Those who had more than one sexual partner were more likely to use condoms than those with one or without sexual partners ($p = 0.016$). In general, reported condom use at last sex was low, especially among women. Factors that influenced the use of condoms among participants were explored in the focus group discussions and are discussed in Chapter Ten.

8.5 Previous STD Diagnosis

Participants were asked the question *“Have you ever been diagnosed with a sexually transmitted disease (STD) other than HIV?”* A previous STD diagnosis was reported by 17.5% ($n = 43$) of the respondents. As Table 31 below shows, there was no statistical difference (p value = 0.107) in the proportions of men and women reporting a previous STD diagnosis.

Table 31: Sex and STD History

Sex	Total	Previous STD Diagnosis		X ² (df)	p value
		No	Yes		
		N (%)	N (%)		
Female	95	83 (87.4)	12 (12.6)	2.595 (1)	0.107
Male	150	119 (79.3)	31 (20.7)		
Total	245	202 (82.4)	43(17.5)		

No demographic characteristic was found to be associated with previous STD diagnosis in either women (see Table 32) or men (see Table 33)

Table 32: Demographic Characteristics and Previous STD History in Women

Demographic Characteristic	Total	Previous STD Diagnosis		X ² (df)	p value
		No	Yes		
	N	N (%)	N (%)		
Age in Years				2.016 (1)	0.156
16-29	58	48 (82.8)	10 (17.2)		
30+	31	29 (93.5)	3 (6.5)		
Employment				1.799 (3)	0.615
Employed	38	33 (86.8)	5 (13.2)		
Unemployed	11	8 (72.7)	3 (27.3)		
Student	36	30 (83.3)	6 (16.7)		
Other	4	4 (100.0)	0 (0.0)		
Education				2.226 (2)	0.329
Secondary/ High School	34	28 (82.4)	6 (17.6)		
University	31	27 (87.1)	4 (12.9)		
Professional	23	22 (95.7)	1(4.3)		
Marital status				0.009 (1)	0.925
Living with Partner	56	49 (87.5)	7 (12.5)		
Living without Partner	38	34 (89.5)	4 (10.5)		
Religion				0.216 (1)	0.642
Christian	72	63 (87.5)	9 (12.5)		
Islam	18	15 (83.3)	3 (16.7)		
Region of Birth				6.271 (5)	0.281
East Africa	5	5 (100.0)	0 (0.0)		
Horn of Africa	14	13 (92.9)	1 (7.1)		
New Zealand	12	10 (83.3)	2 (16.7)		
Southern Africa	27	26 (96.3)	1 (3.7)		
West Africa	19	16 (84.2)	3 (15.8)		
Other	6	4 (66.7)	2 (33.3)		

Table 33: Demographic Characteristics and Previous STD History in Men

Demographic Characteristic	Total N	Previous STD Diagnosis		X ² (df)	p value
		No N (%)	Yes N (%)		
Age in Years					
16-29	84	71 (84.5)	13 (15.5)	3.297 (1)	0.069
30+	57	41 (71.9)	16 (28.1)		
Employment					
Employed	59	46 (78.0)	13 (22.0)	4.406 (3)	0.221
Unemployed	9	5 (55.6)	4 (44.4)		
Student	45	34 (75.6)	11 (24.4)		
Others	26	23 (88.5)	3 (11.5)		
Education					
Secondary/High Sch	63	56 (79.4)	13 (20.6)	0.001 (2)	0.999
University	44	35 (79.5)	9 (20.5)		
Professional	24	19 (79.2)	5 (20.8)		
Marital status					
Living with Partner	55	41 (74.5)	14 (25.5)	1.301 (1)	0.254
Living without Partner	91	75 (82.4)	16 (17.6)		
Religion					
Christian	104	81 (77.9)	23 (22.1)	1.581(1)	0.209
Islam	33	29 (87.9)	4 (12.1)		
Region of Birth					
East Africa	17	12 (70.6)	5 (29.4)	5.159 (5)	0.397
Horn of Africa	53	40 (75.5)	13 (24.5)		
New Zealand	18	16 (88.9)	2 (11.1)		
Southern Africa	27	21 (77.8)	6 (22.2)		
West Africa	18	17 (94.4)	1 (5.6)		
Other	1	1 (100.0)	0 (0.0)		

8.6 Dry Sex Practice

As already discussed in Chapter 4 (4.3.3) there is a growing concern in Africa that the use of drying agents may increase HIV transmission (Brown, Ayowa et al. 1993; Brown and Brown 2000). This study explored the use of drying agents by asking the participants “Some people find that using herbs or grains to dry or tighten the vagina can increase sexual enjoyment. Have you or your sexual partner(s) ever used this technique? Participants were asked to tick one of the answers. Twenty women and 21 men did not answer this question. Ten women (13.3%) and 28 (21.7%) men reported dry sex practice frequently or occasionally in New Zealand (see Table 34)

Table 34: Dry Sex Practice by Sex

Demographic Characteristic	Total	Yes Frequently in NZ	Yes Occasionally in NZ	Not in NZ but Back Home	Not at All	Don't Know
	N	N (%)	N (%)	N (%)	N (%)	N (%)
Female	75	5 (6.7)	5 (6.7)	13 (17.3)	40(53.3)	12 (16.0)
Male	129	8 (6.2)	21 (16.3)	6 (4.7)	59 (45.7)	35 (27.1)

The responses in Table 34 above were grouped into three categories for further analysis: “yes frequently in New Zealand” and “yes occasionally in New Zealand” were grouped as “Yes in New Zealand”, not in New Zealand but back home remained the same and “not at all” and “don’t know” were grouped as No. Table 35 below presents the grouped results by sex. There was a statistically significant difference in the proportion of men and women who reported dry sex practice ($p = 0.006$).

Table 35: Grouped Dry Sex Practice by Sex

Demographic Characteristic	Total	Yes in New Zealand	Not in NZ but Back Home	No	X2 (df)	p value
	N	N (%)	N (%)	N (%)		
Female	75	10 (13.3)	13 (17.3)	52 (69.3)	10.349 (2)	0.006
Male	129	29 (22.5)	6 (4.7)	94 (72.9)		

The relationship between demographic characteristics and dry sex practice was also examined. Only education was found to be associated with dry sex practice in women ($p = 0.004$) as presented (see Table 36) while in men, both education ($p = 0.017$) and region of birth ($p = 0.001$) were associated with dry sex practice (see Table 37).

Table 36: Demographic Characteristics and Dry Sex Practice in Women

Demographic Characteristic	Total	Yes in New Zealand	Not in New Zealand but Back Home	No	X²(df)	p value
	N	N (%)	N (%)	N (%)		
Age in Years						
16- 29	49	10 (20.4)	8 (16.3)	31 (63.3)	5.278 (2)	0.071
30+	22	0 (0.0)	4 (18.2)	18 (81.8)		
Marital Status						
Living with partner	45	4 (8.9)	7 (15.6)	34 (75.6)	2.500 (2)	0.287
Living without partner	30	6 (20.0)	6 (20.0)	18 (60.0)		
Education						
Secondary	29	8 (27.6)	3 (10.3)	18 (62.1)	15.388 (4)	0.004
University	24	2 (8.3)	2 (8.3)	20 (83.3)		
Professional	17	0 (0.0)	7 (41.2)	10 (58.8)		
Employment						
Employed	31	1 (3.2)	7 (22.6)	23 (74.2)	8.026 (6)	0.236
Unemployed	7	2 (28.6)	1 (14.3)	4 (57.1)		
Student	26	6 (23.1)	2 (7.7)	18 (69.2)		
Other	7	1 (14.3)	2 (28.6)	4 (57.1)		
Religion						
Christian	57	5 (8.8)	11 (19.3)	41 (71.9)	4.552 (2)	0.103
Islam	14	4 (28.6)	1 (7.1)	9 (64.3)		
Region of Birth						
East Africa	5	0 (0.0)	1 (20.0)	4 (80.0)	14.091 (10)	0.169
Horn of Africa	10	3 (30.0)	3 (30.0)	4 (40.0)		
New Zealand	10	3 (30.0)	0 (0.0)	7 (70.0)		
Southern Africa	20	1 (5.0)	5 (25.0)	14 (70.0)		
West Africa	17	1 (5.9)	2 (11.8)	14 (82.4)		
Other	5	2 (40.0)	1 (20.0)	2 (40.0)		

Table 37: Demographic Characteristics and Dry Sex Practice in Men

Demographic Characteristic	Total	Yes in New Zealand	Not in New Zealand but Back Home	No	X²(df)	p value
		N (%)	N (%)	N (%)		
Age in Years						
16- 29	70	13 (18.6)	3 (4.3)	54 (77.1)	0.628 (2)	0.730
30+	55	13 (23.6)	5 (5.5)	39 (70.9)		
Marital Status						
Living with partner	50	7 (14.0)	2 (4.0)	41 (82.0)	3.539 (2)	0.170
Living without partner	76	21 (27.6)	4 (5.3)	51 (67.1)		
Education						
Secondary	52	17 (32.7)	2 (3.8)	33 (63.5)	12.025 (4)	0.017
University	41	4 (9.8)	2 (4.9)	35 (85.4)		
Professional	22	1 (4.5)	2 (9.1)	19 (86.4)		
Employment						
Employed	52	11 (21.2)	5 (9.6)	36 (69.2)	10.457 (6)	0.107
Unemployed	7	3 (42.9)	0 (0.0)	4 (57.1)		
Student	39	6 (15.4)	1 (2.6)	32 (82.1)		
Other	22	9 (40.9)	0 (0.0)	13 (59.1)		
Religion						
Christian	93	19 (20.4)	3 (3.2)	71 (76.3)	4.528 (2)	0.104
Islam	27	10 (37.0)	2 (7.4)	15 (55.6)		
Region of Birth						
East Africa	16	2 (12.5)	0 (0.0)	14 (87.5)	27.050 (8)	0.001
Horn of Africa	46	18 (39.1)	2 (4.3)	26 (56.5)		
New Zealand	16	2 (12.5)	1 (6.3)	13 (81.3)		
Southern Africa	23	0 (0.0)	0 (0.0)	23 (100.0)		
West Africa	16	0 (0.0)	2 (12.5)	14 (87.5)		
Other	0	-	-	-		

8.7 Previous HIV Test

Previous HIV testing is important as far as this study is concerned for two reasons. One is that in November 2005, the New Zealand Immigration Service (NZIS) introduced a compulsory HIV test for all migrants coming to stay in New Zealand for twelve months or more (NZIS 2005). It was therefore important to check how this policy has been enacted. Second, it is hypothesised that many Africans who were in New Zealand before November 2005 may not know their HIV status and may be at risk of presenting late with advanced HIV if infected (Birukila 2007). In order to find out about previous HIV tests, participants were asked “*When did you last have an HIV test?*” The responses were grouped according to whether or not the last reported

HIV test would have been before November 2005 or after November 2005. Seven women and nine men did not respond to this question and were excluded from the analysis. Most participants reported that they had had an HIV test (81.8% women and 75.9% men) and there was no observed difference between men and women in the proportion having had a previous HIV test $p = 0.291$). HIV testing was significantly inversely associated with time in New Zealand with those in New Zealand before 2005 more likely not to have been tested than those in New Zealand after 2005 ($p = 0.001$) as Table 38 below shows.

Table 38: Previous HIV Test by Sex and Time in New Zealand

Variable	Ever had HIV test			X ² (df)	p value
	Total	No	Yes		
Gender	N	N (%)	N (%)		
Female	88	16 (18.2)	72 (81.8)	1.117 (1)	0.291
Male	141	34 (24.1)	107 (75.9)		
Time in NZ					
After Nov 2005	106	11 (10.4)	95 (89.6)	15.712 (1)	0.001
Before Nov 2005	121	39 (32.2)	82 (67.8)		

Demographic characteristics and HIV testing were examined separately for men and women. No demographic characteristic was found to be associated with HIV testing in women. Although time in New Zealand, was found to be associated with HIV testing in the whole sample in Table 38 above, this association disappeared in women once the sample was stratified by sex, ($p = 0.315$) as Table 39 below shows.

Table 39: Previous HIV Test and Demographic Characteristics in Women

Variable	Ever had HIV test			X ² (df)	p value
	Total	No	Yes		
Age in Years					
16 – 29	56	12 (21.4)	44 (78.6)	1.461 (1)	0.227
30+	28	3 (10.7)	25 (89.5)		
Time in NZ					
After Nov 2005	42	6 (14.3)	36 (85.7)	1.011(1)	0.315
Before Nov 2005	44	10 (22.7)	34 (77.3)		
Employment					
Employed	36	5 (13.9)	31 (86.1)	3.138 (3)	0.371
Unemployed	9	2 (22.2)	7 (77.8)		
Student	32	8 (25.0)	24 (75.0)		
Marital status					
Living with partner	53	8 (15.1)	45 (84.9)	0.982 (1)	0.322
Living without partner	34	8 (23.5)	26 (76.5)		
Religion					
Christian	66	10 (15.2)	56 (84.8)	1.857 (1)	0.173
Islam	17	5 (29.4)	12 (70.6)		
Education					
Secondary	32	7 (21.9)	25 (78.1)	0.878 (2)	0.645
University	30	4 (13.3)	26 (86.7)		
Professional	20	3 (15.0)	17 (85.0)		
Region of Birth					
East Africa	5	2 (40.0)	3 (60.0)	2.924 (5)	0.712
Horn of Africa	13	2 (15.4)	11 (84.6)		
New Zealand	11	3 (27.3)	8 (72.7)		
Southern Africa	26	5 (19.2)	21 (80.8)		
West Africa	19	2 (10.5)	17 (89.5)		
Other	5	1 (20.0)	4 (80.0)		

In men, variables found to be associated with HIV testing included time in New Zealand ($p = 0.001$), religion, with Muslims more likely to report having had no previous HIV test compared with Christians ($p = 0.026$), and region of birth ($p = 0.005$) as shown in Table 40 below. The possible explanation for the association with religion is that most Muslims in this study came from the Horn of Africa (Somalia and Ethiopia) and were more likely to have been in New Zealand longer or before the introduction of mandatory HIV testing in November 2005. Although most of them may have gone through Mangere Refugee Centre and could have been offered an HIV test, those who came under the family reunification category may not have been tested.

Table 40: Previous HIV Test and Demographic Characteristics in Men

Variable	Ever had HIV test			X ² (df)	p value
	Total	No	Yes		
Age in Years					
16 – 29	78	24 (30.8)	54 (69.2)	3.794 (1)	0.051
30+	56	9 (16.1)	47 (83.9)		
Time in NZ					
After Nov 2005	62	5 (8.1)	57 (91.9)	16.654 (1)	< 0.001
Before Nov 2005	76	29 (38.2)	47 (61.8)		
Employment					
Employed	56	11 (19.6)	45(80.4)	0.612 (3)	0.894
Unemployed	8	2 (25.0)	6 (75.0)		
Student	42	10 (23.8)	32 (76.2)		
Other	24	4 (16.7)	20 (83.3)		
Marital status					
Living with partner	52	9 (17.3)	43 (82.7)	1.714 (1)	0.191
Living without partner	85	23 (27.1)	62 (72.9)		
Religion					
Christian	99	19 (19.2)	80 (80.8)	4.952 (1)	0.026
Islam	31	12 (38.7)	19 (61.3)		
Education					
Secondary	58	12 (20.7)	46 (79.3)	1.500 (2)	0.472
University	44	13 (29.5)	31 (70.5)		
Professional	22	4 (18.2)	18 (81.8)		
Region of Birth					
East Africa	15	2 (13.3)	13 (86.7)	16.583 (5)	0.005
Horn of Africa	50	10 (20.0)	40 (80.0)		
New Zealand	17	10 (58.2)	7 (41.2)		
Southern Africa	26	7 (26.9)	19 (73.1)		
West Africa	17	2 (11.8)	15 (88.2)		
Other	1	1 (100.0)	0 (0.0)		

A potential confounder of the relationship between HIV testing, religion and country of birth in men is time in New Zealand. Mantel-Haenszel analysis was used to examine the relationship between HIV testing and religion, controlling for time in New Zealand. There was no statistically significant relationship between HIV testing and religion in men after controlling for time in New Zealand ($X^2 = 1.261$, $df = 1$, $p = 0.261$). This finding indicates that time in New Zealand confounded the relationship between HIV test and religion. It was not possible to perform a Mantel-Haenszel analysis to examine the relationship between country of birth and previous HIV, controlling for time in New Zealand, due to small numbers.

The relationship between previous HIV testing and other variables of interest namely number of sexual partners, HIV risk perception, previous STD diagnosis and condom use at last sex was examined and the results are presented in Table 41 below. There was no statistically significant relationship between previous HIV testing and number of sexual partners, previous STD diagnosis or HIV risk perception.

Table 41: Relationship Between Previous HIV Test and Selected Variables

Variable	Ever had HIV test			X ² (df)	p value
	Total	No N (%)	Yes N (%)		
Number of Sexual Partners					
None/1	161	35 (21.7)	126 (78.3)	0.759 (1)	0.384
2+	35	10 (28.6)	25 (71.4)		
Feeling at Risk of HIV					
Yes	22	5 (22.7)	17 (77.3)	0.083 (1)	0.773
No	189	38 (20.1)	151 (79.9)		
Previous STD Diagnosis					
Yes	26	2 (7.7)	24 (92.3)	3.657 (2)	0.161
No	197	45 (22.8)	152 (77.2)		
Condom use					
Yes	93	18 (19.4)	75 (80.6)	0.012 (1)	0.913
No	112	21 (18.8)	91 (81.3)		

8.8 Site of HIV Test

Participants who reported previously having had an HIV test were asked to indicate where they had their test done. They were given choices of General Practitioner (GP), sexual health centre, antenatal clinic, hospital, asylum centre, refugee centre (Mangere) and others. The site where an HIV test was done may indicate the utilisation of health services and possibly the reasons for having an HIV test. In this study, most participants (47.5%) reported the hospital as the site of their HIV test, followed by the GP (28.2%). Only 13.8% mentioned that they were tested for HIV at a sexual health centre and none mentioned the New Zealand AIDS Foundation (NZAF), where free and rapid HIV testing facilities have been available since 2006. Table 42 below shows the sites of HIV testing reported by participants.

Table 42: Site of HIV Test

Site of the HIV Test	Total (N)	Female N (%)	Male N (%)
General Practitioner (GP)	51	25 (49.0)	26 (51.0)
Sexual Health	25	10 (40.0)	15 (60.0)
Antenatal Centre	4	4 (100.0)	0 (0.0)
Hospital	86	27 (31.4)	59 (68.6)
Asylum Centre	3	2 (66.7)	1 (33.3)
Refugee Centre (Mangere)	12	4 (33.3)	8 (66.7)
Total	181	72 (39.8)	109 (60.2)

8.9 Feeling at Risk of HIV Infection

Participants were asked to agree or disagree with the statement, “*I do not think that I am at risk of catching HIV/AIDS*”. Fourteen women (14.7%) and 12 (8.0%) men did not answer this question. Most participants (91.1% of women and 87.7% of men) agreed with the sentence, implying that they did not think that they were at risk of catching HIV. The relationships between demographic characteristics and other selected variables and perceived risk of HIV/AIDS were examined separately for men and women. No demographic characteristics or other selected variables such as previous STD diagnosis, number of sexual partners or condom use were found to be associated with feeling at risk of HIV infection in women (see Table 43).

Table 43: HIV Risk Perception and Selected Variables in Women

	Total	Feel at risk of HIV		X ² (df)	p value
		Agree	Disagree		
Age in Years					
16 – 29	56	6 (11.5)	46 (88.5)	1.161 (1)	0.281
30+	25	1 (4.0)	24 (96.0)		
Marital status					
Living with Partner	48	4 (8.3)	44 (91.7)	0.014 (1)	0.905
Without partner	33	3 (9.1)	30 (90.3)		
Employment					
Employed	31	0 (0.0)	31 (100.0)	7.697 (3)	0.053
Unemployed	8	2 (25.0)	6 (75.0)		
Student	30	4 (13.3)	26 (86.7)		
Other	7	0 (0.0)	7 (100.0)		
Education					
Secondary	32	3 (9.4)	29 (90.6)	0.457 (2)	0.796
University	26	3 (11.5)	23 (88.5)		
Professional	18	1 (5.6)	17 (94.4)		
Region of Birth					
East Africa	5	1 (20.0)	4 (80.0)	4.630 (5)	0.463
Horn of Africa	12	1 (8.3)	11 (91.7)		
New Zealand	11	0 (0.00)	11 (100.0)		
Southern Africa	22	2 (9.1)	20 (90.9)		
West Africa	18	0 (0.0)	18 (100.0)		
Other	5	0 (0.0)	5 (100.0)		
Religion					
Christian	61	7 (11.5)	54 (88.5)	2.020 (1)	0.155
Islam	16	0 (0.0)	16 (100.0)		
STD history					
No	68	4 (5.9)	64 (94.1)	1.204 (1)	0.273
Yes	8	0 (0.0)	8 (100.0)		
Condom Use					
No	34	4 (11.8)	30 (88.2)	0.193 (1)	0.660
Yes	35	3 (8.6)	32 (91.4)		
Number of Sexual Partners					
0 -1	62	5 (8.1)	57 (91.9)	1.773 (1)	0.183
2+	9	2 (22.2)	7 (77.8)		

Cross tabulations of demographic characteristics and HIV risk perception and other risk behaviours of interest such as previous STD diagnosis, condom use and number of sexual partners were performed. There were no differences in risk perception among men who reported previous risky sexual behaviours as Table 44 below shows.

Table 44: HIV Risk Perception and Selected Variables in Men

	Total	Feel at risk of HIV		X ² (df)	p value
		Agree	Disagree		
Age in Years					
16 – 29	77	6 (7.8)	71 (92.5)	2.465 (1)	0.692
30+	54	9 (16.7)	45 (83.3)		
Time in New Zealand					
After Nov 2005	62	6 (9.7)	56 (90.3)	0.239 (1)	0.625
Before Nov 2005	73	9 (12.3)	64 (87.7)		
Marital status					
Living with Partner	52	8 (15.4)	44 (84.6)	1.564 (1)	0.211
Without partner	83	7 (8.4)	76 (91.6)		
Employment					
Employed	56	7 (12.5)	49 (87.5)	4.237 (3)	0.237
Unemployed	7	1 (14.3)	6 (85.7)		
Student	41	7 (17.1)	34 (82.9)		
Other	23	0 (0.0)	23 (100.0)		
Education					
Secondary	59	5 (8.5)	54 (91.5)	1.815 (2)	0.403
University	40	7 (17.5)	33 (82.5)		
Professional	23	3 (13.0)	20 (87.0)		
Region of Birth					
East Africa	22	4 (18.2)	18 (81.8)	3.032 (5)	0.695
Horn of Africa	49	5 (10.2)	44 (89.8)		
New Zealand	16	0 (0.0)	16 (100.0)		
Southern Africa	25	3 (12.0)	22 (88.0)		
West Africa	18	2 (11.11)	16 (88.9)		
Other	1	0 (0.0)	1 (100.0)		
Religion					
Christian	99	11 (11.1)	88 (88.9)	0.156 (1)	0.693
Islam	29	4 (13.8)	25 (86.2)		
STD history					
No	114	13 (11.4)	101 (88.6)	2.891 (2)	0.236
Yes	20	2 (10.0)	18 (90.0)		
Condom Use					
No	52	9 (17.3)	43 (82.7)	2.167 (1)	0.141
Yes	80	7 (8.8)	73 (91.3)		
Number of Sexual Partners					
0 -1	84	13 (15.5)	71 (84.5)	1.021 (1)	
2+	26	2 (7.7)	24 (92.3)		

Overall, it can be concluded that HIV risk perception among participants was very low. This finding is important because studies show that lack of risk perception influences low rates of condom use and voluntary testing for HIV among black Africans in the diaspora (Tharao, Massaquoi et al. 2006; Lemoh, Grierson et al. 2010). The complex issue of risk perception was followed up in the focus group

discussions and the findings are presented in Chapter Ten.

8.10 Sexual Orientation

Participants' sexual orientation was assessed by asking participants to select the sex of people they usually have sex with (male, female or both male and female). Fourteen women and fifteen men did not answer this question. As Table 45 below shows, most participants (88.9% of women and 94.8% of men) reported that they usually had sex with a person of the opposite sex. However, four (4.9 %) women and three (2.2%) men reported same-sex relationships while five (6.2%) women and four (3.0%) men reported that they had sex with both males and females. This finding is important as currently there is no HIV prevention activities targeting black African men who have sex with men or same-sex relationship among women. In addition, there is an indication that African MSM may be at higher risk of acquiring HIV, as Hughes and Saxton (2009) reported that 2% of the 91 MSM diagnosed with HIV in 2008 in New Zealand were of African ethnicity.

Due to the sensitive nature of the issue of sexual orientation in the African community and the small numbers of respondents who reported same-sex relationships and sex with both males and females, no further analysis is presented as it may potentially identify these respondents.

Table 45: Sex of Sexual Partners

Sex	Total	Sex of the Sexual Partner/s		
		Male	Female	Both Male and Female
Female	81	72 (88.9)	4 (4.9)	5 (6.2)
Male	135	3 (2.2)	128 (94.8)	4 (3.0)

8.11 Summary and Discussion

Most survey participants were relatively young with the majority (61.7%) under thirty years of age. In addition, 83.1% of men aged under thirty were not married or lived without their sexual partner. Participants were highly educated and 93.3% had completed secondary or higher qualifications. Most men and women were either employed or in full-time education and the majority of participants were born in Africa. Their average time in New Zealand was five years.

This survey has identified both risks and factors that increase vulnerability to HIV infection among the participants. These include the number of sexual partners, condom use, previous HIV test, HIV risk perception and sexual orientation. A significant proportion of participants (21.8% of men and 10.8% of women) reported having more than one sexual partner in the past year. Half the women (50%) and 41.2% of the men did not use a condom at last sex, a previous STD diagnosis was reported by 20.7% of men and 12.6% of women. The majority felt that they were not at risk of HIV (91.1% of women and 87.7% of men) and HIV testing was significantly associated with the introduction of mandatory HIV testing by the New Zealand Immigration Service (NZIS) rather than voluntary testing. A small number of both men (2.2%) and women (4.9%) reported same-sex relationships as well as having sex with both males and females (6.2% of women and 3.0% of men).

Heterosexual spread within this community remains more likely than in many others in New Zealand as prevalence of HIV among Africans here will be higher, a reflection of the higher prevalence in Sub-Saharan Africa. In the subsequent focus group discussions, it was found that Africans tended to seek fellow Africans for sex and sharing of sexual partners was common. In addition, 82.5% of women and 60.0% of men reported their sexual partners were of African ethnicity. It is more likely that an African will meet an infected black African partner due to the higher prevalence of HIV among Africans compared with the local population. In fact, higher rates of heterosexual transmission among Africans in the diaspora have been reported elsewhere. For example, studies in the Netherlands (Gras, Weide et al. 1999), Spain (Castilla, Sobrino et al. 2002), Germany (Wambo, Bazing-Feigenbaum et al. 2009) and Australia (Lemoh, Grierson et al. 2010) have found that some Africans who previously tested negative for HIV, tested HIV positive after a few years in their destination countries. Some Africans have also been infected in New Zealand as well.

This study also found the evidence of sexual mixing with other races or ethnicities, especially between African men and white women. This finding is important because currently HIV prevention activities in New Zealand only target “high-risk groups” namely men who have sex with men (MSM) and black Africans. Other population groups that interact sexually with black Africans are left out of HIV prevention activities despite being equally at risk of both acquiring and transmitting HIV.

Patterns of HIV testing can make a difference in a small population at risk of HIV such as African migrants. Regular voluntary testing for HIV for those at risk of HIV can potentially identify those infected and hence decrease on-going transmission to others. However, although most participants (81.8% women and 75.9% men) in this study reported having a previous HIV test, it seems that the higher uptake of HIV testing was influenced by the requirements of the New Zealand Immigration Service (NZIS), especially in men. Those in New Zealand before the mandatory HIV test (before November 2005) were less likely to report a previous HIV test compared with those in New Zealand after November 2005. Currently there is no evidence to suggest that Africans are testing for HIV after gaining permanent residence. The concern here is the possibility of the undiagnosed HIV among Africans in New Zealand and the associated individual and public health consequences. The issue of undiagnosed HIV among black Africa migrants in the diaspora is well documented. The Mayisha II Group which conducted an unlinked and anonymous seroprevalence survey of black Africans in the UK found that two-thirds of black Africans living with HIV in England were undiagnosed (Sadler, McGarrigle et al. 2007). Other studies among black Africans in the UK (Dodds, Hickson et al. 2009), Canada (Tharao, Massaquoi et al. 2006) and Australia (Lemoh, Grierson et al. 2010) have also reported that black Africans were diagnosed late and missed out on the benefits of early diagnosis.

Individual benefits from early HIV diagnosis include reduced mortality and morbidity, improved life expectancy, prevention of primary and secondary HIV infections and behavioural change following a positive diagnosis. In countries such as New Zealand where highly active anti-retroviral therapy (HAART) is widely available, access to treatment has greatly reduced AIDS-related mortality and morbidity. A study in Europe (Mocroft, Ledergerber et al. 2003) analysed data from patients in 70 European HIV centres and found that AIDS related deaths fell from 14.6 per 100 person-years before using HAART to 1.5 after using HAART and AIDS-defining illnesses fell from 27.4 per 100 pre-HAART to 2.6 per 100 late-HAART. Early diagnosis is therefore key to preventing individual HIV progression to advanced disease.

The evidence is that the majority of people diagnosed with HIV change their sexual behaviour to safer behaviours such as use of condoms and reducing the number of

sexual partners following a positive diagnosis (Weinhardt, Carey et al. 1999). However, individuals who are unaware of their HIV positive status may unintentionally pass on HIV to their sexual partners and women may pass on HIV to their unborn babies during birth or through breastfeeding. World Health Organization researchers found that transmission rate for an individual on treatment differs significantly compared to an individual not on treatment (0.5 per 100 person-years vs. 5.6 per 100 person-years) (Attia, Egger et al. 2009). It can therefore be argued that access to treatment may reduce HIV incidence at the population level because of decreased viral load at an individual level. Apart from early mortality and morbidity caused by late HIV diagnosis, Canadian researchers (Krentz and Gill 2008) found that the cost of care and treatment for individuals with late HIV diagnosis was higher compared with those who were diagnosed early. Results from their study found that patients with CD4 less than 75 cells/mm³ cost over 2.5 times more per month to treat compared with patients with CD4 higher than 200 cells/mm³, due to inpatient hospitalization (Krentz and Gill 2008).

Low perceived risk of HIV infection has been reported to be a major cause of delayed HIV diagnosis and consequently low condom use among Africans in the diaspora. A study in the UK by Burns, Johnson et al (2008) found that nearly 70% of black Africans with HIV had never considered the possibility of being infected before being diagnosed. Apart from low risk perception, another UK study cited poor access and restrained relationships with healthcare providers as contributing to Africans being diagnosed late (Erwin, Morgan et al. 2002; Chinouya and Davidson 2004). Participants in this study also had a lower perceived risk and lower condom use including those who reported risky behaviours.

Although the number of those who reported same-sex relationships in this study was low, little is known about this group within the African communities. According to Patten (2010), black men who have sex with men face stigma from both African communities and the gay communities. As a result, they stay hidden and may be at risk of HIV.

In the qualitative component of this study, some of the survey findings were explored in focus group discussions and analysis of the focus group data found that low HIV risk perception was influenced by the belief that New Zealand is safe and free from

HIV because of mandatory HIV testing and the lack of visible AIDS symptoms. These findings are discussed in detail in Chapter Ten.

8.12 Strengths and Limitations of the Study

This survey is the first study on HIV and sexual behaviours among African migrants and refugees in New Zealand. The setting of this study was in Christchurch, not in Auckland where nearly 75% of Africans live (Mortensen 2008). Africans in Christchurch may be very different from those living in other large cities like Auckland or Wellington, who may be there for different reasons.

The findings of this survey cannot be generalised to other Africans in New Zealand, because the recruitment method could have had both potential selection bias and participation. Those who attended social venues could be different from those who did not attend. Another important fact is that this survey did not reach those who could not read or write in English, therefore we cannot generalise these findings to such groups. This study followed the methodology of the Mayisha I UK study (Chinouya, Davidson et al. 2000) model. Mayisha I aimed to study HIV related sexual attitudes and behaviours and questions about HIV knowledge were not included. This study also did not include questions on HIV knowledge which might have added more understanding about HIV and the African community in Christchurch. However, in the initial phase of the study, the community researchers did not identify the absence of questions about HIV knowledge as a particular concern, as the focus of the research was on understanding behaviours that may increase vulnerability to HIV, especially cultural sexual behaviours such as dry sex and MCP. The questionnaire asked intimate questions related to sexual behaviours of the participants and their answers may not reflect their actual sexual behaviours. Since sexual issues are taboo in African culture, those who were willing to participate could be different from those we could not reach, In addition, the African community is very small and since respondents knew the community researchers, it is possible that concern for confidentiality may have affected how they responded to the questionnaire. Studies among Africans show that women tend to under-report their sexual behaviours, especially the number of sexual partners (Ruark 2008). Reasons for under-reporting are cultural as African culture condemns women who have multiple sexual partners and they may face severe consequences if caught (Akwara, Madise et al. 2003). In

this study, few women (10.8%) reported that they had more than one sexual partner in the past year and it is not clear if this represents their actual behaviours, as focus group discussions suggested that more women may have had more than one sexual partner. Additionally, 20% of men did not answer the question on the number of sexual partners.

Despite its potential limitations, this survey provides critical information about individuals at continued risk of HIV infection or transmission among black Africans in Christchurch. It is recommended that a larger survey and detailed investigation be undertaken in New Zealand to compare and validate these findings. This study has shown that African migrants and refugees can provide intimate information if both trust and confidentiality are established and maintained.

8.13 Comparisons with the Mayisha I UK and Other Studies

This study has both similarities with and differences from the Mayisha I UK study (Chinouya, Davidson et al. 2000). Participants in this study came from different parts of Sub-Saharan Africa while participants in the Mayisha I UK study came from five African countries with the highest HIV prevalence in the UK, namely Kenya, Uganda, Zambia, Democratic Republic of Congo (formerly called Zaire), and Zimbabwe. The five countries selected are very different from the countries of origin of the majority of this survey's participants (For example, those from the Horn of Africa namely Somalia, Sudan and Ethiopia are more likely to be Muslims and to have come to New Zealand as refugees). In addition, the Mayisha I UK participants came from inner London whilst this study's participants came from Christchurch (a smaller city unlike London or Auckland). The Mayisha Study UK study sample was large (748 participants) when compared with this study (250 participants). Although the demographic characteristics of the participants in the Mayisha I study UK were different from those in this survey, their sexual behaviours and other variables such as risk perception were similar. For example 40% of the Mayisha UK study participants reported having more than one sexual partner in the past year, condom use was lower, 28.5% of men and 20.5% of women reported previous STD diagnosis and participants reported low HIV risk perception (Chinouya, Davidson et al. 2000).

Similar findings have also been reported by other studies of migrant Africans in the

diaspora (Tharao, Massaquoi et al. 2006; Dodds, Hickson et al. 2009; Lemoh, Grierson et al. 2010). Low perceived risk of HIV infection has been reported to be a major cause for delayed HIV diagnosis and consequently low condom use among Africans in the diaspora. The reasons behind reported risky sexual behaviours and inability to perceive the associated risks are complex and may be culturally specific. Some of the survey findings were explored in focus group discussions, especially having multiple sexual partnerships, condom use, risk perception and sexual relationships between black men and white women. Culture was found to influence sexual behaviours, especially condom use and number of sexual partners. Low HIV risk perception was influenced by the belief that New Zealand is safe and free from HIV because of mandatory HIV testing and the lack of visible AIDS symptoms. The next chapter explores the issue of culture and acculturation and associated sexual behaviours among Africans in Christchurch.

Chapter 9 Culture and Acculturation

9.1 Introduction

The process of migrating from one culture to another inevitably presents challenges to one's cultural beliefs and practices. This process may entail partial or complete loss of a familiar cultural environment. Several studies show that the process of migration may be associated with increased levels of risky sexual behaviours and hence the risk of HIV acquisition and transmission (Lurie, Harrison et al. 1997; Lurie, Williams et al. 2003). The practice of multiple concurrent partnerships (MCP) and challenges to gender roles emerged as key themes in this study. MCP or having more than one sexual partner at the same time comes in different forms such as polygamy and spouse or partner sharing and sex with multiple sexual partners. The practice of MCP is relevant because several studies suggest that it may be linked to amplified HIV transmission in Africa (Morris and Kretzschmar 1997; Morris and Kretzschmar 2000; Morris 2002; Epstein 2004; Halperin and Epstein 2004; Epstein 2005; Morris and Moody 2006; Epstein 2007; Epstein 2008; Halperin and Mah 2008; Mah and Halperin 2008; Mah 2008a; Mah 2008b; Green, Mah et al. 2009). In the survey, 20.7% (n = 31) of men and 12.6% (n = 12) of women reported that they had sex with more than one sexual partner in the past year, although it was not clear if participants had multiple sexual partners concurrently or sequentially.

This chapter focuses on gaining an in-depth understanding of how sexual behaviours have been modified as a result of being in New Zealand. I am interested to know what happens when cultures meet and how sexual behaviours have been adjusted, negotiated and are now practised in the new cultural environment. The concept of acculturation is used to describe and understand this meeting of cultures. Both African practices and current practices in New Zealand will be examined. After a review of the literature on culture, acculturation and sexual practices, the first major section discusses MCPs and acculturation followed by a section discussing the ways that people make sense of MCPs. The final section discusses culture, status and shifting gender roles.

9.2 Culture, Acculturation and Sexual Behaviours

Acculturation, the process by which peoples' cultural beliefs and practices change when newcomers come into contact with a new and dominant culture, has been found to be associated with risky sexual behaviours among minority groups. For example, studies conducted in the USA on the association between acculturation and sexual behaviours among Hispanic immigrants found that acculturation has an impact on different sexual behaviours such as condom use, rates of sexual activity, HIV/AIDS knowledge and number of sexual partners (Marin and Marin 1992; Marin, Gomez et al. 1993; Nyamathi, Bennet et al. 1993; Marin and Flores 1994; Sabogal, Perez-Stable et al. 1995). Less acculturated men were more likely to carry condoms and report positive attitudes towards condoms but less likely than more acculturated men to use them (Sabogal, Perez-Stable et al. 1995). Similarly, less acculturated Hispanic women were found to be less likely to keep or carry condoms and to have the lowest rates of condom use (Marin and Marin 1992; Marin, Gomez et al. 1993). Also, less acculturated women were more likely to report that their partners disliked condom use than acculturated women (Nyamathi, Bennet et al. 1993).

Other influences on sexual behaviours found to be associated with acculturation include the use of alcohol, with highly acculturated women more likely to consume alcohol before sex when compared with less acculturated women (Marin and Flores 1994). This result was supported by other studies which found that high levels of acculturation were linked to earlier onset of sexual activities, smoking and substance abuse among Asian-American and foreign-born Latinos (Chen, Unger et al. 1999; Ebin, Sneed et al. 2001). Psycho-social researchers (Tschann, Gomez et al. 1993; Marks, Cantero et al. 1998; Schneider 2004) found that there was an association between HIV/AIDS infection and alcohol consumption among Latino immigrants in the diaspora. They also found that alcohol was used as an escape route from the stressors and hassles of adaptation. They also argued that acculturating immigrants especially sex workers are usually under psychological pressure, therefore avoiding risky sexual behaviours becomes a low priority in the face of the need to survive (Tschann, Gomez et al. 1993; Marks, Cantero et al. 1998; Schneider 2004). However, this may not be the case for many African immigrants and refugees in New Zealand because, unlike the case of Latinos in the United States who may be there illegally, most Africans in New Zealand are here legally.

First sexual debut was also found to be associated with acculturation with less acculturated men reporting a younger age of first sexual intercourse (Sabogal, Perez-Stable et al. 1995). Adolescent pregnancy was another factor associated with acculturation; a study by Aneshensel, Becerra et al (1990) found that although Mexican-born American females had the lowest level of reported sexual intercourse, they were more likely to become pregnant. Researchers in the United Kingdom, where acculturation has been less studied compared with the USA, also found that acculturation had an impact on sexual risk behaviours (Jayakody, Sinha et al. 2006). For example, younger black and minority ethnicities who had stronger ties to their traditional culture were found to have lower risk of starting sex early but were more likely to have unprotected sex once they had started having sex (Jayakody, Sinha et al. 2006).

Although most research on acculturation seems to support the notion that acculturation influences the tendency to engage in risky sexual behaviours, other studies have found contradictory results. For example, a study by Marin Gomez et al (1993) reported that acculturated Hispanic women reported higher numbers of lifetime sexual partners compared with less acculturated women, but a study by Ford and Norris (1993) found that acculturation was not related to number of sexual partners. Studies of acculturation in social groups have also found contradictory results. For instance, it has been found that acculturating into minority groups such as the gay community, protected acculturating individuals from HIV/AIDS because of the gay community's higher awareness of HIV/AIDS (Seibt and Ross 1995). Findings from a longitudinal study on the gay community in Dallas revealed that new members were routinely encouraged and exposed to HIV/AIDS prevention messages and community support from existing members (Seibt and Ross 1995).

The literature shows that culture can have both negative and positive impacts on health, including sexual behaviours and HIV/AIDS (Airhihenbuwa and Webster 2004). Because culture influences attitudes and behaviours, there is a need to understand how certain beliefs and practices may protect or put people at risk of HIV/AIDS. Olowo-Freers and Barton (1992) reported the norms and taboos among the Baganda tribe of Uganda and many African tribes who believed in consequences dictated by the spiritual world, whereby disobedience is punished by sickness. For

example, in many African cultures, pregnant women are required to abstain from sex or it is thought they will face the consequences of difficult childbirth and mental illness. In addition, sex is also prohibited in many African cultures during breastfeeding as it is believed that semen may travel to the baby's milk and cause severe diarrhoea (Olowo-Freers and Barton 1992). A study by Madrama (1996) in Uganda stated that men mentioned the lack of sex during pregnancy and breastfeeding as justification for polygamy and extra-marital affairs. Other authors also found cultural beliefs to be central in influencing the practice of MCPs (Halperin and Epstein 2004; Epstein 2007; Epstein 2008). As Akwara, Madise et al (2003) noted, in the Sub-Saharan Africa context, "...sexual activity appears to be largely influenced by sociocultural beliefs and practices....multiple partnerships for men may be tolerated, while women's infidelity is highly penalized" (2003 p 386).

Culture also influences traditional gender roles in many African societies with men possessing more power and control over women and sexual relationships. According to Strebel, Crawford et al (2006), culturally sanctioned gender roles influence the way women and men perceive domestic violence and HIV risk. For example men may feel entitled to beat women and women may perceive that being beaten is acceptable if they don't 'behave'. Many of these understandings are challenged with migration. In the following sections the ways in which cultural mixing is negotiated are discussed. I discuss both participants' practices and experiences when they were in Africa and how such practices have been modified and challenged in the new environment of New Zealand. The first section begins with discussing the role of culture in shaping attitudes to and practices of MCP.

9.3 MCP and Acculturation

Acculturation researchers posit that change may be inevitable when two cultures come into contact (Berry 1980). Findings in this study suggest that Africans did not abandon their cultural sexual behaviours but they negotiated and adjusted their sexual behaviours to fit into the new culture. For example, polygamy which is one of the forms of MCP, is illegal in New Zealand, which placed Africans who are already or who are planning to be polygamous in a difficult situation. Therefore, they found other ways to become or to continue to be polygamous in New Zealand.

In many African cultures, marriage happens when the dowry has been paid to the family of the woman. Participants circumvented this legal issue by paying the dowry for both women in Africa but declaring only one wife to New Zealand authorities while staying married to the other who is culturally, a legal wife.

You can have more than one wife but you will have to do it different here. You cannot declare them, but you can have two wives and they can be pregnant at the same time. For example if you have two wives from [Africa], you will go there and pay the lobola [dowry], but the immigration here will not know that you have done that [Man]

Some Africans regard the practice of having one wife as imposed by Western culture and as part of the colonial legacy. Indeed, polygamy remained unchanged in Africa until the arrival of colonial rulers and missionaries. According to Iman (1994), colonial rulers replaced polygamy with monogamy through religious regulations and by giving preferential treatment to men who were monogamous. They also transmitted Western ideas of the nuclear family through education, and also weakened parental influence by creating economic opportunities for young Africans. Economic independence for young Africans meant less dependence on parents for land, marriage and cultural beliefs. After independence from colonial powers, many African countries included polygamy as a legal marriage. For example, a Tanzanian marriage certificate has three options, namely monogamous, polygamous or potentially polygamous. When the South African President Mr Jacob Zuma, who had three wives in 2010 and a fiancée (he married his fiancée in 2012), was questioned in the Economic Forum in Davos, Switzerland on why he was polygamous, he invoked culture as the main reason as reported by the BBC news reporter:

That's my culture. It [polygamy] does not take anything from me, from my political beliefs, including the belief in the equality of women. Some think that their culture is superior to others, that's a problem we have in the world (Zeitzen 2010 p 1).

President Zuma's view is supported by some authors, especially anthropologists who argue that there is a double standard when dealing with African and Western sexual behaviours. Gausset (2001) argues that Western countries that fund HIV/AIDS programmes in Africa encourage the 'eradication' of the harmful African cultural sexual practices but at the same time insist on "safer" sex in the west. She said "today

in the West, AIDS prevention campaigns do not suggest that homosexuals or drug-addicts have to stop being homosexuals or drug-addicts; rather, they advise them to make their practice safer- to use condoms and clean needles”(Gausset 2001 p. 6). If we pay attention to the double standard highlighted by Gausset, then perhaps the focus should be on encouraging safer cultural sexual practices, instead of insisting on eradication.

Participants in this study are therefore used to two forms of marriage; Western marriage [monogamous] and cultural marriage [polygamous]. Western marriage involves getting a ‘paper’ or marriage certificate, while African marriage involves paying a dowry and being accepted within the family. Having a ‘paper’ or marriage certificate may therefore not be of importance to some relationships so long as the cultural marriage requirements have been fulfilled. In fact, a woman is considered married once the parents receive the dowry, not when the marriage certificate is issued by the celebrant.

The only thing that you cannot have is the western legal marriage but you can have the African marriage. You will have them here [New Zealand] but you cannot fill the immigration papers and mention that. There are many girls here who are in such relationships [Woman]

Participants discussed the way that single African women who had babies without known husbands or partners were suspected of being in polygamous relationships. People did not want to talk about this because of the legal sanctions against polygamy in New Zealand.

I think some people may be in polygamy but you will not know. Sometimes you wonder about the African women who are single but are having babies. The babies are black but no one knows the father, may be they are in polygamy but the hidden one [Woman]

Polygamy among Africans was reported also in the USA when an African family from Mali lost five children in a house fire. Authorities then realised that a man had two wives and several children living in two floors of the same apartment in New York (Bernstein 2007). In Canada some Africans practise polygamy secretly by having wives in different cities (Tharao, Massaquoi et al. 2006). Some Africans

perceive that in Western culture too, people have a way of getting around the issue of polygamy by, for example, having mistresses or affairs.

Polygamy is not the only cultural practice that had to be adjusted in New Zealand. Although MCP is common in Africa, one key element for the practice of MCP to continue is the guarantee of secrecy between people involved in MCP. A woman involved in MCP or a 'small house' must not tell the man's wife and if the woman is involved, the male partner must make sure that the woman's husband does not find out. In that way, according to participants, sexual relationships between neighbours can go on for a long time without the spouses finding out. However, in New Zealand things did not work out quite the same way. For example, participants stated that the main problem they have with white girls in New Zealand is that they cannot make them keep quiet or keep secrets. Unlike in Africa where women involved in MCP are highly secretive, African men in New Zealand are normally exposed if they have extra-marital affairs with white women.

The multiple partners do not work with white girls for sure. You cannot hide them somewhere and visit them certain days. They will talk, have you seen on TV how they can report affairs? [Man]

Participants acknowledged that women involved in MCP in Africa usually receive money or economic support from men. If they do not keep a secret, then they can lose the relationship and a man can move on and find someone else who is willing to keep quiet.

The small house is the issue, in Africa it is practiced mainly by unmarried women who have no money; they will keep quiet about it and continue to have affairs. Here the white women will not keep secrets, in Africa women keep quiet because it is linked to economic survival. Here you do not need to depend on the man financially. Some Africans tried to have extra-marital affairs for pleasure and enjoyment in New Zealand, but white women did not keep quiet. The women [white] came looking for them and in some situations it become disastrous, this place is small and these things by nature are harder to hide [Man]

Since MCPs could not be practiced in New Zealand in the same way as they were in

Africa, mainly because extra relationships could not be hidden, another strategy was adopted. Men found a way to continue with MCPs without their wives finding out, so they had sex with black women. However, participants mentioned that there are fewer black women in Christchurch. So, sharing of sexual partners became a way of getting around this shortage for some.

There can be five black men for one black woman some girls do not mind, you can date one, date two to three at the same time. They all go to one black woman. They do not mind if they know that another man has been seeing the same girl [Woman]

Maybe because there are few black women that is why. Black ladies are not many, right, if they all want a black woman they go for that one black woman. If the woman has that character that can withstand that then she also plays the game [Woman]

This practice is more commonly discussed among men than it was amongst women although some women too complained of the lack of sexual partners as one woman described:

We just have to find someone to sleep with, even if we have to share [Woman]

Migration often results in the separation of couples. Participants indicated that some people in New Zealand have their spouses in Africa or some were re-united after three to five years and others have not been able to re-unite. Meanwhile people form sexual relationships with different partners and continue with such relationships even when their husbands or wives have joined them in New Zealand.

Many African men left their wives in Africa and they had a lot of girlfriends in here. Some did not tell their girlfriends who were normally white girls that they are married and the women find out too late [Man]

Sharing of partners is not new in many African cultures, for example the Okun tribe in Nigeria (Osagbemi, Adepetu et al. 2007). The Maasai of East Africa (Coast 2007) and many other tribes accept sexual relations between males and wives of next of kin. For example, a study of 1029 participants in the Okun tribe, Nigeria found that 65.3% of

men and women were involved in spouse sharing (Osagbemi, Adepetu et al. 2007). Again it can be argued that other people outside Africa also share sexual partners, for example, having sex with a sex worker (the client knows that the sex worker has sex with other people too) and swingers, whereby couples share their partners sexually. Since sharing of sexual partners increases the risk of HIV acquisition and transmission, participants were asked if they were worried about getting HIV. They acknowledged that because they have a small pool of sexual partners they were at risk. They stated that they have a small 'pond' to fish from and that can be dangerous. If the pond was bigger, they could cast their fishing net wide. The pond in this case means a hunting ground or where you find fish or food [sex].

We have a small pool for which to fish as Africans, so if that small pool consists of infected elements, then our chances of getting infected is higher. If the white man came here [New Zealand] he will have a wide selection of girls. But as an African, I will start from first from what I know, from black population, if that population is already highly infected then there is a higher chance of me getting infected because of that pool [Man]

Although it was not possible for men to have MCPs with white women in the same way as they might with black women, they were able to have casual sex with white women that had no 'strings' attached. This will be discussed in chapter ten. Although most of the time African men paid for or looked after women they had a sexual relationship with, in New Zealand it was not usually the case, especially with white women. In fact, the opposite could be the case with some men reporting that they were paid by white women to have sex. Some participants also mentioned that some young men are paid to have sex by older New Zealand women (white women). One participant said that one of his friends was paid by an older man to have sex with his wife.

My friend was paid by one older guy to have sex with his wife. The older guy is not from Africa, this has also happened to other black guys [Man]

Sometime you are seduced and when you say that you need to go to work, the lady [white] will say do not worry about that I can give you some money. Just come over with me to my house and you know have coffee and sleep with me

[Man]

Another practice that was different for men is that they did not need to buy for example, drinks or food for white women in order to have sex or relationship with them. Women too reported being paid for sex by older men in New Zealand. One African woman mentioned that she was approached by an older white man who wanted to pay her for sex:

You know I am pregnant, I was buying things at the supermarket and a white old man came to me and said hello, I thought he was trying to be friendly. As I was walking outside the supermarket he asked where I was from and I said no. He asked again do you have children. I said no but the child is on the way. He said really, and he asked again is your husband here, I said No. He continued talking and said can you give me a hug and I asked why? And he said okay, okay may be you do not want to do it in public but you can come into my house and we can have a wee bit of fun. I did not know why he said the wee bit of fun, and he said I love black girls coming over and I pay them and we just have fun. I said to him, did you hear me, I said I am pregnant, and he said it does not matter, I said I am married; he said I am married too. I was very angry and I said you are a useless man and get out of here. I was too shocked. He did not care that I was pregnant; it means some people are doing it

[Woman]

It was evident in this study that the sexual practices of some New Zealanders were influenced by the presence of black Africans. Fascination with black men for some white women supports those who critique some research on acculturation that appears to see the dominant culture as static (Padilla 1987; Padilla and Perez 2003). For example, participants spoke of white women wanting to have sex with them because they are different.

People are just different, whites are different from us, in the same what they do is also different, people tend to find out what others are doing and the same applies to other races. So this people who date each other do the same. They just want to be able to say, white people do this and that. And the same with whites who will say black people do this and that. And by so doing they

want to find out like experiment and you always find those people [Man]

Also most white women here have never seen a black man, and when they see one, they will be rushing to that black man. The black man has to be pretty decent to avoid them [Man]

African men perceived that most white women like black men, however this could be what UNESCO and UNAIDS (2000 p 3) referred to ‘misunderstanding’ of the new environment by migrants. For example they noted that immigrants may interpret “high levels of physical contact in public places according to the norms of their country of origin...Moreover since the physical contact is not limited to one person, they assume that promiscuous sex is the norm” (2000 p 3). Male participants in this study clearly perceived that ‘all’ white women like black men sexually which may not be the case. African women seem to have an explanation for why men think they are liked by white women and that was that men most of the time find white women in night clubs.

I do not agree with that, it depends on where you are going. If you stay at home or go to places that are not like those, obviously you will not be disturbed. If you go let say to Church right, girls will not run after you and say you are the only black man, but if you go to the bar or night /club that's is what clubs are made for. They will run after you [Woman].

Immigrants appear to interpret the host culture’s behaviours based on their cultural understanding. For example, African women may interpret that New Zealand women do not respect their husbands because they are economically independent, which may not be the case. The following section will look at ways that participants talked about why they thought people engaged in MCP.

9.4 Making Sense of MCP

Participants identified sexual dissatisfaction, lack of peace at home, transactional or financial reasons and revenge as factors that influence MCP. But culture was mentioned as the main driver of those factors. For example, cultural beliefs and attitudes influenced the way people perceived sexual satisfaction or enacted revenge.

Sexual dissatisfaction was mentioned by participants as a key reason for extra-marital affairs. A study of ten countries in East and Southern Africa found that the lack of sexual satisfaction greatly influenced MCP (Jana, Nkambule et al. 2007). Participants in this study mentioned that sex is very important in any relationship and in life, and without good sex, men and women will be forced to have 'someone to meet the need'. Women mentioned lack of sexual satisfaction caused by men not wanting to try out different sexual styles.

Maybe women are not getting satisfaction from their husbands. The men are doing the same old things and sometimes if you have been in a marriage for while or you have been dating the same person for a long time, and you see yourself doing the same thing. You may want something new and sometimes if you have something new, you spice up your own marriage and relationship sexually. If you have something new outside your own relationship, you spice up your current relationship [Woman]

If you have dated your husband for a long time before you get married to him. There are sometimes you feel choked [suffocated] doing the same thing sexually and he may be busy and you just want a life other than him. And you see yourself meeting friends and all and the kinds of people. You may want a young person who is in tuned to have different styles [Woman]

Both men and women were reluctant to introduce new sexual styles for fear of being accused of 'cheating'. Women participants said that in many African cultures, a good woman is the one who does not know about sex. They are supposed to learn about sex inside the marriage from their husbands, and cannot share any style or ideas they have not learned from their current partners. However, most of them said that they actually know the difference between good sex and bad sex. This may influence others to go outside their current relationships to seek sexual satisfaction. They were also aware that their husband or partners sought good sex from outside their marriage. This is the case in both Africa and in New Zealand.

We in the African culture we believe that the man should know more about sex than the woman. And for that matter, who dares tells her husbands that do it like this and I will be happy? Then you have to explain to him, where you had

the experience from? So whether you like or not [sexual styles], you just have to be his assets that is for us. For us women, just pretend you don't know, crucify me [meaning you lie still in bed during sex, just like the symbol of the cross] every day crucify me, everyday crucify me. If you bring another style, it means you are practising it elsewhere and you are bringing it home [Woman]

The desire for sex is with the men, some men, some of the things that they are able to do with their girlfriends, they are not able to do those things with their wives. When they go outside, the ladies are such that they are able to do everything, and they explore with them, and they have that desire so they always want to go out. Whilst you are at home, they know that no matter what you are there. But when it comes to real desire, they get it from outside. If you settle down hardly will your husband lick you [oral sex], but he will go and be licking outside [Woman]

Interestingly, men said that the reasons some of them have extra-marital affairs is because they cannot explore sexually with their wives but they can with their girlfriends or mistresses. Men wanted to appear 'conservative' with their wives but were able to do what they wanted with their mistresses.

We had a group discussion with men who were having dogo dogo [young girls/women]. They [men] are called sugar daddy; they said they were having dogo dogo because their women cannot offer them the kind of match [sex] they want. When they are having sex in bed, there are things that they will really like to explore but their women will not give them that opportunity. It is like if you are with your wife, you are in marriage; it is like there is a lot of formality in it. But if you go out with a girlfriend of someone you have just picked, you can go further, you can explore further with them [Man]

A friend of mine before I came here [New Zealand] said the same thing. I found him with a very nice young woman and that is exactly what he said. He said what this woman does to me; my wife can't [Man]

Men were wary of women who had sex before marriage for the fear that they may compare their husbands with the former boyfriends. Comparison is unlikely to happen if the woman had never had sex before. In addition, men believed that such women

were more likely to have affairs:

Adolescents are not married yet but are an indicator, most of them who had two to three to four boyfriends in their life get different experiences with these boyfriends. Like Peter here was a good player [Sex], so and so has never sent her to the moon [orgasm] so and so does it this way. Then finally, when she gets married unfortunately she ends up with a husband who takes two minutes and yaa [premature ejaculation]. So, they miss, they know what it is like, they know what a good sex is but the husband cannot provide it and she goes out to find it somewhere [Man]

Another area is that women felt that if they do not take care of themselves physically, their husbands may be attracted to other women who look after themselves. Some women were concerned that their husbands meet women who are smart and young.

I think the women, one problem we have is that when we marry, we relax too much. We relax in terms of our personal upkeep. Because sometimes when you are dating, there are certain things that you do and when you marry you don't do them again. You relax, you feel after all this is the man we are at home [Woman]

Men also mentioned lack of peace at home as one of the reasons they go out to other women. They are well looked after at the 'small house' compared to their own homes. Men talked about having a change from the usual life or wife. Since sex is compared with food, eating the same food may be boring so some men said that they go outside the usual sexual relationship just for a change.

Mistresses is for the time when you feel like resting or having a change, then you go there and rest you know, a change. Also the small house [mistress] does not take things for granted. She is very happy with whatever you give her, but your wife thinks she has this right of getting stuff from you; after all it is your responsibility to look after her. You just buy food and few gifts and she is fine, but not your wife who will nag for everything [Man]

Fighting or quarrelling made some men go to other women according to participants. In the situation when there is quarrelling, the first thing the man would consider is to

have another girlfriend or mistress. One participant described such situation;

The other reason could be the relationship is not strong, there is quarrelling in the relationship, the husband then does not need to be faithful, he will say why should I be faithful to her. Maybe they are living together because of their kids. And once people are living together because of the kids, there is no sexual desire between the two anymore, therefore the husband ends up doing what is doing okay, once the husband is not happy, he can be happy elsewhere [laugh] and at the end of the day, the woman ends up doing the same thing [Man]

Some of the married women challenged other women who blame wives for their husband's extra-marital affairs. They indicated that mistresses have motives of being extra nice to married men, because they want their financial support.

It is sad that women are blamed for their husband's extra-marital affairs, when a woman has an affair she is called a prostitute, when a man has an affair it is his wife's fault or it is because of the temptation [Woman]

Women who sleep with people's husband will do anything for the man because he might be paying her rent, buying food and giving her money. She provides what the wife cannot because maybe the wife has children, she is working and she cannot do much for the house. The wife's aim is not to trap the husband but the other woman's aim is to trap and keep him [Woman]

African women too were involved in transactional sexual relationships and were the ones paying men. Such women were those who had money or were married to rich men who were unable to satisfy them sexually. In that case they sought young men and gave those gifts or money in exchange for sex.

In those estates for rich persons, there are actually the youths, just the middle aged boys around 20 to 30 years old. They have specific women in those estates, I don't know how they connect with them but they know. They go at day time around ten to serve those women [sexually], so for them it is because of the performance [Man]

Rich women who paid young men to have sex with them in Africa were more likely

to be married to rich men who were never home or had other young women.

For me I know those particular boys, some of them are my friends, they are getting, cash over there. Those women are willing to give them money and they give them money out of pleasure [Man]

Sometimes the transactional relationship can be dangerous for both a man and a young woman involved. One participant described what happens if a young man finds out that his girlfriend has been having an affair with a much older and rich man:

In my country there was a phenomena called passion killing. A young boy who was dumped by a girlfriend will be so mad about it and he cannot control it and he will go and kill the girl and commit suicide. My personal feeling, the girl will have a boyfriend probably they are at school together, now she wants boots, she wants a cell phone, she wants these other things. But this boy cannot provide and she does not want to dump him and she finds an older man who is working and he provides. During the week she is with the young boyfriend and on weekend she is with the older guy. Then the boy discovers this and he cannot take it and he goes crazy. This is still happening. The issue of men having young girl friends is still happening [Man]

Some women participants felt that wives were to blame if their husbands cheated. They mentioned that if a man feels neglected by his wife, then he will find someone else to make him happy. They compared men with children because you cook for them, wash their clothes and feed them.

Some women let the maid [servants] do everything for the man. Men are like children you know, you have to take care of them, if you do not take care of them, they will go somewhere else [Woman]

Men have extra-marital affairs because of lack of attention at home. They go to work and when they come home, their wives are shabby, kids are shabby and the house is shabby. There is so much shouting complaining about money and other things that are lacking in the house. At the mistress house, he is treated like a king, the house is clean and the woman will take of his shirt and ask him how your day was. The man feels relaxed and well respected

[Woman]

But in New Zealand, women are unable to take care of men as in Africa because they are busy working. Some women asked why men can't also take care of women since women are now contributing to the income of the household. Those whose husbands had affairs in Africa wondered if they should do the same to men.

Culture allows men to cheat why not women who are economically independent? I know women who will go for young men because they are not satisfied in their marriage. They ask themselves, if I pay for rent, and pay this and that. Why can't I go out because women are also human beings just like men? [Woman]

Women used revenge if their husbands were unfaithful to them; this may explain why men try to keep affairs hidden from their wives. Although women accept that culturally, men have extra-marital affairs, they still feel hurt when they find out. For example, women described their pain as burning fire. Because of that hurt, they said that the fire is cooled by another fire which is being unfaithful just like men. Some women described the situation of flames (hurts):

Women, why most of them, you see women having partners, some of them are on the 'revenge mission'. They normally say that, 'if you want to cool fire, use fire' so, some women will go for men outside because they want revenge [Woman]

You see, if my husband is moving around with girls, and it really hurts, you know. Sometimes you know it because he does it openly, and people can tell you but there is nothing you can do about it. And you try to do your best but you can't control this man. So what some women do, they go outside and they have flames. So in the house I am crying, but if I go outside and someone tells me I love you, it cools the fire, so sometimes women get partners just to cool the fire [hurts] [Woman]

Revenge has been cited by other studies in Africa whereby women use revenge against their husbands who have more wives or many girlfriends (Ruark 2008). Especially in polygamous relationships, women found ways to have sex if their

husbands were visiting fellow wives.

Men cheat, they go out they don't come to you and you really feel it. Sex becomes less and some days may pass without seeing him because he is with other women. My friend's husband had four wives and my husband have four wives too. My friend said that she will not sleep alone, the moment the husband goes away to other women, and then she will have someone to come to her house. She is like I am thirsty and will find someone to quench my thirst. Why can't I find water to drink? He is somewhere drinking, why should I continue to feel thirsty? [Woman]

Men said that although for them going outside their marriage is purely for sex, they acknowledged that if their wives go outside it must be something else which they put down to revenge.

I think African women can just go out not for funny like men but for a reason. Probably when there is marital problems in the house, may be the sex, small problems just to get even or revenge, or something like that. That is the time she will plan her revenge, and she will do it in a way that you will not know. So it is possible they will be going out just like men but it is difficulty for men to know [Man]

There are indications that being in New Zealand has changed some people's view, especially women's. For example, although men regarded having MCPs as something that is normal, women regarded the practice as 'cheating' as two participants indicated.

Whether we like it or not, our culture allows men to cheat on their wives [Woman]

Some men go out just for sex and they have the sense of entitlement [Woman]

The way that African women refer here to MCPs as 'cheating' seems to indicate that their attitudes have changed because of being in New Zealand. In Africa, culture allows men to have MCPs without feeling bad or guilty about it and without women regarding the practice as automatically bad, although they sometimes do wish to seek

revenge. This could be what was referred to as psychological acculturation by Berry (1980) because it involves invisible changes such as those to beliefs and attitudes. The word 'cheating' is frequently used in Western culture, while the word 'going out' is commonly used in African culture when referring to a husband who has sex with 'another' woman. This 'going out' removes condemnation against the husband or partner while the word 'cheating' condemns and blames the husband or the partner. These findings show that the mixing of cultures has an impact on behaviours and attitudes, especially sexual behaviours. The following section explores the influence of culture on sexual behaviours and the effect of acculturation on gender roles.

9.5 Culture, Status and Shifting Gender Roles

Attitudes towards the practice of having more than one sexual partner were influenced by culture. Participants said that it is culturally acceptable among African men to have more than one sexual partner and 'brag' about it. Male participants talked about how men boast and talk openly about having multiple sexual partners because of the status attached:

It is a man's thing, when men are together they will talk about it in sort of boasting or bragging about it that they have another girl friend [Man]

In my country, if someone has a mistress they can talk about it quite openly, it can be known by the mum [man's mother] in the house, the neighbours and friends [Man]

Having multiple partners comes with social status because men are supposed to provide and take care of the women financially and sexually. Therefore, having more wives can be seen as an expression of virility. By showing-off his sexual partners, a man is sending a message to fellow men and to women that he is capable of fulfilling their financial and sexual needs. Participants used statements like 'look he has many wives and they are happy'. This statement talks about sexual satisfaction because happy women are those who are well taken care of economically, emotionally and sexually.

In Africa if you are married and you have got a girl friend or 'small house' is like a status symbol. It is like look I have got money and I can support these

women. Like my uncle is a polygamist, he has got three wives and he is got a lot of money and all his wives drive the BMWs and, the Mercedes and it has been a joke in the family. They say look, he is better he has three wives he is happier than those with one wife [**Woman**]

Some participants felt that men are innately polygamous and therefore could not have only one sexual partner. This view was supported by women also who felt that men are ‘just like that’ and incapable of being monogamous. Indeed having more sexual partners makes some men feel that they are ‘real men’.

*I will talk about the men why they usually go outside. What I know about African men, they usually feel that naturally they are polygamous and they must have more than one partner. So most of the time when they see the lady outside even if they have a wife some of them feel that you are not enough, they must have more partners. And in another way some of them say that for them to prove that they are real men, they must have another girlfriend. That is why they have girlfriend and another wife. Because they feel like naturally it is in them, naturally they must have more than one partner [**Woman**]*

*Men are naturally polygamous just in their thinking. They could have one person, who is the wife, but they could have other extra-marital affairs and they keep mistresses [**Man**]*

Because of the cultural acceptance and the status attached to MCP practices, some men who do not have the financial means to have MCPs look forward to the time when they can afford to have more partners. This time for some men occurs in their forties because by then they have worked, studied, settled down and have money. Participants thought that women too are more attracted to men who could provide for them financially, especially those in their forties as the discussion below indicates:

Man: *In most cases you find that men, when we grow and we are about 45 years and above, we tend to come back to adolescence, I do [not] know if it is adolescence or we rejuvenate [laugh] but it is the time when we are stable and then we feel that maybe we should have a mistress. In that time you are really stable [settled] and the women want to have stable men. So at that time the temptations and you have girlfriends whom you find it difficult to confirm as*

wives. I think this is one reason we have extra-marital affairs

G: Do you mean that older men are more likely to practise MCP than younger men?

Man: *Yaa, they are more likely to have more [sexual partners] than the age when they are studying, when you are 34 to 35 years old at that time, most likely you are not stable, but by 40 years old you are stable, you can have your house and a few things you really need to have. Then you see that your old age is coming and they tend to be more active at that time than the early age.*

Women participants talked about their concerns when their husbands earned more money or were promoted at work. They worry instead of celebrating when their husbands become financially secure because the more money or economic power men have, the more likely it is they will have sexual partners or girlfriends. This finding is consistent with other studies that found wealth is positively associated with HIV risk and positive HIV status in Africa (Mishra, Asscheb et al. 2007; Potts, Halperin et al. 2008), due to the increased prevalence of MCPs in this group. This also confirms what male participants discussed about the relationship between MCP and financial security. Women complained that men undermined their wives once they had money and become attracted to younger, good-looking women as the quotations below indicate:

Another thing that I have seen with African men, what drives them to have more partners is money. Once they get an extra coin, the extra coin brings the woman. That is very common, like in [Africa], if someone gets a retirement pension ehee like a package, the package will come with another wife or another woman [Woman]

I have seen it happen even to my own family, if there is a promotion today you [the wife] are very lower person [unworthy]. At home you are happy that my husband had a promotion and we are going to have a better life, but that is the start of problems [Woman]

Because African men have money and economic advantages in Africa, transactional sexual partnerships are very common although these are more complex than those

between sex workers and clients in the western contexts. Transactional sexual partnerships involve paying money or providing material goods or services (food, clothing, school fees, jewellery, cell phones) in exchange for sexual relations. Other studies in Africa (Chingandu 2007) found that transactional sexual relationships were common among men and women. This type of partnership was more common between older men and younger women. For example, participants stated that a young woman can have a sexual relationship with an older man if she needs material things which cannot be provided for by her boyfriend of the same age. This phenomenon is called the 'sugar daddy':

Professionals in my country go out with high school girls like 18yrs old. She will go after a sugar daddy, he has a lot money, a wife and she has got a young boyfriend who is 20 years old. So this people are setting the chain, it will go from the house to the young guy to the kid [Man]

Young women who had 'sugar daddies' were more likely to have boyfriends of the same age but still get involved with older men for the purpose of receiving material goods. Students especially stated that men provided a lot of material things which were hard to resist because they did not have enough money.

I know there was a time in my university years; a married man would get a flat for a young girl, for the sole reason of having sex with her. He will provide material things for her and tell her not to have sex with anybody except him [Woman]

Participants said that most of the time men have multiple sexual partners because of sex but women have multiple partners because of poverty.

Men cheat because of culture, but women go out of their relationships to be able to feed the kids [Woman]

Although African men are economically in advantaged positions in Africa, their situation in New Zealand is more complicated. In the African tradition, women stayed home to take care of the family while men worked to provide for the family. In New Zealand, gender roles shifted and sometimes reversed as women found it easier to gain paid employment while some men found it difficult to be employed. Men

therefore lose their status as 'providers' for the family and feel undermined by women:

When women come here, they gain economic empowerment and they feel that they can survive on their own and that one makes them really think otherwise, and they end up breaking the marriages, and that can be the risk area where they can get the HIV [Man]

Men often found it hard to adjust and accused women for not respecting them enough and for trying to leave them for other men who have residency visas.

They think if we leave the country where I was just a secretary, and getting 30,000 thousands a month (NZ\$ 300) they tell the man no way you go alone. So they try to anticipate and try to find a way to discard you. One of the key challenges is that for the men who came here, on scholarships, maybe when their visa expires, the visa of the woman also expires, and then they try to find the way to break it [marriage] and get married to another person who is here permanently [Man]

Women participants felt that men became threatened by the fact that they were earning wages and were no longer dependent on them. In Africa, they used to ask for money from men for everything but in New Zealand, they no longer go to their husbands for money and this made men feel as if they were not needed by women.

You know our men always want you to ask them for money. That is how they are, they feel yes, you belong to them so they will just bluff oh, I don't have money today, this, that. When you stop asking, then they start thinking, why is she not asking for money it worries them because they always want to feel like yes, they are big men [Woman]

And you know, within our African men, that mentality that they have to be the head, for that one, you cannot take it from them. So normally when they [men] see that you are becoming independent slightly in terms of money, then the first thing is that you are not respecting, but when we travel, things are different! [Woman]

African women are not only becoming independent in New Zealand, but may be earning higher salaries compared with their husbands or partners. This may challenge the power relationships in certain families and cause conflict.

I may be working in an institution where my salary will be more than you [husband] that one alone can torture him [all laugh]. And for that matter, he will dump all his anger on me, so in fact when we travel things don't change much, but if you the man you refuse to dance to the tune of the outside life [overseas] then the woman becomes wise, then she will start cheating on you. Because she has no peace to stay at home [Woman]

Conflict also arises because of work commitments if women attend work-related after- hours events such as seminars, conferences and meetings. Women mentioned that their husbands become jealous and assumed that they were having sexual affairs with other men.

If someone is threatened by you, like every day you are coming from work, today you are coming from a social event from work, tomorrow you are coming a fund raising from work, they [men] will think that there is something going on and they are threatened and something like that will even result into domestic violence [Woman]

Men get threatened like ahaa, she has a job, she is always working nine to five or nine to six and she is always going to a work party so I think she is having a boyfriend. She is always looking smart and she is not even asking me for money, so they feel a little bit threatened and is like ahaa there is something going on even if there is nothing going on with you, you are happy, you are developing. So some men will be like there is something going on and they want to see what it is, so they want to try and reduce you to where or to the level they are or to be miserable person [Woman]

Women also reported that men could be so threatened by their wives' economic independence that they could try to stop their wives from studying or working.

Some men can even tell you, do not work again, why? Because you seem to have money all the time. But the money is to help the home, but the fact that it

will make you independent, you don't really need them so much [Woman]

Women's perception that men are threatened by their economic empowerment in New Zealand was confirmed by men who blamed women for 'changing'. The issue of 'changing' could be explained by some of the findings by Caetano, Ramisetty-Mikler, et al (2004) who observed that some couples and family members may acculturate at a different pace. According to Hebbani, Obijiofor et al (2010), if people of the same household acculturate at a different pace, the changes could alter family dynamics especially changes in gender roles and intergenerational conflict. For example, a study of Iranian women in Sweden reported that their lives improved following migration because they gained economic independence while men complained of loss of status and frustration with their new life (Darvishpour 2002). Although acculturation may be partially to blame for marital conflict among new migrants, men perceive that the new environment disempowers them and favours women. It could be that men resisted the new environment because they had to give up power, control and freedom while women enjoyed the new environment because it gave them freedom through economic independence.

Men in this study spoke of the unwritten constitution in Africa where a man was the head of the household and accused women of trying to overturn this constitution in New Zealand.

*You know we come from an African family; do you have a constitution there?
But the constitution is there, unwritten. You know exactly what your husband
requires mh? You have come to New Zealand and you want to change the
constitution, you know there is always going to be a struggle [Man]*

Men felt that it was their duty to make sure that the 'constitution' is not challenged by women. They felt that they were under attack by the new cultural environment that does not allow men to be men.

*Being an African I think that the African in you will not allow you to have
your constitution swayed the way you want. And that one does not mean that
these people [New Zealanders] do not have culture. They have their culture
and you want to fit yourself into other people's culture and that is why you
have these problems [Man]*

Male participants referred to New Zealanders as having their own constitution, but perceived New Zealand men to be 'ruled' by women and were concerned that they would face the same fate if they do not defend their position as men. For example, they blamed New Zealand women for influencing African women to demand their rights

You know the idea of bringing your wife with nothing, you struggle to pay, and you know how you have to pay a lot of money for visa, for transport [airfares] and so on. The moment they [women] get here and work for three years, they realise they are making good money and you [husband] are spending probably half of your time in the Uni. They decide like aha—no. I think something happens to women when they come abroad. And are probably driven by Kiwi women who ask the [African] women; so [in a Kiwi accent woman's voice], you cook for your husband all the time? He is supposed to cook for you; he supposed to vacuum, he is supposed to do that. I think that creates a problem [Man]

Men, to some extent, positioned themselves as victims in the new cultural environment. As noted by Boonzaire (2005), when women are empowered economically, men usually blame women for overturning traditional roles and for their loss of self-esteem and for male violence. Men who felt stigmatized because of the lack of social status in the new environment sometimes responded with violence towards their female partners. Participants in this study who were more economically independent seemed to experience more domestic abuse than those who were not. A study of 62 married Somali refugee women in the United States of America found that greater ability to speak English was associated with both psychological abuse and physical aggression from their husbands (Nilsson, Brown et al. 2008). Ability to speak English was linked with education and the ability to find paid employment. Findings in Israel also showed that African migrant women were more likely to speak Hebrew and gain employment faster than men and that appeared to be associated with increased levels of domestic violence towards them (Kraft 2007).

A study of domestic violence in refugee communities from Ethiopia, South and North Sudan, Serbia, Bosnia and Croatia, living in Melbourne, Australia found that male unemployment was strongly associated with domestic violence, especially, when

women entered the workforce and men were unable to live up to their social roles as providers and protectors (Rees and Pease 2006). In New Zealand, a study of 50 Asian women (originally from China, South Asia, Fiji and South East Asia) who were victims of domestic violence, 6 men who were the perpetrators of domestic violence and practitioners in the field of domestic violence named unemployment and difficulties in adjusting to the new life as some of the triggers of domestic violence (Tse 2007).

Domestic violence is relevant to HIV/AIDS because studies show that women who experience domestic violence are at increased risk of HIV compared with those who do not (Dunkle, Jewkes et al. 2004a). Although studies that link domestic violence and HIV risk are cross-sectional in design and do not show what came first, domestic violence or HIV, follow-up studies show that in discordant couples, a woman is at an increased risk if the man is HIV positive and is violent towards her (UNAIDS 2006). Another concern is that HIV can be used as a biological weapon against the women. The following true story reported in Birukila (2006) highlights the link between serodiscordancy and domestic violence.

My husband came to New Zealand three years before I arrived as an asylum seeker. When I arrived, I was told he had HIV. I was tested three times and I was HIV negative. My husband refused to accept it and said it was a conspiracy by health workers to stain him. He refused to use condoms; he asked me if I was a part of the conspiracy. Time and again he will use a condom and damage at the end of the tip. I felt powerless because I did not know what to do....three years after my arrival in New Zealand, I tested positive for HIV. I know exactly when I got infected. My husband forced me to have sex with him. In New Zealand you call it rape, but can you be raped by your husband? Not in my culture anyway. Now am angry and I have young children to look after. I should never have been infected in New Zealand (Birukila 2006 p 11)

Another story in New Zealand that became headline news around the world also illustrates this potent link between serodiscordancy and violence. Although the African man used unusual means to intentionally infect his wife with HIV, there are similarities to the above story: it was a discordant couple by which the man was the one who was HIV positive, they had experienced domestic violence in the past and the intention was to have sex with the woman as described in the story below.

An HIV-positive man, Artwell Chakanyuka 35, injected his wife with his own blood while she slept, infecting her with the virus that causes AIDS. It is believed the man wanted to give her the disease so she would start having sex with him again. She told police he also hoped it would prevent her from finding another man and leaving him. The man admitted infecting his wife, in the first case of its kind in New Zealand. In other cases, HIV-positive people have infected others through unprotected sex. In court documents, the woman, 33, described how her husband twice pricked her with a sewing needle laced with his infected blood as she slept and how she once caught him handling a syringe full of his blood.

In the year before the man pricked his now-estranged wife, the couple had been experiencing relationship problems, in part because of the woman's refusal to have sex with him, as she feared she would contract the disease. She had tested negative for the human Immuno-deficiency virus (HIV) on at least four occasions before the year-long abstinence, so police were certain the needle stick had caused her to be infected. In her evidence, the woman said when she confronted the husband with the diagnosis late last year he admitted dipping a "sewing needle" in his blood and pricking her with it...He said: 'I used needles on you because I wanted you to be the same as me so that you can live with me and you won't leave me'." The man discovered he was HIV-positive during health checks imposed on the family upon arrival in New Zealand in 2004. Tests on the woman and their children showed they were not infected with the virus...The couple had protected sex for a number of years until 2007, when the woman became too scared of contracting the virus and insisted on abstinence.

The woman told the court: "I just wanted to maintain the relationship for the sake of the children. ... He insisted on staying and he mentioned that he was not worried about sex... any more. All he wanted [was] to see the children grow with both parents under one roof." Then in May last year she discovered a sting-like mark on her left thigh. "After having a shower I put some lotion on myself and I could feel pain on my thigh. When I looked at it, it was turning red like a circle, getting bigger. Later that morning, when she returned home from her nursing studies unexpectedly, she saw her husband in the bedroom with a syringe full of blood. She said he pushed past her and walked away, refusing to talk about it. She searched the rubbish for evidence of the syringe but found nothing. Two days later she awoke to a stinging feeling in her leg. "In my sleep I felt a prick on my leg. I got up... and I flicked the blankets... I looked at [the husband] and he was wide awake." She asked him if he had pricked her and he said no. Later she found evidence of "blood sprinkles" on their duvet, which she says her husband tried to hide from her. Concerned by his behaviour, she told him to leave the house. It was only in September, when her doctor suggested a test at a routine check-up, that she found she was HIV-positive (Stoep 2009 p 1).

Women in this study referred to the above case frequently during the discussion.

There is a lot of abuse; it is not just domestic violence like being beaten or something. There is a lot of abuse just like that woman in Auckland whose is

recently been injected with HIV by her husband. Her, probably there are a lot of things going on everyday but probably she did not report it and those small things kept on accumulating and you see [Woman]

Because domestic violence influences risky sexual behaviours (Dunkle, Jewkes et al. 2004b), it is important to look at how the process of acculturation may exacerbate violence against women and the associated HIV risk. Both men and women reported that coming to New Zealand had increased the level and extent of domestic violence. Most women said that they did not have major problems with domestic violence in Africa, but as they became more economically independent in New Zealand levels of violence could escalate.

You can have peace with your husband at home [Africa] but when you travel, you become enemies to such an extent that one can shoot the other [Woman]

Participants also talked about the lack of appropriate culturally acceptable social systems of dealing with domestic violence. For example in Africa, marital conflicts are usually resolved within the wider family or clan unit. But in New Zealand, domestic violence is dealt with by the police and the court system.

But here [New Zealand] the only people who can resolve that [domestic violence] is the police and the police don't understand those things, they think you hit the woman and remove you out the house. Imagine you buying this house and they came and take you [Man]

The way conflict is resolved by police is different. For example, I have never slapped my wife, but if I am to do so and she will call a meeting, and my elder bro will come, and probably her mother will come and we talk about it. But she couldn't call the police, because once the police come, it is a criminal case. And we have a song in [Africa] that says that 'anybody who takes you to jail is not your relative'. You come back and marry his daughter even if it is your wife [Man]

The phrase “anyone who takes you to the police is not your relative” means that any familial bond is automatically broken by the act of calling the police and the marriage is effectively over because the worst thing that a woman can do to her husband is call

the police. In many African cultures, preserving family honour is the first priority. Calling the police means embarrassing your husband and the family and that cannot be tolerated. Some women felt that although the New Zealand law protects them, it puts them at risk because men who choose to beat their wives are more likely to hurt them badly or kill them because they know they have a lot to lose. While in Africa a man can beat them less severely on many occasions, in New Zealand, he will do it 'properly' once. They gave an example of a Kenyan woman who was severely beaten by her estranged husband and was in a coma for days.

I think I would say that back home, it [being beaten] is very common, but here a man will not beat you, that is why the Kenyan woman - this man it is not that she cheated on him that day. She was doing it, and he was persevering, he was seeing it happening, but because of the New Zealand rule, he could not just beat up the woman or keep on fighting and fighting. So over here for the African woman is even worse, because what will happen, is the man will not beat you, the man will not do something to you, but he will keep on accumulating it, and the day he will come out he will finish you [Woman]

I think it is like in New Zealand here, it may not happen, but the one beating that will happen the guy would have thought of the consequences and will do it properly and go to prison and that is it. So if the husband is beating the wife here it is going to be done properly. That is basically what you are saying but it will not happen very often because at home, they are beaten a bit and a bit everyday so it is okay. But your husband is beating you [in NZ] he knows that I am in the system in which if I beat you up, I am going to prison, but I am really angry to whatever level and I am just going to do it and just go [prison]. So they do it far in between so the woman are safer [in NZ] but we forget ourselves we think we are safe, but once it happens, it happens badly [Woman]

Women implied that if the law would have allowed small beatings, then they would not be in danger. As Strebel, Crawford et al (2006) observed, gender roles are complex and culturally specific. Some women view domestic violence as acceptable and sometimes expected. Participants somehow blamed the legal system especially the police for not allowing low level beatings.

I think over here as much as the rule [law] is trying to cover us, it covers us but at the end of it is not the best. People should be talked to, you would rather solve the small, small bit than keeping accumulating to the big huge of problems that will accumulate to a big fight [Woman]

Because of the possibility of being responsible for sending their husbands to jail, most women choose not to report the abuse. Indeed, all participants said that no one could say that she has never been beaten by her husband. During one of the focus group discussions, one woman asked other women to raise their hands if anyone had never been beaten by her husband. All participants looked down and silence followed, indicating that they had all been beaten.

It is not common to report that you have been beaten by your husband, because, to some extent our grandparents thought that beating was part of marriage. Husbands beat wives like children and it is taken to be normal. It is very difficult to go and tell the police that your husband has beaten you. It is like you are exposing yourself. So though some people may be suffering, by all means an African [woman] must have been beaten by her husband before but the person will not say it. Because when you say it is like sending him to prison, jailing him [Woman]

In this study, men made light of the domestic violence and blamed women for exaggeration. Men also felt that the police believed women more than men.

There are was an instance in America, the guy is my classmates, hee he invited the lady to the States, all the papers [immigration] were done. There was a small incident, but the lady said but I am doing an assignment, but you come you have to also heat up the food and whatever. And he said for this week I am busy, but the lady was disturbing him so he hit her. She called the police; the police came and moved him out of the house. You see, and the lady took the house, when the lady did that the boy [man] said that I am not going to reconcile. So practically the marriage is broken. Like they are saying, I think the women also exaggerate their problems. Here they have a voice [Man]

Domestic abuse and sometimes homicides among African migrants and refugees have

been reported in other countries such as Israel, the USA, Canada and the United Kingdom. For example in Israel, although Ethiopians make up 1% of the total population of Israel, they account for 40% of all murders of women killed by their husbands (Carter, Kraft et al. 2007). According to different accounts of murders gathered from interviews with the families of murdered Ethiopians in Israel, this trend was unheard of in Africa because there are cultural tools to deal with marital conflict (Carter, Kraft et al. 2007). However with migration, there are no such tools and men from a patriarchal society find it hard to cope with the stress associated with being in the new culture. Studies on migrants and refugees from non-Western countries found that in their home countries, men were “undisputed heads of the family”. In the Western world, men are found to be slower than women and children to adapt (Darvishpour 2002; Kraft 2007; Tse 2007; Doyal 2009). Women adapt faster and find it easier to find work such as care-giving and working for disability services than men do, and it is possible that women may become bread winners and hence be perceived as head of the family.

Coming into contact with the new culture indeed changed attitudes as Berry (1980) noted. Although women did not see themselves that they had undergone changes in New Zealand apart from economic independence, their attitudes had changed. For example, they mentioned that coming into contact with New Zealand women made them view their marriages differently. They perceived that they were being slaves to their husbands. In Africa, they spent much of their time serving their husbands and had no time to take care of themselves.

To some extent when you travel, when you come to the place like this [New Zealand], then you realise that what you called marriage [in Africa] was slavery. Yees, because our interpretation of a wife is like do this; she will close from work, cook food, fetch water for me to bath, do this, do that, do that, do that, do you get me? She has no time no time to even put herself into order [Woman]

In addition, African women compared themselves with New Zealand women they worked with and perceived that African men did not show enough appreciation and affection to them as they thought New Zealand men did.

We women we love what we hear, you want the man who will tell you, I love you, you are nice, you are this and this, not the man when you open your mouth says [in deep voice] what is this. Then when you compare yourself with your colleague where you are working, she is always happy, husband sending her flowers, but you, you go home and your husband is always squeezing his face [frowning] and you can't even face him [Woman]

As already discussed, the process of acculturation inevitably influences the ideas, behaviours and cultural norms of the individual or groups. However, these changes, if not negotiated well, may cause both stress and conflict in relationships, especially between men and women.

9.6 Conclusion

This chapter has presented the challenges of migration and adjusting to the new culture experienced by Africans in Christchurch. The concept of acculturation was used to understand the adjustment to life in New Zealand including to gender roles and sexual behaviours especially MCP. Although culture influenced sexual behaviours, being in New Zealand influenced attitudes towards MCP, especially among women. One of the reasons for engaging in MCP in Africa among women was financial gain. Being in New Zealand provided women with financial security and hence reduced the need for a 'side partner'. However, having financial freedom also posed challenges to some women who viewed marriage as a form of slavery and wondered why they should be faithful to their partners especially if their partners were abusive or unfaithful. In Africa, men who practised MCP, needed to have enough resources and money to support their 'side partners'. In New Zealand, they did not need to have money to have sexual relationships with different women as they had opportunities for casual sex.

Lack of communication about sexual matters between couples could encourage some participants to seek sexual satisfaction outside their current relationship. While we may expect only women to be concerned with being seen to be conservative, this is also the case for men who did not want to explore within marriage but were happy to be more adventurous with 'side partners' or 'small houses'. Though the major concern has been the transmission of HIV, perhaps we should consider focusing on

improving communication about sexual relations within marriage. The focus of information about safe sex has been simply on sexual practices rather than maintaining healthy sexual relationships. More attention to interpersonal relationships, trust, intimacy and sexual pleasure is likely to be beneficial. This has to be done in a culturally acceptable manner.

Although both men and women experienced some adjustments, it seems that men and women experienced the adjustment to the new life very differently. Back in Africa, men and women had a distinct division of labour whereby men provided financially for the family and women took care of children and the household. Migrating to New Zealand inevitably rearranged these gender roles because women found work faster than men and in some cases, they became sole breadwinners. Although women reported enjoying this new life that provided them with opportunities and options for more independence and less dependence on men financially, men felt displaced and experienced reduction of status. This loss of status due to migration had a detrimental psychological impact on men and could result in domestic violence against women. Although the causes of domestic violence are complex, this study has identified that the stress associated with the acculturation process may be a trigger for domestic violence against women, especially in the relationships where a woman becomes financially independent and a man is not. In relation to gender roles, men experience what Berry (1980) called rejection in his four-stage model of acculturation while women experienced assimilation by embracing the values of gender equality in New Zealand, at least to some extent.

Women expressed the fear of being killed by their husbands as violence against them was reported to be more severe in New Zealand compared with when they were in Africa because men are aware of the legal consequences. Although women felt empowered in New Zealand, their cultural beliefs and background affected the way they responded to domestic violence. They were concerned about reporting their husband to the police for fear of breaking and destroying their family. Consequently, domestic violence was kept secret and the authorities only became involved when a woman was harmed or killed. Investigating the ways that culture travels and is modified and the challenges this presents allows for a deeper understanding of sexual beliefs and practices amongst Africans in diaspora. These beliefs and practices are

mediated not only by culture, but also by the ways that people understand risk in relation to sexual practices. The next chapter uses the concepts of risk and stigma to explore how participants perceived their risk of HIV in New Zealand.

Chapter 10 Risk and Risk Groups

10.1 Introduction

The survey results of this study showed that the overwhelming majority of respondents (85.2% of male and 78.7% of female) felt that they were not at risk of getting HIV, despite reporting higher risk behaviours for HIV. For example, 41.2% of men and 51.3% of women reported that they did not use condoms in their last sexual intercourse, 13.3% of men and 8.4% of women reported previous sexually transmitted infection (STI) diagnosis, 28.7% of men and 12.6% of women reported having more than one sexual partner and 24.3% of men and 16.3% of women indicated that they had never had an HIV test. Similar findings were reported in studies conducted among Africans in the diaspora indicating that participants had lower HIV risk perception but reported higher risk sexual behaviour. These studies were conducted among Africans in New York (Yewoubdar 2000), the Mayisha study in the United Kingdom (Chinouya, Fenton et al. 1999; Chinouya, Davidson et al. 2000; Chinouya and Davidson 2004) and Spain (Luque, Fernandes et al. 2006).

Studies conducted in Africa also found that most respondents reported very low personal HIV risk perception but higher-risk sexual behaviours (Shama, Fiala et al. 2002; Akwara, Madise et al. 2003; Asekun-Olarinmoye, Bamidele et al. 2009). Furthermore, one study in Nigeria reported that the majority of respondents who considered themselves at risk of HIV felt that the source of risk was not from their behaviours but the behaviours of their partners (Asekun-Olarinmoye, Bamidele et al. 2009). These findings are not confined to African populations alone; other studies have shown that individuals are more likely to underestimate than to overestimate their risk of HIV infection regardless of the nature of their sexual behaviours (Aggleton, Slutkin et al. 1994; Ingham and Zessen 1997; Nzioka 2001).

While it is not known why some people perceive that they are at low HIV risk even if they engage in higher-risk sexual behaviours, some studies have found that there is a relationship between inaccurate HIV/AIDS beliefs or knowledge and risk perception. For example, studies conducted in Portugal (Dias, Matos et al. 2006), Hong Kong

(Lau and Tsui 2005), Thailand (Boer and Emons 2004), the USA (Herek, Capitanio et al. 2002) and Africa (Nyblade, MacQuarrie et al. 2003; Nyblade, Stangl et al. 2009) found that people who possessed inaccurate information on how HIV is transmitted were less likely to take preventative measures against HIV infection and more likely to perceive that they were at lower risk of infection (Boer and Emons 2004).

How people construct and respond to risk is dependent on many factors. This chapter begins with a discussion of the concept of risk and sociocultural approaches are discussed in detail. An investigation of the ways that participants understood risk in relation to HIV follows and four themes that emerged as significant in the focus groups are explored. These are: New Zealand as risk free, attitudes towards condom use, construction of risk groups and sexual relationships between black men and white women. Although not drawing on focus group data, the construction of risk groups is discussed as this is very significant in understanding how Africans themselves come to be labelled as 'risky' and a racialised moral panic emerges particularly around the 'protection' of white women. This chapter will be informed by the work of authors such as Mary Douglas (1978; 1982) and Deborah Lupton (1999; 2002; 2003) who deal with risk as a socio-cultural concept. This approach was selected to inform this study because the analysis of the focus group discussions showed that that how participants perceived risk was socially and culturally mediated. The concept of stigma (Goffman 1963) is drawn on briefly to discuss the issue of race and discrimination.

10.2 Sociocultural Approaches to Risk

According to Adams (1995), risk is the likelihood or the probability of an undesirable event happening and the consequences of that undesirable event. However, this definition of risk is drawn from a western-centric and technico-scientific understanding of risk that views risk as something that can be calculated, predicted and managed. In some of the African languages such as Swahili which is spoken in Burundi, Kenya, Rwanda, Tanzania, Uganda and Zaire, the word risk can be translated as *ajali* or accident. Another word for risk is *bahati mbaya* or bad luck. This meaning is quite different from the above understanding of risk as explained by Adams (1995) because accidents or misfortunes are understood to happen if you do something wrong. This kind of understanding of risk was observed by Douglas and

Wildavsky who stated that “every disaster was freighted with meaning, every small misfortune pointed the finger of blame” (1982 p 29). Therefore, sociocultural approaches are very relevant for this study because they take into account local and social understandings and interpretations (Douglas 1978; Douglas and Wildavsky 1982; Douglas 1996; Lupton 1999).

Socio-cultural approaches to risk posit that perceived risk is closely related to cultural adherence and social learning as people are selective on what to fear and not fear (Douglas and Wildavsky 1982; Douglas 1996). Lupton and Tulloch (2002) conducted an interview-based study of 74 participants in Australia to elicit participants’ understanding of the notion of risk. They sought to examine three major issues, namely participants’ definition of risk, the risks they nominated as most threatening to themselves and those they saw as threatening to Australians in general. They found that perception of risk was localised and contextualised to individuals. Participants were concerned with personal situations such as security of family, jobs, health, violence and personal relationships. They also found that global issues were barely mentioned (2002 p 331-332). In a second study, Lupton and Tulloch (2003) compared their Australian study to that of 60 British participants of different ages and occupations. They found that the British participants were also concerned with local issues such as violence, drug abuse, social divisions and unemployment as the risks of concern. Like the Australian study, global issues were not of major concern for the British participants but rather it was local issues that people understood as risky or dangerous. These two studies show that what is considered dangerous or risky is socially determined.

Socio-cultural approaches to risk can be helpful in the area of HIV and risk as they can assist in explaining how people may fear one aspect of HIV transmission but be unconcerned about other aspects. Most studies on HIV/AIDS in Africa have utilised the technico-scientific approach to risk and have found mixed results. More specifically, the studies have looked at whether perceived risk is associated with behavioural change. For example studies that support the hypothesis that individual risk perception is associated with behaviours include those conducted in Southern and Eastern Africa. A cross-sectional study that used the Demographic Health Study (DHS) data from Kenya, Uganda and Zambia found that knowing someone with

AIDS was predictive of protective sexual behaviours (Macintyre, Brown et al. 2001). Another study of Zambian youth found that, there was an association between HIV/AIDS knowledge and a reduced probability of sexual experience as well as an increased probability of condom use in boys (Magnani, Karim et al. 2002).

Studies that reported contradictory results indicating that personal perception of HIV/AIDS risk is not associated with sexual behaviours include those conducted in Dar es Salaam, Tanzania (Maswanya, Moji et al. 1999), Ethiopia (Sahlu, Kassa et al. 1999) and Kenya (Akwara, Madise et al. 2003). A survey of 1041 students in Dar es Salaam, Tanzania found that students who were aware of HIV risk, had a reduced likelihood of always using a condom (Maswanya, Moji et al. 1999). In Ethiopia, a study of a cohort of factory workers with higher HIV/AIDS prevalence found that although participants believed condoms were the best way to prevent HIV transmission, they still reported risky sexual behaviours and lower condom use (Sahlu, Kassa et al. 1999). The DHS data in Kenya found no association between HIV/AIDS knowledge and sexual behaviours and they also found that the odds of engaging in risky sexual behaviours was three times higher among men and women who had higher personal perception of HIV risk (Akwara, Madise et al. 2003). The above studies have limitations because most of them were based on cross-sectional data from which causal connections between risk perceptions and sexual behaviours cannot be made. While sociocultural contexts can influence the way that people make sense of risk, these sociocultural understandings also affect the way that some environments may be assumed to be less 'risky'.

10.3 New Zealand as Risk Free

Findings in this study show that participants interpreted HIV risk based on their African experiences. For example, participants felt that HIV/AIDS was not prevalent in New Zealand and therefore their chance of being infected by HIV was reduced. Participants also drew on anatomical understandings to explain lower risk perception. Indeed, the prevalence of HIV in New Zealand is much lower than the Sub-Saharan African prevalence. New Zealand therefore presents a challenge to many Africans because what they regarded as dangerous in Africa is non-existent in New Zealand. For example, there are no wars or wild animals, including snakes, in New Zealand; it is hard therefore to convince people that something can harm them while in New

Zealand. Furthermore, AIDS is very visible in Africa; most people have lost relatives, neighbours, teachers, and leaders to AIDS. Hospitals are full of dying patients, and even on the streets, some adults and children have visible AIDS symptoms. Once bombarded with AIDS messages in Africa, in New Zealand HIV/AIDS messages on big billboards, radio, bus stops, in schools, markets and shops are non-existent. Also, there are no visible AIDS symptoms and few AIDS deaths in New Zealand which may serve to remind people of the danger of HIV/AIDS.

They think that it is [HIV] much smaller compared to [Africa]. Most of my flatmates came as refugees and for them the risk is about war. That is the main thing, they have seen so much in terms of war, and they think this is nothing. Anywhere without war is alright, that is the thing [Man]

Even in countries with terrorism anything that is not terrorism is okay, their fear is terrorism only. That is the biggest thing, they have seen so much in terms of problems and here is healthy [Man]

In addition, to many Africans, anyone infected with HIV/AIDS is very skinny or 'slim' because people who had AIDS in Africa lost a lot of weight. People who are thin therefore are usually suspected of having HIV/AIDS. In African culture being slim or thin is regarded as 'ugly' and being overweight for men is associated with wealth and for women beauty. In some cultures men consider sleeping with thin women to be akin to sleeping with bones or stones, while fat women are believed to be soft and beautiful. In this study, some women participants said that they looked for AIDS symptoms in the man they wanted to have sex with. If he looked well (not thin) and his wife and children looked well then it was fine to have sex with him.

Some girls will say this is a clean man, he has wife and children, and he is over 50 years old and looks okay (Woman)

The above quote illustrates the importance of understanding how different people assess others as 'risky' or not in terms of HIV transmission. Men who were older than 50 years were perceived to be less likely to be infected with HIV. Although it is known that you cannot tell who is infected with HIV/AIDS unless they have a blood test for HIV, some participants think that they can tell by looking for symptoms. To them, the risk is rated according to what they think is more infectious. For example,

Corrigan (1996) found that people were more afraid to share toilet seats, share cups, shake hands, or eat with someone with HIV/AIDS than of having unprotected sex with multiple sexual partners. This may be due to the fact that most infectious diseases in Africa such as cholera and dysentery are transmitted in those ways. The common finding is that both men and women participants thought that they were at low risk of becoming infected with HIV. For example, some men thought that it would be very difficult for them to get HIV from a woman because of how men's sexual organs are made.

Another thing that is a bit technical but is the man organ is different from a woman like women all believe to be higher race, because the man gets into them. And then the men look into the capillary and say I don't think anything like semen will get into me because of my organ [penis]. They really believe there is a small chance of getting infected [Man]

While men felt that the anatomical makeup of the penis could protect them from HIV, women thought that if they chose the right person who did not look sick physically, they could avoid HIV infection. Participants therefore see risks selectively, because they appear to fear certain aspects of HIV transmission and face other risks calmly. Another interesting finding is that most male participants believed that Africans in New Zealand do not have HIV because of compulsory HIV testing. They thought that those found to be HIV positive were not allowed into New Zealand. Compulsory HIV testing was introduced in November 2005 (NZIS 2005), meaning that those who came after that time have all been tested for HIV. What they did not know is that before compulsory HIV testing, the majority of migrants were not tested for HIV, with the exception of refugees who were offered the HIV test on arrival. Some participants were surprised to learn (during the focus group discussion about HIV in New Zealand) that Africans are the second ethnic group most affected by HIV. They thought only men who have sex with men were at risk in New Zealand because most people who speak about their HIV status on television are gay.

I think that is the problem, because they [Africans] think that all Africans have been tested [Man]

Those who had been tested for HIV before coming into New Zealand seemed to

believe that all Africans had been tested. For example, students who came on scholarships were required by their governments in Africa to be tested for HIV before being tested again to meet New Zealand visa requirements.

There something also I think we spoke about last time about when you are coming here for all of us have been tested for HIV. Especially us who came in the past couple of years, you have to go through all kinds of medical tests. I have had a discussion with people but not just because it was a sexual discussion but they just want to be curious. I told them the first thing they do is an HIV test, and my doctor told me clearly that there is no point of paying 10,000 shillings [NZ\$ 168], to do all the tests while the HIV test is only 200 shillings [NZ\$3]. Pay for the HIV test first, you know your status because if you are HIV positive you will not be able to go to New Zealand [Man]

This perception that everybody was tested and therefore perceived to be HIV-free is reinforced by the fact that there is no African in New Zealand who is openly living with HIV. Although the AIDS Epidemiology Group (AEG) and AIDS New Zealand under the Ministry of Health publish the HIV/AIDS data twice a year, it is not known whether Africans access such information. It is therefore possible that most Africans are not aware of the level of HIV risk in New Zealand and may not take precautions as they might have done if they were in Africa.

Another area of concern that emerged from the focus group discussion was the lack of HIV/AIDS information for young people who grew up in New Zealand. It is correct to assume that young Africans are more likely to meet people who may be HIV positive compared with other young people who are not African. This is due to the higher prevalence in the African community and frequent travel to Africa, yet they have little information about how to protect themselves and others from HIV. In the focus group discussion of young men aged 16 to 21 years, they revealed that they have nowhere to go for sexual health information and HIV because it is a taboo to talk to their parents about sex and sexuality. Most of them relied on the internet to find information about sexuality. The following paraphrased comments came from young men who grew up in New Zealand. They responded to the question ‘have your parents ever talked to you about sex?’

My parents raised the topic just once, and it was actually weird. When they talk to you, you know especially the African parents, they tell you in the form of prevention, not to go there at all [abstinence]. They tell you not to obey your sexual feelings [Man]

The thing is it is like, to tell you the truth like us, it is probably a taboo for us to go to our parents and talk about sexual problems. You know, sexual things, as soon as raise something up you know what to expect from your parents [Man]

A qualitative study conducted in Melbourne, Australia (McMichael and Gifford 2009) on sexual health promotion among refugee youth had similar findings. They reported that study participants had lower risk perception and could not talk to their parents about sexuality and HIV. Young people who grew up in New Zealand may therefore be in a particularly vulnerable situation in terms of how they view their HIV risk compared to migrants and refugees who grew up in Africa.

Although culture and previous experience with HIV/AIDS before coming to New Zealand may have influenced low risk perception among participants, it can be argued that structural factors in New Zealand are also important. Non-MSM populations that are at increased risk of HIV are less visible. For example, a closer look at the data on HIV in New Zealand shows that 36.6% of those for whom the source of exposure is known (excluding those for whom exposure is unknown) were infected through contact other than homosexual contact (such as heterosexual contact, injecting drug use, perinatal, blood product recipient and blood transfusion recipient) and 63.4% through homosexual activities (AEG 2012). Despite the higher prevalence in other populations, usually when there is a press release about the HIV situation in New Zealand, only MSM are warned about the dangers of HIV. The unintended consequences of ignoring other groups or populations affected by HIV is to send a message to all people in New Zealand, including black Africans, that HIV is a problem for MSM only. It may come as a surprise to many New Zealanders to learn that 519 women live with HIV in New Zealand and 18.7% (n = 97) of those are of European ethnicity, 3.8% (n = 20) are Māori and 5.0% (n = 26) are of Pacific Island descent. These women and ethnic groups may traditionally not be regarded to be affected by HIV in New Zealand. The remainder are African (48.4%, n = 251), Asian

(17.1%, n = 89) and other/unknown (6.2% n = 32). Scholars such as Epstein (1996) argue that the way policy makers approach the issue of HIV among minorities may create a label of 'risky groups' that may have a negative impact in HIV prevention. Indeed, low risk perception among black Africans appears to have also resulted from the lack of identification with the most commonly discussed risk group for HIV in New Zealand, namely MSM.

Another area that has been used to assess how people perceive their HIV risk is the use of condoms. Findings in this study suggest that participants, especially women, had negative attitudes towards condom use. The following section will examine the sociocultural understandings that influence such attitudes.

10.4 The Trouble with Condoms

The survey results of this study show that 41.2% of men and 50.0% of women did not use condoms in the last sexual intercourse. Although condom use is still the best known prevention method for HIV and other sexually transmitted infections, it remains the most controversial aspect of HIV prevention. Findings from the focus group discussions revealed different factors that influence negative attitudes towards condom use. These factors include the cultural meaning of sex², the value of sperm and the association of condoms with trust and intimacy. Coast (2007) argues what is missing in the research on condom use in Africa is the consideration of what sex means for different cultures. Other researchers have found the meaning of sex varies from tribe to tribe and from region to region in Africa (Bond and Dover 1997; Gausset 2001; Hobbins, Haupt et al. 2009). For example, the Tongan culture in Zambia believe that semen during pregnancy gives strength to the baby (Gausset 2001). They also believe that a woman can only reach an orgasm if the semen reaches her womb. In Northern Mozambique, Swiss health workers reported that villagers believed that sperm gives energy to women, and provides nutrition or food for both the foetus and mother during pregnancy (Hobbins, Haupt et al. 2009). They found that

² The word 'sex' in this study means penetrative penile/vaginal sexual activity. In the African cultural context sex is most commonly understood in this way and this is evident in the ways that participants described especially the value of semen and reluctance to use condoms.

because of this tradition, single women and women who did not have regular partners, actively sought men to have sex with to gain such nutritious elements. Equally, a pregnant woman whose husband is far away might seek a sexual relationships with other men to guarantee the best outcome for herself and the unborn child (Hobbins, Haupt et al. 2009).

Female participants in the focus group discussion of this study also mentioned the nutritional values of sperm. They said that biologically, sperm contain a special protein which makes women look beautiful and feel good. The use of condoms was believed to take away or interfere with that benefit.

When you even study biology, they tell you the sperm head is full of protein that is what we were taught. So if they tell you that it is contains a lot of protein, there are some women you see them they are reserved [look sad], especially ladies when they reach to certain stage, you realise they really need men. And they get into the stage, they are sick, every day you see them they are sick. But as soon as they start moving out with men, I don't know if it is miracle, but all of the sudden, they start changing. So it is sex, sex is the good thing, God would have not have made it if it was bad [Woman]

‘Feeling good’ in the above quotation means feeling happy and emotionally satisfied. Women’s grumpiness and moodiness was assumed to be due to lack of sex. The sperm was also regarded as part of the sexual act; those who did not receive sperm felt that they may not be liked by the man. In addition, participants said that true sex and satisfaction takes place when there is an exchange of sexual fluid.

They [women] feel like you didn't like me? Why? do you get me, they [women] complain a lot. Because this is the person that I love and everything that he has I like it, why should I scoop it [semen] into a cup [condom] and throw it away? [Woman]

If it is husband and the wife and it is comfortable, I want to have it all, the sperm is mine, give it to me [Woman]

A study of migrant workers in Zambia found that semen was regarded as the main means of satisfying a woman during coitus, as the release of the semen made a

woman feel 'sweet and warm' (Bond and Dover 1997 p 382). Men also reported that they felt sweetness and warmth if they ejaculated inside the woman, but condoms denied them that because 'the penis is in a sack' (Bond and Dover 1997 p 382). Sperm value beliefs have been reported in other cultures outside Africa, for example; China, India and Bangladesh (Coast 2007). Kirk (1996) reviewed historical perspectives of the early twentieth century and found that even the medical community promoted sperm as protective factor as summarised in Kirk's study:

"Leaders of the British Medical Association condemned contraception as unnatural and all kinds of maladies would befall the users. Semen was envisaged by some as an elixir for women's health when absorbed through the vaginal wall" (Kirk 1996 p 375).

Participants in this study also associated trust with condom use, indicating that condoms are only used when the male partner does not trust the female partner. Married women especially, saw no need to use condoms because of the ways they thought condoms were associated with trust. They believed that married people should not use condoms because they could trust their husbands. In fact, they expected not to use condoms in marriage.

As a matter of fact, if we are married today, we all believe in one another. I am faithful and you are faithful why a condom? I have nothing to fear, I knew I married a healthy person, so why a condom? Do you get me? [Woman]

Trust was discussed differently for men and women, for example men primarily used condoms to make sure that they are "safe" especially if the partner was new. For women, if a new partner used condoms, they interpreted this to mean that he did not trust them and did not expect to have a future with them. Therefore if a new partner did not use a condom, women perceived that they were being trusted and loved.

What I have seen with condoms, when a man doesn't use a condom, it is like he becomes more intimate with a person, when the man is cheating on you outside, if he has other girls, he uses condoms, it is because he doesn't want to be close to them. He doesn't want the relationship to go far. But if he doesn't use a condom that is when he feels like he wants more relationship with this person. So by not using a condom, it creates more intimacy with this person [Woman]

*If the guy is using a condom it is because they are not sure you are the one
[Woman]*

For single women condom use signified that men did not want to marry them because they didn't want them to become pregnant. In this case, condoms were not seen as a means to prevent HIV, but instead to prevent pregnancy. Since pregnancy before marriage is regarded as a disgrace to the family, most African cultures force men to marry girls or women they make pregnant. Therefore, women perceived condom use as a sign that men do not want to have a future with them and especially not to marry them.

Most of the guys have learnt lessons from their past, so they are using condoms not because they are thinking of AIDS, they are thinking they don't want to make this girl pregnant. That is always the first thing for the guy, the pregnancy first [Woman]

Yaa, if he uses a condom, he does not want to make you pregnant not because you are sick [with HIV] that is not the point. He does not want to have a kid with someone he does not want to marry. Because you notice that most guys, especially African guys, they end up in marriages because they made the woman pregnant back home [Woman]

Sex with condoms was regarded as signifying unwillingness by women to give their heart and love to the man. Since condoms were seen as unacceptable in marriage, even those who were unmarried wanted to feel like they were equally treated to those who were married.

I think another disadvantage, with women is when you meet a guy, you become emotionally involved and you trust him and everything he says, so when you go to bed with him is just like, AIDS is the last thing in your mind when you are making love. You don't think about STDs, or you don't think all those, all you are thinking at this moment is I love this guy and this is what I want, he treats me right, you know that kind of thing [Woman]

And I find ahaa, with African men they will prefer not to use a condom with their wives, because they look at the condom, you know, something as

cheating. If they have the girlfriend they will use a condom not so much to prevent AIDS, but so there are no babies to expose them [Woman]

These findings are consistent with other studies in Africa that found that low condom use was influenced by cultural beliefs, the association of condoms with casual sex and lack of trust (Schoepf 1995). The interesting observation in this study is that African men may be under pressure from African women not to use condoms to prove their commitment and fidelity. In addition, women may sabotage the opportunity to use condoms because of what condom use means to them. This can be done by not suggesting condom use or by sending signals that they do not want to use condoms.

This finding is quite contrary to what has been documented before about gender inequalities in condom use whereby women are unable to negotiate condom use with their ‘dominating’ husbands and male sexual partners. In fact it may be difficult for men who have HIV or other sexually transmitted infections to introduce condom use in marriage for fear of being accused of cheating or not loving their wives anymore. Some women said that if a man introduces a condom, it may mean that he has done something that may have put him at risk of STIs.

If you are sleeping with the man [husband] and he is keeping off, maybe he knows what he did. May be he wants to be sure especially if these STIs, HIV is so unfortunate. I have relatives dying of HIV because the man slept outside, they get it and die. So in a way it is killing family because of that [Woman]

I will not be happy if my husband comes home and I see if puts the condom out, number one I will think he thinks I have been sleeping around and for that matter he is protecting himself, or he is sick and because he loves me, he does not want to give the virus [Woman].

Women too may be under pressure to be seen as ‘faithful’ by their male partner and may not be able to use condoms even if they know or suspect that they are infected with HIV or other sexually transmitted infections. Although most women indicated that African men are likely to have multiple sexual partners, they still did not want to use condoms with them because they believed that their husbands or partners did not love those other women or girls. Since they did not love the ‘outside women’, they believed that their husbands or partners used condoms to protect themselves and their

wives. One participant described that a man normally tries to protect the wife.

When you see an African man and has one woman outside, and happen to get HIV it is because he wanted to be more intimate with this woman but unfortunately this woman was sick, so they end up getting the virus. So with them even if they have four or a fleet of girls around those girls will not be more important to them like the wife. In a way they try to protect themselves against the virus. But whoever is foolish enough to trust those girls, most of them end up sick [Woman]

That is why prostitutes use condoms, the men most of the time they don't care about the woman they just care about the satisfaction. But if you are married for satisfaction, that is why most families they don't use condoms because of that satisfaction [Woman]

A study in Zambia found that women were offended when their male partner wanted to use a condom (Gausset 2001). The Zambian study also found that some male partners put on condoms without their female partner's knowledge, and those who were 'caught' were accused of 'deception' by their female partners.

Men mentioned trust, lack of access to condoms, stigma associated with carrying or buying condoms and the association of condoms to prohibited sex as barriers to condom use. Men stated that they used condoms the first and the second time they had sex but stopped as soon as they got used to the women, typically the third time they had sex with the same person. They indicated that by then, they start trusting the woman.

There is the aspect of condom use, you know if I get the girlfriend today, the first day I will use condoms, the second day I will use condoms, the third time is like I am really getting used to her although we have not gone for the HIV test, there is that trust that is building up. And so you start going for it [sex] without using condoms [Man]

People don't use condoms because they use them for one night stand only. When you get used to one partner, then trust comes into play [Man]

Terms used by men to describe condom use were derogatory and sometimes fatalistic. For example they used analogies such as - the cow dies with the grass in its mouth, meaning it is better dying for something you like than to starve. They also talked about 'eating sweets in wrappers' meaning you cannot enjoy a sweet if it is still wrapped in plastic, you need to open the sweet to enjoy eating it. A 'wrapper' in this case is the condom and 'sweet' means sexual organs.

Like if you ask them, don't you fear that you will die of AIDS, they will say that even if I die, a cow dies with grass in its mouth, or you cannot chew the sweet in its wrapper but you want to maximize the sweetness, you know, it is something like this terms when they say even if I am infected with HIV I can still manage it, I will not be the first or be the last [Man]

One participant also said that condom use was associated with HIV/AIDS in Africa because condoms arrived at the same time as HIV/AIDS.

To begin with, in Africa condoms did not make sense. In the rural areas people did not know about condoms, they were dying and stuff like that and they had no idea what it was. So when condoms came, it did not make sense, at one time they thought condoms caused AIDS because before AIDS came, there were no condoms. Then condoms arrived and AIDS arrived too, they therefore believed that condoms brought AIDS, things like that [Man]

This view shows the distrust of condoms and the presence of a conspiracy theory which was common in some parts of Africa. People believed that condoms were sent from America to control African fertility. At that time the acronym AIDS referred to American Invention to Discourage Sex (Matthew, Bengo et al. 2008).

The issue of condom access was mentioned by men as another barrier to condom use. They said that lack of access to condoms in rural Africa and lack of knowledge about condoms contributed to low use by men.

In the African setting, that we have naivety, at home in the rural setting, sometimes, it is difficult for someone to advice the need of using condoms. And people are not even able to access them, if you go to my village for example; the local shops do not even store condoms so you cannot find them, so you

cannot access them even if you wanted to [Man]

One participant mentioned that condoms are expensive for international students in New Zealand, and this could be a barrier to using them.

When I first came here [New Zealand] I wanted to get condoms; do you know that if you are an international student you pay for condoms? Until I got free condoms from [New Zealand AIDS Foundation] for international student you pay \$10 for condoms and that is something they need to look into [Man]

Stigma associated with condoms made it hard for men to buy or access them because of fear of their being associated with sex. Although it is common knowledge that people have sex with multiple partners, sex is still a taboo and people do not want to show that they have sex. Buying condoms is seen as telling everybody around you, for example in the shop, that you are intending to have sex. Since most people who are married do not use condoms (Akwara, Madise et al. 2003; Epstein 2008), having condoms can be interpreted to mean that you are going to have sex with someone other than your wife or partner.

In fact, that is the same thing at home; you find that even if condoms are free, most people are not able to go for them as well. You know people will think how people can think of me you know, they always see the act of carrying condoms will imply I am going to use them for sex, and people don't know that you can use them for family planning purposes or other purposes [Man]

In African perspective, sex is something people should not talk about openly, and having a condom means that you are going to have sex. So there is a problem going to the shop to buy condoms, in fact, somebody will go to the shop and instead of saying help me with the packet of condoms, he will start pointing and wait when people are away from the shop, buy other things and then say and that one, and that one [Man]

Other barriers to condom use that were specific to women were interference to intimacy or the perception that this was an unnatural way of having sex. Women said that there is a big difference between having sex with a condom and having sex without a condom. Women participants talked about condoms as something which

cannot allow them to enjoy sex. The condom was seen as a 'barrier', a 'plastic' a 'wall' and a 'thing' that interferes with intimacy and sexual pleasure.

With condom and no condom, is not the same. A condom is plastic, when you play sex with the condom; you will not feel like when you do not have the condom on. So you have more satisfaction, without the condom than with the condom [Woman]

More specifically, condoms were seen to interfere with the process of sex because the time spent trying to put on a condom made someone lose interest in sex.

I don't use condoms because when we are trying to make each other to be on, and then I have to stop then and put on the condom [laugh]. By the time, this condom is on, and me I have to be on again, I am off [all laugh]. So in a way, if the man will use the condom, he will be satisfied, but you the woman you may not be satisfied unless you are very smart, I don't know. Because you try to be on, so by the time you are on you want to put on this thing, and by the time you put on this thing, you are off [Woman]

The time of putting on the condoms and the time of making the woman on it will relapse and the man is like after ejaculating is happy but you the woman you may not reach your orgasm. So for me, that is how I look at it [Woman]

One woman said that condoms hinder intimacy, and cause a barrier between her and her male partner, although she acknowledged that condom use would be ideal in HIV prevention, the need for intimacy and feeling close to the man overrides the fear of HIV infection.

As for myself I find it ahaa, I don't like condoms. I find the ideal thing is to use condoms so you don't get HIV, but I find ahaa I look at condoms as barrier and it hinders intimacy, so if you are trying to bond with somebody, it is like there is this wall between the two. Even though they say it is very thin, I look at it as a barrier [Woman]

When asked what they would do if they did not trust their husbands or partners, one woman said that she would rather abstain from sex than use condoms. They compared

sex with condoms to rape because there was no satisfaction. Sex with condoms was seen as loveless and meaningless.

*I will abstain, because I know because of the condom I will not be satisfied,
as if it is rape in marriage [Woman]*

This study shows that many participants especially women, had negative attitudes to condoms. Some writers blame anti-AIDS campaigns in Africa for reinforcing the association of condoms use with casual sex (Gausset 2001). For example, most campaigns advocate for the ABC approach. This slogan tries to send a simple message; if you cannot be faithful or abstain, then use a condom. This type of message may influence some people to prove that they are faithful by rejecting condom use.

This slogan has been used by other agencies such as UNAIDS. For example, in advocating for the importance of using condoms to prevent HIV transmission, UNAIDS stated that:

“Condoms need to be actively promoted among sexually active young people and other populations at higher risk of HIV exposure such as sex workers and their clients, men who have sex with men (MSM) and people with HIV and their partners” (UNAIDS 2004 p 14).

Although this statement is epidemiologically correct, it sends a message that can influence negative attitudes towards condoms. For example, the statement can be interpreted in two ways; one is that if you are not a young person who is sexually active, if you are not a sex worker or a client of sex workers, if you are not a member of the group of MSM, if you do not have HIV or are not a partner of someone who is HIV positive, then you should not worry about using condoms. Secondly, this statement from the UNAIDS can be interpreted that if you use a condom, it means you belong in the population of people at ‘higher risk’ of HIV such as MSM, sex workers or their clients, or you have HIV or your partner has HIV. What is troubling about this statement is that in the same document by UNAIDS (2004), the author acknowledged that there is enough evidence to suggest that most HIV transmission occurs between steady partners. Steady partners may not be represented on the above ‘populations at risk’ list.

So far, condoms are marketed and promoted to be used for people who are ‘vulnerable’ or belong to ‘risk groups’, despite the evidence that the HIV/AIDS epidemic in Africa is generalised. For example, marriage was found to be a significant source of HIV infection in Africa (UNAIDS 2004). In addition, the only way to prevent HIV transmission in serodiscordant couples where one partner is infected with HIV and the other is not is to use condoms. A recent study on HIV transmission and discordance produced sobering results. By using the data from the Demographic and Health Survey (DHS) in Zambia and Rwanda, it was found that 55.1% to 92.7% of new heterosexually acquired HIV infections among adults in urban Zambia and Rwanda occurred within serodiscordant marital or cohabiting relationships (Dunkle, Stephenson et al. 2008). The study therefore supports the view that the source of HIV for most people in Africa is not from sex with ‘at risk groups’ but within marriage or long-term sexual partnerships. Investigating how people understand and use, or do not use, condoms helps to reveal the ways that understandings of risk are socioculturally mediated. Bodies can be constructed in many ways including as risky and/or fascinating. Fascination with the black male body is explored next.

10.5 The Black Male Body and White Women

The survey findings showed 21.5% of men indicated that they have sexual relationships with white women. As was explored in the discussion of culture and acculturation (chapter nine), minority groups and host populations can influence each other’s behaviours and practices, especially sexual behaviours. Participants reported that some white women were fascinated by black men and sought to have sex with them.

One white lady said, “Once you go black you can’t go back” having gone black is going big so I can’t go back [Man]

This quote from the men’s focus group refers to sexual liaisons between black men and white women which were reported to be common in Christchurch. Participants mentioned that in Christchurch there are white women who only have sex with black men.

I know of one white girl who has two kids with different black men. She is strictly black; she only dates black men [Woman]

When African men arrive in Christchurch, they use some of the services of some white women before they find a permanent partner or before their wives join them in New Zealand. The telephone numbers of the women are exchanged among African men and given to new arrivals or to those who want a 'change'. African men do not pay these women. Participants said that African students and men who are without their partners or single were more likely to use such sexual services of women who only have sex with black men.

In New Zealand for example in Christchurch, there are couple of white women that are known to be sleeping with black men. So when people say that 'nimekuwa na ukame' [I have had drought] for too long [meaning I have not had sex for too long] they will be told why can't you call so and so? So, we know them, we know these women who are ready to service the black men. They are all known for that, what they do, they sleep with black men [Man]

You know I came here as a student and my wife is still at home. Some guys gave a number to call if I am starving or hungry [sexually] Yaa, those ladies are there any time you can call them you know. Guys can give you a number any time; it is well known that there are those girls for such purpose. My studies will take at least three years; do you think I can stay for that long? [Man]

Finding women to have sex with was very easy for some because of the community connections.

Actually my first week in New Zealand, I met this guy, I can't remember his name but he is from my country. He asked me, did you come with your wife? I said no, he said okay call this girl, you can have sex tomorrow. I was like Wow! That was my first week in New Zealand!! [Man]

Apart from being given the phone numbers from other men, another way that participants reported finding sexual partners was the practice of 'hunting'. In many African cultures, sex is usually compared with food because it is something which is considered necessary for survival (Akwara, Madise et al. 2003). Therefore hunting is

usually used to describe the process of looking for sexual partners. This word does not have a negative connotation from a cultural perspective, it is just figurative. However, hunting also means the use of skills; not all hunters come back home with food, only the skilled ones do. That is why men boast about bringing home the ‘spoils’

I flat with African guys who are in their twenties; it is interesting that every Friday evening when we sit on the table people are talking about ‘hunting’. It is about fun, these guys are used to have multiple sexual partners. When they go ‘hunting’ and bring a woman home, they make sure that everyone in the house knows it. They say today I got the blonde one, today I got a red head or something, you know. So for the young people it is just about fun [Man]

Because of the concept of hunting which shows that a man is skilled if he succeeds in bringing a woman to his flat, there was a competition among them. This put pressure on those who did not succeed to try harder. The following quote was in response to my question on how hunting was done.

They just leave and go to the clubs and most of them do not drink. They just walk around the pubs or clubs looking for women they think they can come home with and actually, they are always lucky almost every weekend. And then they wake us to tell us about it [Man]

What happens in my flat now, it is like whoever doesn’t succeed to get something [woman for sex] on Friday he will work harder on Saturday. So it is based on the other guys as well, it is like if this guy got a blonde, I must get someone too [Man]

Although African men mentioned the practice of hunting, findings show that the relationship between the hunter and the hunted was not that of the predator and prey. White women too, were reported to hunt black men in night clubs, bars and other social places. African men went to the night clubs to look for someone they could have sex with and white women went to there to look for black men to have sex with. Indeed, in some cases, participants indicated that white women made the first moves.

Every time I went out almost half the time or 50% of the time, someone made proposition to me. A white woman will just tell you no strings attached my

place or your place? [Man]

The fascinations of the black male body for white women have been documented before. According to scholars of race and sex, constructions of the black race include the belief that black male sexuality is exotic, hyper masculine, dangerous and aggressive (Stevenson 1994; Worth 1995; Hyde 1997). Men described that white women were attracted to black men because of their sexual abilities and believed that they are quite different from white men sexually.

When you talk to a few white women and a few African women, they tell you one thing. That an African man gets a good and a steady erection, and that is what everybody wants. A white man is always not really hard it is I don't know what to call it, it is fluffy. And probably that will be one reason why many women want African men because it is as hard as a rock [Man]

Long rod, you cannot compare an Asian instrument [penis] with the African one. The African is a stallion I mean literally, it is there, it is something that God gave the African man [Man]

Although African men felt desired by white women, they described what appeared to be a form of racism whereby men were only wanted because of their sexual powers instead of who they were as people. For example, black men said that white women liked them just for sexual pleasure, not because of their intellect.

I was having a drink with my friend and this woman comes to me and my friend and says like her dream is to have sex with two black men at the same time. All I am saying is that there is something about a black man, they [white women] never think about what is in your brain [your intelligence] but what is in your trousers. [Man]

African men too had their own hidden agenda in the sense that they viewed such women as 'promiscuous'. Although the literature shows that the West perceives Africans as having excessive sexuality and of being promiscuous (Worth 1995; Worth, Reid et al. 1997), Africans too perceive that Western culture is very promiscuous. Since promiscuity is linked to women not to men in Africa, white women were viewed by African men as being 'promiscuous' but men did not see

themselves as 'promiscuous'. In fact men justify this behaviour using such statements as "a man is like a bull and cannot be contained in one Kraal" (Carter, Kraft et al. 2007 p 822). A Kraal is a paddock or pasture where bulls are kept.

If you live here [New Zealand] and you have never had a one night stand is like you never succeeded. The white girls go by such standards and they talk to each other about it [Man]

Interestingly, men defended their sexual practices by blaming hormones and by using biological explanations. They claimed that African men may have more hormones than non-African men. They spoke of the ways that their hormones drove them crazy and they had to do something about this. This is culturally constructed and some studies in Africa reported that men believed that without sex they may get high blood pressure (Coast 2007).

I think I will think of it in biological sense because I have done a little bit of biology. Men have a lot of hormones in their bodies to be sincere, we have a lot of testosterone, for your information we have ten times more than the amount that women have. That is what drives men crazy, you know, the other thing that I want to add is that men are actually the weaker sex, in terms of the sexual act. When they see, talk and meet a woman whatever, the thing that comes into their mind is sex. And you cannot divorce that from an African man [laugh] when you see one passing [woman] there what comes into your mind is sex. I am not ashamed to say probably, African man have more testosterone more than white men, but don't quote me there. So that thing makes them think about sex, they say that men think about sex almost every four minutes, so it is biology, it is in the blood of men [Man]

African women though felt embarrassed by men for this practice of hunting and being hunted by white women. They said that men were being used by white women and seem to believe, as men also mentioned, that men are not valued as men but because of their sexual abilities.

Black people are seen as sex toys and they must change that, in NZ dating one woman wrote that she is divorced and only have sex with black men. She said that she tried one time with a black man and she can never stop [Woman]

This is very sad; the black men are embarrassing us. They are trying bad stuff
[Woman]

It was not clear from this study whether safe sex or sex with a condom was practised by both African men and white women because most participants did not use their own examples. They only referred to ‘my friend’ or my ‘flat-mates’ to describe such relationships. However, a few gave examples by using the word ‘I’.

There is this girl who is Kiwi and I was talking to her about HIV. She was just saying that people talk about HIV and so on, but it is not true. And then she told me, my mother had an African boyfriend, for her the first thing her mother told her was if you are sleeping with an African, you must use a condom. And then she was telling me that by the time her mother was telling her to use condoms with African men it was already too late! So it meant that they did not use condoms. And this is the Kiwi girl telling me, so I think sometimes I don't know what to call it but condom use is sometimes a tricky issue [Man]

In this sense, Africans are constructed as a source of HIV infection while white sexual partners are not. This point is important because of the issues related to race and stigma that occur if white women are infected with HIV by black men. Currently white women are not considered as one of the ‘risk groups’ in New Zealand. The use of the term ‘at risk groups’ is controversial because it is known that what puts people at risk of HIV is not the group they belong to but what they do. It is the behaviours that put people at risk not their affiliation or their origin. The following section will look at how the ‘risk groups’ for HIV/AIDS were created and how this has implications for understandings of risk of HIV among Africans in the diaspora.

10.6 The Construction of ‘Risk Groups’

The history of HIV/AIDS gives abundant examples as to how the epidemic was portrayed earlier on by health experts, especially epidemiologists who indicated that the new disease was confined to certain ‘risk groups’ (Epstein 1996). When the new disease started to affect gay men in the USA, epidemiological methods were used to distinguish characteristics of those who have the disease from those who do not have the disease. Epstein (1996) argues that from early on, epidemiologists sensed that the

new disease was a gay disease. In 1981 the Centres for Disease Control (CDC) gave the following briefing in July 1981 as quoted by the New York Times reporter:

"Dr. Curran said there was no apparent danger to non-homosexuals from contagion. The best evidence against contagion he said, is that no cases have been reported to date outside the homosexual community or in women" (Altman 1981 pg 1).

Furthermore, a letter was published in the *Lancet* calling the new disease "gay compromise syndrome" (Brennan and Durack 1981). Others called it GRID which stands for Gay Related Immune Disease (Epstein 1996). A year later in 1982, the CDC released the list which was later referred as the 4-H list of risk groups, namely Haemophiliacs, Homosexuals, Heroin addicts and Haitians (Treichler 1989). The New York Times stated that the inclusion of Haitians as a risk group caused angry reaction from the Haitian community who accused the CDC of racism and stigmatization, and Haiti's tourism industry suffered greatly (Altman 1983). Epidemiological research was later criticized for creating scapegoated risk groups because of the frequent associations between blame and identified risk groups (Akeroyd 1997; Schoepf 2001). Others argued that the risk groups approach classified risk as demographic factors instead of behavioural factors which perpetuated the notion that the general public was not at risk (Entwisle 1996). Today, most people still think that they are not at risk of HIV if they are not gay, hemophilic, black or injecting drug users (Akwaru, Madise et al. 2003). Other critics of the identification of risk groups complain that care was not taken in addressing such groups because all of them were already disadvantaged and marginalised population groups (Seidel 1993). Furthermore, epidemiologists were blamed for creating stigma towards people affected or infected with HIV/AIDS. As more information about HIV/AIDS become available, more 'risk groups' were identified. One of those groups was black Africans because by then HIV/AIDS was reported in Africa and Africans were dying in great numbers. The inclusion of Africans as a 'risk group' for HIV raised questions regarding race and stigma more specifically to Africans living in the diaspora.

The higher prevalence of HIV/AIDS among black Africans in diaspora than that in the host population raises questions about the connections that are made between race, stigma and disease (Worth 1996). Although little data exist on the relationship between race and HIV/AIDS (UNAIDS/WHO 2001), evidence shows that race is a

strong predictor of variations in morbidity and mortality (Williams 1997). In order to understand the interplay between stigma and race and its relevance to HIV/AIDS, it is crucial to examine the concept of stigma. It can be argued black Africans in diaspora may face double stigmatization (Goffman 1963) because of their racial identity and because of being associated with HIV/AIDS. Associating people of black descent with infectious disease is not new. Historically especially in the USA, blacks were associated with filth, disease, superstition and anything to do with transmitting disease (Wailoo 2006). As a medical historian, Wailoo gave a chronology of events that shows that medical and scientific professionals contributed to the construction of the black body as a 'carrier' or a 'vector' of disease (Wailoo 2006 p531-532). He argues that in the early 20th century when infectious diseases were common, African Americans were portrayed as key disease vectors who were able to infect the rest of the American population. For example in the pictorial image of a disease vector, "a black woman is pictured flying alongside the mosquitoes, the flies, and other disease vectors in a cloud of dust, leaving her filthy habitat that waves the flag of contagious disease" (Wailoo 2006 p531-532). One of the diseases that was causing significant mortality and morbidity was the hookworm which was blamed on the 'Negros' which:

"Possibly indicates that the negro has brought [it] with him from Africa...and spread it broadcast through the South....We must frankly face the fact that the negro....because of his unsanitary habit of polluting the soil....is a menace to others (Stiles 1909 p 1126).

Wailoo (2006) also argued that cancer in the 1920s to 1940s was widely feared and regarded as a death sentence, but because it was found among the white population, it was presented differently. For example, it was portrayed as a disease of rich women and social leaders, or a "disease of civilization and a disease originating in refined living and lifestyles; the disease was unknown, experts said, among so-called savage and primitive cultures" (Wailoo 2001 p 56). He added that the message of hope for cancer sufferers was preached and physicians embraced such an image and encouraged white women to be aware of symptoms. However, things changed when it was observed that non-white Americans were indeed susceptible to cervical cancer especially 'Negros'. Wailoo (2001) commented that the research that followed showed that cervical cancer was associated with age at first sex, age at marriage, frequency of sex and sex with uncircumcised partners. These findings led to the study of how morality and behavioural choices could have led to the personal suffering of

the individuals involved.

The stigmatization of black Africans in relation to disease has not disappeared and HIV/AIDS brought to the surface the pre-existing prejudice, anxiety and discrimination against black people. The stigma against black Africans is centered around 'African sexuality' and many in the West perceive African sexuality as excessive, animal-like, primitive and promiscuous (Worth 1995; Lichtenstein 1996; Worth 1996; Parker and Aggleton 2003). The following section discusses three examples of the ways that black Africans were portrayed in the media when some of them infected women in New Zealand and Norway. In Israel, the discussion looks at racism and the fear of Africans and HIV contamination. Three countries were selected because the cases are some of the most prominent in recent times.

In 1994, a Kenyan musician called Peter Mwai was found guilty of grievous bodily harm for infecting a woman with HIV, and of reckless disregard for the sexual safety of four others (Worth 1995). The Peter Mwai case is associated with HIV/AIDS and Africans in New Zealand because it was the first case and it caused a lot of emotional reactions and racial stereotyping. Even now, his name is always mentioned whenever there is deliberate HIV infection in New Zealand. In addition, sexual relationships between black men and white women were reported in this study and there are similarities to the debates that occurred during the Peter Mwai case, in which he was portrayed as black and a carrier of HIV.

Lichtenstein (1996) argues that the media portrayed Peter Mwai as a "polluter of New Zealand women, one who systematically and deliberately set out to entice white women into having sex with him while he was touring with his band" (Lichtenstein 1996 p 68). Lichtenstein also observed that "the discourse about the carnality of Africa was highly explicit in the media reportage at the time. It revolved around the primitive, excessive sexuality of the black African man, Africa as an infectious continent and was counter pointed to the need to protect the innocent white women of New Zealand" (Lichtenstein 1996 p 68). Negative reaction towards the Peter Mwai case did not come out of a vacuum, but was a result of what was already boiling underneath the surface among the New Zealand public (Worth 1995). The year before saw the arrival of the first Somali refugees and a lot of calls were made in the media demanding mandatory testing for HIV (Worth 1995). Similarly, the arrival of thirteen

stowaways from Africa in November 1995 caused public outcries because they were not tested for HIV (Worth, Reid et al. 1997). Both Somali refugees and stowaway Africans were 'tagged' as a 'high risk group' and were perceived to be HIV positive because they were African (Worth 1995). Politicians too expressed their views on this matter and used the Mwai case to support mandatory HIV testing for refugees and migrants. On 26th of May 1996, the then Member of Parliament Honourable John Banks and the former Mayor of Auckland read a letter on Radio Pacific talk back programme, which he claimed came from the prison officer who said that "Peter Mwai should be swinging in trees in the Congo" (BSA 1996 p 1). This comment was later taken to the Broadcasting Standards Authority (BSA) who ruled that the words used were offensive and one of the oldest slurs used against blacks which portrayed black people as no better than monkeys (BSA 1996).

This kind of stigma was observed by Goffman (1963) when he stated that being a member of a certain race or group could be a significant source of stigma. Because of the racial stigma, it was not only Peter Mwai as a person who was on trial but what he represented; blacks, Africans and Africa. In fact, the African community then was very traumatized and faced public fury; black men reported being spat at while walking down Queen Street in Auckland, and it was as if all black people were on trial. Black Africans who were in New Zealand at that time, remember those days with emotion, as one African community leader and academic said, Peter Mwai is the name many Africans would rather forget (Chile 2002). Stigma and prejudice can inform policies that may end up being discriminatory and uninformed by public health knowledge. For example, the outcome of the Peter Mwai case was the recommendation that mandatory HIV testing be implemented and women who had sex with men 'at risk' or from higher prevalence groups or countries should have antenatal HIV testing if pregnant. The issue of unsafe sex that was the root cause of this story was never considered (Worth 1995). To the public, HIV/AIDS was a foreign problem that could be contained by imposing mandatory HIV testing for migrants, I would argue especially Africans.

Peter Mwai's case was not to be the last one. In 2004 an HIV positive African man called Shingirayi Nyarirangwe was sentenced to three years jail after pleading guilty to four charges of criminal nuisance and three of assault, relating to unprotected sex

with several women, infecting one with HIV (Gower 2004). The media frenzy did not happen in this case. It is interesting to note that the woman who was infected and most of those he had unprotected sex with, were black Africans. Another 35 year old HIV positive African man named Artwell Chakanyuka was jailed for eight years in February 2010 for infecting his 33 year old African wife with HIV by pricking her with a sewing needle laced with his contaminated blood while she slept. He claimed that he wanted his wife to have sex with him after she had stopped a year earlier for fear of infection. As horrifying as this case was, the New Zealand public seemed to accept the plea from the New Zealand AIDS Foundation which asked for an 'understanding' and to treat the case as an isolated incident (NZPA 2010). For the African women in New Zealand though, it seems that when they are violently and intentionally infected by one of their own, there is no outcry or outrage from the public.

It can thus be argued that the media and the public at large treat cases that involve Africans with Africans differently compared with the cases that involve Africans with non-Africans, especially African men and white women. For example the case of Glenn Mills of Auckland did not receive the same coverage as did the Peter Mwai case. Glenn Mills, a white male was arrested and charged with 14 allegations of infecting or attempting to infect 14 men and women with HIV. Seven of his partners tested positive for HIV and one woman fell pregnant to him (Savage 2009). He committed suicide while awaiting trial in prison. Although his case was reported briefly in the media, he did not face the same scrutiny reserved for black Africans, despite infecting far more people than Peter Mwai. This differential treatment can also be seen in the issues of race and the death penalty in the USA. It was found that the severity of punishment and the media coverage depended on the race of the victim. For example, although both blacks and whites are victims of murder, the black defendant was 3.5 times more likely to be executed if his victim was white than if the victim was black (Unah and Boger 2001).

A Norwegian case also served to construct African migrants as a 'problem'. In 1996 the Norwegian authorities through the Norwegian Board of Health, held a press conference. The main aim of which was to warn the white population that African migrants and refugees were potential HIV 'carriers', because six Norwegian women

were infected by African men. The statement as reported by Migrants Against AIDS (MAA) read:

The Board warns Norwegian women and men against having unprotected sex with Africans, especially those that come from south of the Sahara. Public health officials cited two cases of African men supposedly responsible for the infection of six Norwegian women and new studies which show that a number of Norwegian women have sex with African men (MAA 1996 p 1).

Within a week of this announcement, Africans in Norway and some Norwegian organisations united in anger and protested at the Ministry of Health to demand an apology. They considered the official warning to the white population about black Africans an act of institutional racism because the health board was a representative of the state. The head of the Board said that she stood by her statement, although she did not mention that one of the men in question had died and the other one had already been deported. The media picked up the story and announced that 10% of the 12,000 Africans in Norway were HIV positive. This figure was incorrect as it was estimated the correct figure to be around 2% (Haour-Knipe 1996). The Health Board was silent about the incorrect headlines in the news (MAA 1996). In the Norwegian case the Board appeared to be only concerned about the risk to the white population (Haour-Knipe 1996). She argued that the health board did not mention that Africans may also be at risk, they only asked white Norwegian women and men who had sex with Africans to seek help. This case is similar to the New Zealand one because once again the 'experts' failed to address the issue of unsafe sex and appealed to people's prejudices.

In Israel, the case of Africans and HIV/AIDS happened in Jerusalem on the 24th of January in 1996, when a newspaper reported that the Israeli blood bank had been discarding the blood donated by Ethiopian Jews for the past 12 years for fear of HIV contamination (Kaplan 1998a; Ben-Eliezer 2007). What made this case so unique is that the Ethiopian donors were never told that their blood was discarded almost on a daily basis for the past 12 years. The violent protest that erupted from the 10,000 Ethiopians left 70 protestors and policemen injured and brought issues of racism to the surface (Ben-Eliezer 2007). Ethiopians like many Africans, regard blood as sacred and spilling their blood meant more than simply discarding unwanted donors' blood,

but it mean the rejection of people. As Ben-Eliezer observed, the blood bank issue was the last straw for Ethiopians in Israel who:

“Were frustrated and embittered because of the day-to-day discrimination they endured. Veteran Israelis did not want to sit next to them on the bus and they did not receive an equal opportunity in the job market. Classrooms and schools emptied out when young Ethiopians entered them, and private kindergartens refused to accept Ethiopian toddlers because they were “different.” Indeed, everyday life exposed the color barrier and brought to the surface racist tendencies in Israel between a Jew and a Jew. There was no residential integration, no intermarriage, and no integration in education” (Ben-Eliezer 2007 p 1).

Under questioning the head of the blood bank and medical representative defended their exclusion approach by invoking the ‘risk group’ category and revealed that an Ethiopian donor was 50 times more likely to be HIV positive compared to an Israeli (Ben-Eliezer 2007). This statement frightened the public and incited the public against Ethiopians who were left helpless. Again the knowledge of an ‘expert’ was used against the disadvantaged minority. As Goffman (1963) noted perceptions about stigmatized groups may inform discriminatory social policies. In this case, the head of the blood bank was an expert, who reinforced what people already feared; ‘the negro’ or black contagion. Interestingly, the blood bank did not disclose that by using the same calculations, an immigrant from America was 25 times more likely to be HIV positive compared to an Israeli but they did not ban their blood donation (Ben-Eliezer 2007). It can be concluded that their exclusion was not informed by science as they claimed, but by their beliefs and prejudices about African blood and race. Again this is not new, in 1964 a writer in the USA described the danger of having ‘Negro’ blood:

The one who has got the smallest drop of Negro blood, he is as one who is smitten by hideous diseases. Inside him are hidden some unknown and dangerous potentialities, something which will sooner or later crop up (Myrdal 1964 p 100).

This policy of excluding African blood is still current in Israel and The Ministry of Health continues the ban on Ethiopian blood donation despite protests from affected communities and human rights groups.

Most studies on stigma usually emphasize the effects of stigma on minorities and ignore the stigmatizing attitudes held by the minorities towards their perceived stigmatizers. According to Parker and Aggleton (2003) while the developed world

perceived excessive African sexuality as the main cause of HIV/AIDS, Africans perceived that Western immoral behaviors were responsible. In the Peter Mwai case, the media and the public ignored one crucial part; that women agreed to have unsafe sex with Mwai, a stranger, and blamed Africans as a group. On the other hand Africans ignored the fact that Mwai knew he was HIV positive and deliberately had unprotected sex with multiple women and blamed the whole story on racism. Both the New Zealand and the Norwegian cases highlight an important issue which is the sexual relationships between black men and white women, especially when transmission of HIV from black men to white women is suspected.

10.7 Conclusions

This chapter has shed some light on how Africans in Christchurch view their risk of HIV infection and indeed other risks. All of these risks are, of course, culturally mediated as has been explored in both Chapter Nine and this chapter. Although the study participants were highly educated and had a general knowledge about HIV/AIDS, some participants held beliefs and misinformation that may increase the risk of HIV infection. The belief that you can tell who is infected by looking at their weight indicates the lack of information about the differences between being HIV positive and having AIDS and ignores the fact that those who are receiving treatment for AIDS, may look quite well. Compounding the belief that New Zealand is HIV free is the fact that there are no visible AIDS symptoms, no AIDS deaths and the relative lack of information and messages about HIV in the media and health centers.

One of the key findings in this study is in regards to women's attitudes towards condom use. Both married and single women appraised condom use negatively viewing them as barriers to love, intimacy and sexual satisfaction. Condoms were also viewed negatively because of their association with trust, infidelity, casual sex, HIV, STD, disease and commitment. To the contrary, sperm was viewed as a crucial part of sex, love, giving and connectedness. To some women, sperm was not just body secretion that should be blocked by condoms to prevent diseases and pregnancy but something special that was important to the woman's enjoyment and satisfaction during sex. This belief is contrary to biomedical approaches that view sperm as

simply biological material that must be blocked by condoms to prevent HIV. Biomedical approaches fail to view sex in a broader cultural context and this is especially so with respect to the importance attached to sperm.

Sexual relationships between black men and white women were reported to be common in Christchurch. Participants provided detailed accounts about white women who only have sex with black men. Although it was not established if condoms were used during such sexual encounters, it can be argued that those women are at risk of both acquiring and transmitting HIV to their sexual partners including black men they have sex with. Currently, the Ministry of Health funds programmes that work with populations mostly affected with HIV namely; MSM and black Africans. In a way, the Ministry of Health guided by the epidemiological evidence; has created its own 'risk groups' for HIV in New Zealand. It can be argued that the Ministry of Health assumed that Africans only have sex with Africans and this study has shown that this is not always the case and people who do not belong to these groups and are at risk of HIV are marginalised. Such groups also include female sexual partners of bisexual men who are equally at risk of HIV infection. The key conclusion of this chapter is though, the straightforward but still challenging claim that like any other forms of risk, HIV risk cannot be fully examined outside the cultural context and that applying a sociocultural approach to investigating risk has enabled a much deeper understanding of the ways that people respond to, manipulate and ignore risks to their sexual health. The implications for future HIV/AIDS prevention efforts among Africans in New Zealand that are evident from this research are elaborated in the next and final chapter of the thesis.

Chapter 11 Conclusions

11.1 Introduction

Black African migrants and refugees from Sub-Saharan Africa in New Zealand carry a disproportionate burden of HIV infection second only to MSM. In spite of the higher HIV prevalence, there has been no research on HIV-related sexual behaviours, attitudes and practices among this group. This is in contrast to the MSM group where periodic sexual behaviour surveys are conducted every two years (Saxton, Dickson et al. 2002; Saxton, Dickson et al. 2003; Saxton, Dickson et al. 2004; Saxton, Dickson et al. 2006; Saxton, Dickson et al. 2010) to inform interventions. This study set out to investigate HIV-related sexual behaviours, attitudes and practices of black African migrants and refugees in Christchurch. The study has identified behaviours and practices that increase the risk of HIV infection and transmission and factors that influence such behaviours. . I have also developed a model based on the findings from the focus groups discussion (See Section 11.8). This model can be used for HIV related activities among black Africans in Christchurch, New Zealand and in the diaspora.

I chose to use sequential mixed methods (survey and focus group discussions) as described in Green, Caracelli et al. (1989) whereby findings from one method are used to complement the findings of the other method. The survey enabled me to study the prevalence of HIV-related behaviours, attitudes and practices while the focus group discussions helped me to understand in more depth, influences of such behaviours. This study was conducted in four main stages namely community consultation, the social mapping exercise, survey phase, followed by the focus groups. Community consultation involved working with African community leaders to nominate the community researchers who gathered the survey data. The social mapping exercise was conducted by identifying social venues and events attended by black Africans in Christchurch. The survey phase involved distributing and collecting study questionnaires during different social events and gatherings. Focus group discussions were conducted to explore some of the findings from the survey and participants were selected purposively to generate a diversity sample.

This study is the first of its kind in New Zealand and provides much needed empirical

evidence to inform HIV interventions among black Africans in New Zealand. Although studies among Africans in diaspora (Gras, Weide et al. 1999; Chinouya, Davidson et al. 2000; Yewoubdar 2000; Sinka, Mortmer et al. 2003; Chinouya and Davidson 2004; Tharao, Massaquoi et al. 2006; Sadler, McGarrigle et al. 2007; Lemoh, Grierson et al. 2010) have identified the factors for HIV risk and vulnerability, most of them have not investigated the role of culture in depth as has been the case in this research. This study has contributed to the literature by exploring in more depth, the connections between culture, risk and HIV. I started out looking at cultural sexual behaviours that increase or prevent HIV and the prevalence of particular behaviours. Over the course of the research, it became evident that culture also influences how people understand risk and HIV. Rather than looking at culture as simply one factor, there was a need to investigate cultural understandings because these understandings permeated how people made sense of everything to do with their daily lives, including HIV, risk and sexual behaviours. These findings therefore contribute to our understanding of HIV-related behaviours among Africans in the diaspora.

11.2 HIV Risk Factors and Behaviours

One area of interest in this study was to investigate HIV-related behaviours and risk factors or vulnerability. Risk behaviours are behaviours that create, increase and perpetuate risk, while HIV vulnerability refers to the factors that reduce the ability for individuals or communities to avoid HIV infection (UNAIDS 2007a). As evidenced by the findings of this study, both HIV risk factors and vulnerability were identified. These included low condom use, having sex with multiple sexual partners including MCP, previous STD diagnosis, lack of HIV risk perception, HIV testing and shifting gender roles due to migration, and these have been explored in detail in Chapters Eight, Nine and Ten. Some of these factors have also been reported by other studies on HIV among black Africans in the diaspora (Gras, Weide et al. 1999; Chinouya, Davidson et al. 2000; Yewoubdar 2000; Sinka, Mortmer et al. 2003; Chinouya and Davidson 2004; Tharao, Massaquoi et al. 2006; Sadler, McGarrigle et al. 2007; Lemoh, Grierson et al. 2010).

Utilising socio-cultural approaches to risk enabled a more comprehensive understanding of the ways that participants understood risk and this approach offered

significantly more depth to the analysis which could not have been provided by technico-scientific approaches. As already indicated, cultural understandings influenced all the factors that I was concerned to investigate. However, I must make it clear that I am not suggesting that culture is somehow to blame for HIV risk behaviours among Africans but instead, that we must understand culture better. The failure of previous HIV interventions may be at least partially due to attempts to 'eradicate' cultural practices that we thought to be harmful (Gausset 2001). It may be much more productive to work with culture rather than against it. Cultural understandings are sometimes at odds with the biomedical approach to HIV risk and prevention that is commonly used in western countries. In Chapter Seven, I argued that models and theories used in HIV prevention such as the health belief model and theory of reasoned action have failed to change people's sexual behaviours in Africa because they are individualistic in nature and do not take into consideration the influence of culture in understanding and responding to risk and disease. These theories often focus on individual behavioural change and attempt to increase people's knowledge, education and information about how to reduce the risk or the likelihood of getting certain diseases. Investigating culture and the challenges of acculturation as has been done in this study allows us to move on from simplistic understandings of how sexual practices play out in new cultural contexts. In the following sections I discuss the influence of culture in a range of areas. These thematic areas emerged from the focus group discussions and need to be understood much more deeply than has previously been the case, in order to develop more effective interventions.

11.3 Condoms and Culture

Consistent and proper use of condoms plays a key role in HIV prevention and provides clear public health benefits. Condom use remains the best way to prevent HIV transmission from an infected to an uninfected sexual partner. This is particularly important for couples who are serodiscordant. Despite the benefits of condom use, this study found low levels of condom use and negative attitudes towards condoms, especially among women. The most common source of resistance to condom use among women was not gender imbalances and the difficulty of negotiating condom use, but what the use of condoms symbolised about the character of the relationship

and how people understood sexual satisfaction.

I have argued in Chapter Ten that one of the issues that is inadequately addressed in the area of sexual health is what sex means for different cultures and people. The very definition of sex among participants is at odds with condom use because participants indicated that true sex happens when sexual organs touch and the exchange of sperm and vaginal fluid take place. These findings have important implications because current HIV interventions in New Zealand promote the use of condoms in preventing HIV in African communities. Africans are provided with free condoms and graphic information on how to use them because providers perceive that free access and information will encourage condom use. The findings of this study indicate that there is a need to reconsider this approach and prevention activities need to address and deal with the cultural meaning of sex, especially the emotional aspect of sex, rather than the biomedical understanding that deals with biological transmission of HIV.

11.4 MCP and Communication

In Chapter Four, I discussed in detail the literature about the practice of MCPs and its association with HIV transmission. In Chapter Nine, I explored the factors that influence the practice of MCP among Africans in Christchurch. Lack of communication about sexual styles was identified as an important reason why both men and women sought to fulfill their sexual needs outside their current relationships. Lack of communication can be attributed to culturally sanctioned gender roles where men and women are supposed to behave in a certain manner. Women feared that they would lose status as a 'respectable' wife or woman if they indicated that they knew more about sex or wanted to explore more sexually with their husbands. Men, on the other hand, wanted to maintain the 'formal' image of marital sex with their wives that involved having sex in certain way. This culturally constructed and largely unspoken understanding of what marital sex was, created the potential for both women and men to rely on 'side partners' for sexual variety and fantasy. In the past before the arrival of HIV, the practice of MCP did not pose real physical danger, but the arrival of HIV makes this practice potentially fatal. While Africans are not alone in the tendency not to discuss sexual matters openly, there is a need to promote communication among couples. This communication should include a strategy to promote sexual variety as a means to keep sex within the relationship or marriage. This strategy could include

working with both men and women to explore more about what sex means to them, what condoms mean to them and how they think the issue should be addressed. Instead of simply telling people about the dangers of having multiple sexual partners, it is likely to be more productive to get people to talk about sex. Although this could be a sensitive issue, this study has shown that Africans can and will discuss sex explicitly given the right environment and facilitation.

11.5 Migration and Gender Roles

The process of adjusting to the new culture posed challenges to gender roles for participants. Men felt disempowered in a new country while women felt empowered because of their increasing economic independence. Chapter Nine showed that there are concerns about the increase in domestic violence as the result of being in the new country. Two cases highlighted by women in Chapter Nine show the effect of domestic violence on women. Although domestic violence was ever present in Africa, women reported that abuse had intensified in New Zealand. Indeed, even those who did not experience domestic violence at all in Africa reported marital conflict due to the stress related to immigration and acculturation. Although women felt empowered in New Zealand, their cultural beliefs and background affected the way they responded to domestic violence. They were concerned about reporting their husband to the police for fear of breaking and destroying their family.

As well as the links that have been documented between increased risk of HIV infection and domestic violence, these findings have policy implications because domestic violence interventions in New Zealand are designed to reach mostly Pākehā (White New Zealanders), Māori and Pacific Island populations. The notable absence of data on domestic violence among refugee and migrant communities in New Zealand contributes to a lack of understanding on how to provide evidence-based interventions. While to some extent it is understandable that issues such as domestic violence may not have been thought to be significant in the light of all the other challenges that migrants and refugees encounter, there is a need for those working with migrants and refugees from Africa and other continents, to consider the issue of gender roles and how these are disrupted on migration. It is vitally important to understand what the likely impact of changing expectations of gender roles might have on, in particular, relationships, HIV risk, and incidence and on the potential for

domestic violence. Programmes should aim at helping and empowering men in the new cultural environment. There is also a need to have culturally appropriate programmes that address domestic violence among Africans in New Zealand. Health workers working with HIV positive Africans should assess domestic violence risk and provide appropriate interventions especially for serodiscordant couples where a man is HIV positive and a woman is HIV negative. Training in cultural sensitivity should also extend to other agencies such as police, social workers and community services.

11.6 Cross-Cultural Sexual Mixing

In countries with concentrated HIV epidemics such as New Zealand, UNAIDS (2007a) advocates for targeted interventions for key populations. As evidenced in Chapter Ten, sexual relationships between black men and white women were reported to be common in Christchurch. It can be argued that white women who have sex with black men are at risk of both acquiring and transmitting HIV to their sexual partners, including black men they have sex with. Although there are prevention programmes for black Africans, there are no programmes for sexual partners of black Africans who are not African. In order to influence any behaviour, including sexual behaviours, it is important to design programmes that target both the primary and the secondary audience. The primary audience can be defined as an individual or people who are mostly affected by the health problem and the secondary audience are those people who have contact or those who directly influence the primary (FHI 2002). In this case, the primary audience is black Africans and the secondary audience encompasses people they interact and have sex with. There is a need therefore to re-think the way HIV interventions that target populations are conducted to make sure that the secondary audience is included in HIV prevention activities. This study also identified 'hot spots' where 'hunting' for sexual partners usually takes place, namely night clubs and bars. These settings could provide avenues for HIV interventions and a peer education approach may be appropriate for these settings.

11.7 Leaving HIV in Africa: Implications for HIV Testing

Africans in the diaspora including in New Zealand believe that they have left HIV/AIDS in Africa. In addition, although research among Africans in the diaspora has demonstrated that Africans are at increased risk of both acquiring and transmitting

HIV, Africans themselves do not perceive that they are at risk of HIV (Tharao, Massaquoi et al. 2006; Dodds, Hickson et al. 2009; Lemoh, Grierson et al. 2010). In Chapter Ten, I highlighted that Africans in New Zealand, like other Africans in the diaspora, struggle to comprehend that they can be infected with HIV in New Zealand. In Chapter Two, I argued that mandatory HIV testing for foreigners can give a false sense of security to the host population who might believe that HIV has been controlled by keeping those who are infected out of the country. Although the mandatory HIV testing for migrants introduced in New Zealand in November 2005 may have identified those infected then, this policy cannot guarantee that those who were HIV negative at entry will remain negative in New Zealand. This study found that Africans believed Africans who are in New Zealand are HIV negative because those who were infected were not allowed in. Compounding this issue is the fact that HIV statistics are not fully discussed or highlighted to those working outside the HIV sector in New Zealand.

It can be argued that HIV-related services in New Zealand were mainly created to cater for MSM, more specifically white men, and that there are few, if any, strategies for reaching black MSM. Although the epidemiology of HIV/AIDS in New Zealand has moved on from the 1980s and early 1990s when HIV exclusively affected MSM, policies and services for HIV have not. The domination of the perspectives of MSM in the area of HIV/AIDS in New Zealand may have contributed to the relative exclusion of other population groups affected by HIV, especially women, heterosexual men, black Africans and Asians, from HIV prevention strategies. For example, there is no HIV testing strategy for black Africans and other population groups in New Zealand, and there are no culturally appropriate places for HIV testing for Africans. As already indicated in the previous sections, poor access to HIV services was cited as one of the main reasons black Africans in the diaspora tend to present late with HIV diagnosis. HIV prevention measures should place more emphasis on the fact that HIV affects other communities in New Zealand that may be culturally and socially different from MSM.

Currently, the Ministry of Health (MoH) funds a programme for HIV prevention in African communities under the aegis of the New Zealand AIDS Foundation (NZAF). This programme only funds HIV prevention activities, especially promotion of safer

sex, and not promotion of voluntary testing for HIV. On the NZAF website, Africans are virtually invisible and the website is not customised to reach non-MSM groups. Since the internet is a relatively private way to access information, this source is especially important and could be constructed in a much more inclusive way as it is very difficult for any African to find information that may address their specific needs. Such needs include information on prevention of mother to child transmission, sero-discordancy, breastfeeding, HIV and prevention of sexual HIV transmission for heterosexual men and women. In addition, there are no services to cater to the needs of Africans living with HIV and there is an invisibility of black Africans in decision-making processes surrounding HIV services. The key message on the website is “get it on” which is aimed at promoting condom use always. The real stories of people talking about HIV or AIDS on the website (<http://www.nzaf.org.nz/real-people>) include two Africans who make it categorically clear that they are HIV negative while non-Africans declare that they are HIV positive. These stories may reinforce the belief that there is no HIV among Africans in New Zealand. In general, black Africans in New Zealand are currently constructed as subjects of prevention policies that may not be based on evidence.

It is therefore recommended that an HIV testing and prevention strategy for Africans in New Zealand should be developed. The best available evidence, knowledge and epidemiological information should be used to clarify strategic aims and objectives. This strategy should use an audience segmentation approach to identify who is at risk within the African communities, why and what strategies are best to reach them. More efforts should be made to reach those who were in New Zealand before November 2005. The strategy should aim at greater involvement of Africans living with HIV because any new infection involves someone who is already HIV positive. Efforts should be made to recruit HIV positive speakers who are African. This may help in dispelling the myth that there is no HIV among Africans in New Zealand.

Data on HIV and AIDS in New Zealand should be disseminated to Africans using appropriate channels. Such channels may include social venues and events such as those identified during the social mapping phase of this study. Potential barriers to and opportunities for HIV testing should be clearly established and this thesis goes some way towards identifying these. Information on benefits of early diagnosis and

treatment should be included in HIV education. HIV services targeting Africans should be culturally appropriate and acknowledge the target population. Specific risk behaviours should be targeted by using culturally acceptable approaches and healthcare providers especially, primary care providers working with Africans should be trained in how to sensitively introduce HIV testing to their patients. Rapid testing for HIV should be promoted in HIV education and those who have tested for HIV should be encouraged to re-test, especially if they have engaged in unsafe sex.

11.8 New Models for Intervention

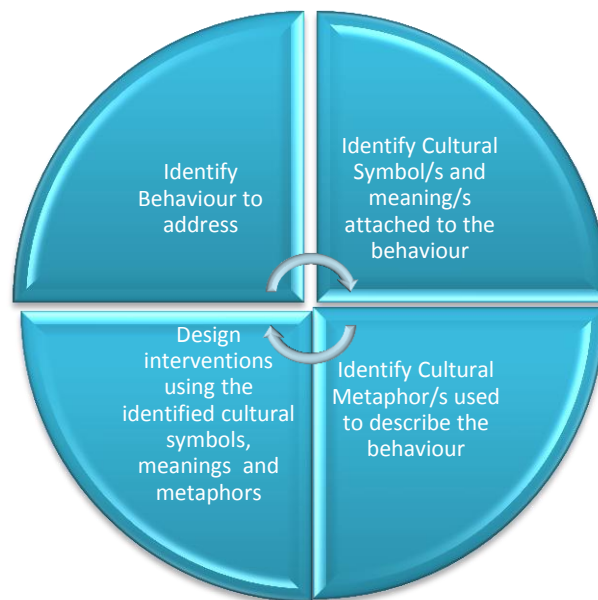
Earlier in this chapter, I rehearsed the argument that current models informing the design of interventions to reduce the spread of HIV in Africans have important deficiencies in that they do not address the cultural context of behaviour and interventions and are less effective, or ineffective as a result. I have drawn on the findings from the focus group discussions to develop an alternative model for understanding behaviours and designing intervention activities. I argue that in order to be effective in addressing risky behaviours among African migrants and refugees in Christchurch, interventions that address the cultural meanings, symbols and metaphors used to understand and describe sex and sexual behaviours are needed. Audience segmentation strategy (UNICEF 2008) should also be used as different groups (such as men, women and young men/women) may have different understandings. A potential model drawing on the findings from the focus group discussions is described below. This model has four main steps:

1. Identify the behaviour(s) to address
2. Identify cultural symbol(s) and meaning(s) attached to the behaviour
3. Identify cultural metaphors(s) used to describe the behaviour
4. Design interventions using the identified cultural symbols, meanings and metaphors

Identifying the behaviour will involve working with the community and building relationships with key community members and leaders. This relationship-building phase should not be taken lightly. Time and commitment are required to gain the depth of information and community trust needed for the model to inform an effective intervention. This work should be done if possible by someone from the community

who has a deeper understanding and appreciation of the African culture and they must be of good standing in the community. Focus groups and in-depth interviews can be used to identify key behaviours and cultural meanings, symbols and metaphors used to describe the behaviours. Intervention activities should use culturally specific language for example, using proverbs or metaphors to describe behaviours. Figure 13 below attempts to describe the process of developing an intervention using the BMSMI Model.

Figure 13: Using the BMSMI (Behaviour, Meaning, Symbol, Metaphor and Intervention) Model



In the Table 46 below, I give an illustrative example of how the model could be used to design interventions to address the issues of sex and condom use especially among women.

Table 46: Using the BSMI Model in Addressing Sex and Condom use in African Women

Behaviour or Practice	Cultural Meaning and Symbol Attached to Sex and Condoms	Cultural Metaphor to Describe Sex and Condoms	Possible Intervention Messages
<p>Sex and Condom use in Women</p>	<p>Meaning: Sex occurs when a man and a woman exchange sexual fluid during penetrative vaginal sex</p> <p>Sex with Condoms is:</p> <ul style="list-style-type: none"> • Not real sex • like rape <p>Sex without condom:</p> <ul style="list-style-type: none"> • It is real sex • It means intimacy • Shows that a man loves you • Feels warm and sweet <p>If a man uses a condom it means:</p> <ul style="list-style-type: none"> • He does not love me • He is not close to me • He does not want to have children with me • He has HIV and wants to protect me • He thinks I have HIV and wants to protect himself • He thinks that I am a prostitute • He thinks that I have been sleeping around 	<p>Metaphor used to describe sex</p> <ul style="list-style-type: none"> • Sweet (roll-pops) • Cookie • Food • Doughnuts <p>Metaphor used to describe sex with condom</p> <ul style="list-style-type: none"> • Eating sweets in wrappers • Taking a shower while wearing a rain coat <p>Metaphor used to describe sex without a condom despite the danger of getting HIV</p> <ul style="list-style-type: none"> • A cow dies with grass in its mouth 	<p>What is done if <i>sand</i>³ is threatening to enter your food?</p> <p>What happens if your beloved doughnuts have been contaminated with <i>sand</i>?</p> <p>What is done usually to protect food?</p> <p><u>Covering is the key!!</u></p>

While further development of the above model and interventions is beyond the scope of this thesis, it is important that the findings of this study are used by others, and the black African communities of New Zealand, to help address the issues that have been identified in this study. Greater involvement of black Africans in all decision making process including the development, implementation and evaluation of policy, research and activities used to reach Africans should be monitored and evaluated to ensure the efficacy of the approaches used. Black Africans in New Zealand deserve nothing less in the place they have chosen to call home.

³ Sand means contamination. In many African countries, traders sell food in the open and once sand enters the food it becomes difficult to eat that food, for example, doughnuts. The best way to avoid sand is to cover the food. The key here is to get the community members to talk about covering (wearing condom) to protect food (sex). This has a deeper meaning for Africans and it brings them to understand concepts using metaphors and symbols that are common in their culture.

References

- Adams, J. (1995). Risk. London, UCL Press.
- Adler, P. and P. Adler (1987). Membership Roles in Field Research. Newbury Park, California, Sage.
- Adrien, A., V. Leane, et al. (1999). "Migration and HIV: An epidemiological study of Montrealers of Haitian origin." International Journal of STD & AIDS **10**(4): 236-242.
- AEG (2008). HIV and AIDS in New Zealand-2008. Dunedin, AIDS Epidemiology Group: University of Otago.
- AEG (2009). AIDS - New Zealand. Dunedin, University of Otago.
- AEG (2010). AIDS- New Zealand. Dunedin, AIDS Epidemiology Group (AEG), University of Otago.
- AEG (2011). AIDS-New Zealand. Dunedin, University of Otago.
- AEG (2012). AIDS - New Zealand in 2011. Dunedin, AIDS Epidemiology Group, University of Otago.
- Aggleton, P., G. Slutkin, et al. (1994). "Risking everything? Risk behaviours, behaviour change and AIDS." Science **265**: 341-345.
- AIDS-NZ (2012). AIDS-New Zealand Wellington, Ministry of Health. **Issue 70**.
- Airhihenbuwa, C. and R. Obregon (2000). "A critical assessment of theories/models used in health communication for HIV/AIDS." Health Communication **5**(Supplement): 5-15.
- Airhihenbuwa, C. and D. Webster (2004). "Culture and African contexts of HIV/AIDS prevention, care and support." Social Aspects of HIV/AIDS Research **1**(1).
- Akeroyd, A. V. (1997). Sociocultural Aspects of AIDS in Africa: Occupational and Gender Issues AIDS in Africa and the Caribbean. G. Bond, J. Kreniske, I. Susser and J. Vincent. Boulder, CO, Westview Press: 11-32.
- Akwara, P. A., N. J. Madise, et al. (2003). "Perception of risk of HIV/AIDS and sexual behaviour in Kenya." Biosocial Science **35**(3): 385-411.
- Alanis, M. C. and R. S. Lucidi (2004). "Neonatal circumcision: a review of the world's oldest and most controversial operation." Obstetric and Gynecology Surv **59**(5): 379-395.
- Altman, L. K. (1981). Rare cancer seen in 41 Homosexuals The New York Times. New York.
- Altman, L. K. (1983). Debate Grows on U.S. Listing Of Haitians in AIDS Category The New York Times. New York.
- Amnesty (2004). A summary of property rights violations against women in sub-Saharan Africa. Geneva, Amnesity International.
- Amon, J. (2009). Blaming foreigners: Republic of Korea. Geneva, UNHCR/Human Rights Watch.
- Anderson, J. (2010). Treat with Care: Africans and HIV in the UK. Mobility, sexuality & AIDS. T. Felicity, M. Hanour-Knipe and P. Aggleton. Oxford,

- Routledge: 80-90.
- Anderson, R. M., M. C. May, et al. (1991). "The spread of HIV-1 in Africa: sexual contact patterns and the predicted demographic impact of AIDS." Nature **352**: 581 - 589.
- Aneshensel, C. S., R. M. Becerra, et al. (1990). "Onset of fertility-related events during adolescence: A prospective comparison of Mexican American and non-Hispanic White females." American Journal of Public Health **80**: 959-963.
- Arcia, E., M. Skinner, et al. (2001). "Models of Acculturation and Health Behaviours among Latino Immigrants to the US." Social Science & Medicine **53**: 41-53.
- Asante, A., H. Korner, et al. (2009). Understanding late HIV diagnosis among people from culturally and linguistically diverse backgrounds. Sydney, National Centre in HIV Social Research, University of New South Wales.
- Asekun-Olarinmoye, E. O., J. O. Bamidele, et al. (2009). "Sexual Risk Behaviors and Risk Perception of HIV/AIDS among a Rural Adult Population in Southwestern Nigeria " Research Journal of Medical Sciences **3**(2): 80-86.
- Asiimwe-Okiror, G., A. Opio, et al. (1997). "Changes in sexual behaviour and decline in HIV infection among young pregnant women in urban Uganda." Acquired Immune Deficiency Syndromes **11**: 1757-1763.
- Asselin, M. (2003). "Insider research: Issues to consider when doing qualitative research in your own setting." Journal of Nurses & Staff Development **19**(2): 99-103.
- Attaran, A., K. Freedberg, et al. (2001). Dead Wrong on AIDS. The Washington Post. Washington: A33
- Attia, S., M. Egger, et al. (2009). "Sexual transmission of HIV according to viral load and antiretroviral therapy: Systemic review of meta-analysis." AIDS **23**(11): 1397-1404.
- Auver, B., D. Taljaard, et al. (2005). "Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 Trial." PLoS Med. **2**(11): e298.
- AVERT (2009). AVERTing HIV and AIDS: The ABC of HIV prevention, AVERT.
- Bailey, R. C., S. Moses, et al. (2007). "Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial." The Lancet **369**(9562): 643-656.
- Baleta, A. (1998). "Concern Voiced over "dry sex" Practices in South Africa." The Lancet **352**: 1292. .
- Barnett, T. (2005). "HIV/AIDS: sex, abstinence, and behaviour change." The Lancet **5**(9): 590-593.
- Bassett, I., J. Giddy, et al. (2007). "Routine voluntary HIV testing in Durban, South Africa: the experience from an outpatient department. ." J Acquir Immune Defic Syndr **46**(2): 181-186.
- BBC (2006). Kenya shock at mutilation death. BBC News. London.
- Beaglehole, A. (1988). A Small Price to Pay: Refugees from Hitler in New Zealand 1936-1946. Wellington, Allen and Unwin and Historical Branch, Dept of Internal Affairs.
- Becker, J. U., C. Theodosis, et al. (2008). "HIV/AIDS, conflict and security in Africa: rethinking relationships." International AIDS Society **11**: 3.
- Becker, M. H. (1974). "The health belief model and personal health behaviour." Health Education Monographs **2**: 324-508.
- Beksinska, M., H. Rees, et al. (1999). "The Practice and Prevalence of Dry Sex Among Men and Women in South Africa: A Risk Factor for Sexually

- Transmitted Infections?" Sexually Transmitted Infections **75**: 178-180.
- Belich, J. (2001). Paradise Reforged: A History of the New Zealanders from 1880s to the Year 2000. Auckland, Allen Lane The Penguin Press.
- Ben-Eliezer, U. (2007). Being a Black Jew in Israel: Identity Politics in the Post-hegemonic Era. Diaspora and Comparative Immigration Conference Massachusetts Centre for Israel Studies, American University.
- Bernard, E. J. (2003). 35% of HIV infections diagnosed late in England and Wales last year Aidsmap News, NAM.
- Bernstein, N. (2007). In Secret, Polygamy Follows Africans to N.Y. The New York Times. New York.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. Acculturation: Theory, models and some new findings. A. Padilla. Boulder, CO, West View Press.
- Bessinger, R., P. Akwara, et al. (2003). "Sexual behavior, HIV and fertility trends: a comparative analysis of six countries; phase 1 of the ABC study." BMJ **328**.
- Beston, A. (2006). Government offers HIV amnesty for Zimbabweans New Zealand Herald. Auckland.
- Biggs, B., M. Hellard, et al. (2006). Reducing the risk of transmission of HIV/AIDS in African and Arab speaking communities in Victoria: Final Report. Melbourne, Department of Human Services.
- Birukila, G. (2006). How to work effectively with Africans with HIV/AIDS: A guide for health care workers. Auckland, Merck Sharp & Dohme.
- Birukila, G. (2007). Attitudes towards voluntary counselling and testing for HIV among African migrants and refugees in Christchurch. Department of Public Health and General Practice. Christchurch, Otago. **Master of Public Health (MPH): 88**.
- Bodley, J. (1999). Victims of Progress. Mountain View, CA, Mayfield.
- Boer, H. and J. T. Emons (2004). "Accurate and inaccurate HIV transmission beliefs, stigmatizing and HIV protection motivation in northern Thailand." AIDS Care **16**(2): 167-176.
- Boholm, A. (1998). "Comparative studies of risk perception: A reviews of 20 years of research." Journal of Risk Research **1**(2): 135-163.
- Bond, V. and P. Dover (1997). "Men , women and trouble with condoms: Problems associated with condom use by migrant workers in rural Zambia." Health Transition Review Supplement **7**: 377-391.
- Bongaarts, J., P. Reining, et al. (1989). "The relationship between male circumcision and HIV infection in African populations." AIDS **3**: 373-377.
- Boonzaire, F. (2005). "Women abuse in South Africa: A brief contextual analysis." Feminism and Psychology **15**: 99-103.
- Borkan, J. M. (2004). Mixed Methods Studies: A Foundation for Primary Care Research Annals of Family Medicine.
- Boski, P. and J. Kwast-Welfeld (1998). A quest for a more cultural and more psychological model of psychological acculturation 14th Congress of the International Association of Cross-Cultural Psychology, Bellingham, WA.
- Brady, M. (1999). "Female Genital Mutilation: Complications and Risk of HIV Transmission." AIDS Patient Care and STDs **13**(12): 709-716.
- Brennan, R. O. and D. T. Durack (1981). "Gay compromise syndrome." The Lancet **2**: 1338-1339.
- Breuer, F., K. Mruck, et al. (2002). "Subjectivity and reflexivity: An Introduction." Qualitative Social Research **3**(9).
- Brown, J., O. B. Ayowa, et al. (1993). "Dry and Tight: Sexual Practices and Potential

- AIDS Risk in Zaire." Social Science and Medicine **37**(8): 939-994.
- Brown, J. E. and R. R. Brown (2000). "Traditional Intravaginal Practices and the Heterosexual Transmission of disease." Sexually Transmitted Infections **27**: 183-187.
- Brunham, R. (1991). "The concept of core and its relevance to the epidemiology and control of sexually transmitted disease." Sexually Transmitted Diseases **18**(67): 67-68.
- BSA (1996). Peter Mwai's Case. Wellington, BSA
- Buckley, S. (1997). Widow inheritance spurs AIDS rise in Kenya. Washington Post (Foreign Services). Washington.
- Bunnell, R., J. Nassozi, et al. (2005). "Living with discordance: knowledge, challenges, and prevention strategies of HIV-discordant couples in Uganda." AIDS Care **17**(8): 999-1012.
- Burns, F., M. Arthur, et al. (2009). "United Kingdom acquisition of HIV infection in African residents in London: more than previously thought." AIDS **23**(2): 262-266.
- Burns, F., A. Johnson, et al. (2008). "Missed opportunities for earlier HIV diagnosis within primary and secondary healthcare settings in the UK." AIDS **22**(1): 115-122.
- Buve, A. (2006). The HIV epidemic in Sub-Saharan Africa. Historical Perspective. P. Denis and C. Becker, Online edition.
- Caetano, R., S. Ramisetty-Mikler, et al. (2004). "Partner violence among Hispanic couples in United States: A longitudinal study " Hispanic Journal of Behavioral Sciences **26**: 60-78.
- Caldwell, J. C. and P. Caldwell (1987). "The cultural context of high fertility in Sub-Saharan Africa." Population and Development Review **13**: 409-437.
- Caldwell, J. C. and P. Caldwell (1996). "The African AIDS Epidemic." Sci Am **274**: 62-63.
- Carael, M. (1995). Sexual behaviour and AIDS in the developing world. London, Taylor and Francis.
- Carswell, J. W., G. Lloyd, et al. (1989). "Prevalence of HIV-1 in East African lorry drivers." AIDS **3**(11): 759-761.
- Carter, M. W., J. M. Kraft, et al. (2007). "'A bull cannot be contained in a single krall': Concurrent sexual partnerships in Botswana." AIDS and Behaviour **11**(6): 822-830.
- Carvalho, I., M. Haour-Knipe, et al. (2010). Migration and HIV Infection: What do data from destination countries show. Mobility, Sexuality and AIDS. F. Thomas, M. Haour-Knipe and P. Aggleton. London and New York, Routledge: Taylor & Francis Group: 10-23.
- Castilla, J., P. Sobrino, et al. (2002). "HIV infection among people of foreign origin voluntarily tested in Spain. A comparison with national subjects." Sex Transm Infect **78**(4): 250-254.
- CDC (1981). Pneumocystic Pneumonia. Morbidity and Mortality Report. Atlanta, Centres for Disease Control (CDC).
- CDC (2008). Male circumcision and risk for HIV transmission and other health conditions: implications for the United States. CDC HIV/AIDS Science Facts, Updated Atlanta, Centres for Disease Control
- Centre for Disease Control and Prevention (2005). " CDC HIV/Hepatitis/STD/TB Prevention News Update " (International News).
- Centre for Disease Control and Prevention (2007). Sexually Transmitted Diseases,

- CDC Fact Sheet. Atlanta, Centre for Disease Control and Prevention.
- Chadborn, T. R., K. Baster, et al. (2005). "No time to wait: how many HIV-infected homosexual men are diagnosed late and consequently die? (England and Wales, 1993-2002)." AIDS **19**: 513-520.
- Chadborn, T. R., V. Delpech, et al. (2006). "The late diagnosis and consequent short-term mortality of HIV-infected heterosexuals (England and Wales 2000-2004)." AIDS **20**: 2371-2379.
- Chen, X., J. B. Unger, et al. (1999). "Smoking patterns of Asian-American youth in California and their relationship with acculturation." Journal of Adolescent Health **24**(5): 321-328.
- Chersich, M. F. and H. V. Rees (2008). "Vulnerability of women in Southern Africa to infection with HIV: Biological determinants and priority health sector interventions." AIDS **22**(Suppl 4): S27-S40.
- Chile, L. (2002). The Effect of Peter Mwai's case on the African Community. G. Birukila. Auckland.
- Chin, J. (2007). The AIDS pandemic: the collision of epidemiology with political correctness. Oxford, Radcliffe Publishing.
- Chingandu, L. (2007). Multiple Concurrent Partnerships: The Story of Zimbabwe-Are Small Houses a Key Driver? Harare, Southern Africa HIV and AIDS Information Dissemination Services (SAfAIDS).
- Chinouya, M. and O. Davidson (2004). Assessing health related knowledge, attitudes and behaviours of HIV-positive Africans accessing services in north central London. London, African Policy Network (APN).
- Chinouya, M., O. Davidson, et al. (2000). The Mayisha Study: Sexual attitudes and lifestyles of migrant Africans in Inner London. London, NHS.
- Chinouya, M., K. Fenton, et al. (1999). Mayisha Study Social Mapping Report. London, AVERT.
- Chomba, E., S. Allen, et al. (2008). "Evolution of couples' voluntary counseling and testing for HIV in Lusaka, Zambia." Acquired Immune Deficiency Syndromes **47**(1): 108-115.
- Claude, R. P. and B. Weston, Eds. (2006). Human Rights in the World Community. Human Rights in the World Community. Philadelphia, University of Pennsylvania.
- Coast, E. (2007). "Wasting Semen: Context and condom use among the Maasai." Culture, Health and Sexuality **9**: 4,387-384,401.
- Cohen, J. and T. Tate (2006). "The less they know, the better: abstinence-only HIV/AIDS programs in Uganda." Reproductive Health Matters **14**(28): 174-178.
- Colson, E. (1962). The Plateau Tonga of Northern Rhodesia. Manchester, U.K, Manchester University Press.
- Colvin, M., S. S. K. Abdool, et al. (1998). "HIV infection and asymptomatic sexually transmitted infections in a rural South African community." International Journal of STD and AIDS **9**(9): 548-550.
- Corbett, E., B. Makamure, et al. (2007). "HIV incidence during a cluster-randomised trial of two strategies providing voluntary counseling and testing at the workplace, Zimbabwe." AIDS **21**: 483-489.
- Corrigan, B. (1996). HIV/AIDS Counselling : Palliative Care. Dar es Salaam, . Dar es Salaam Pastoral Services for AIDS in Archdiocese (PASADA).
- Cremin, I., P. Mushati, et al. (2009). "Measuring trends in age at first sex and age at marriage in Manicaland, Zimbabwe." Sexually Transmitted Infection

85(Suppl_1): i34-i40.

- Creswell, J. (2003). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Thousand Oaks, SAGE.
- Creswell, J., C. Plano, et al., Eds. (2003). Advanced Mixed Methods Research Designs. Handbook of Mixed Methods in Social and Behavioural Research Thousand Oak, Sage.
- Dallabetta, G. A., P. G. Miotti, et al. (1995). "Traditional Vaginal Agents Use and Association with HIV Infection in Malawian Women." AIDS **9**(3): 293-297.
- Dalton, J. (2008). Male circumcision inappropriate for the HIV prevention, NORM-UK.
- Darvishpour, M. (2002). " Immigrant women challenge the role of men: How the changing power relationship within Iranian families in Sweden intensifies family conflicts after, immigration." Journal of Comparative Studies **33**: 271-296.
- Davidson, O. and G. Birukila (2007). Mayisha NZ: Towards an evidence base to inform HIV prevention interventions in New Zealand's migrant African communities. Australasian Sexual Health Conference Brisbane, CSIRO Publishing.
- De-Walque, D. (2007). "Sero-discordant couples in five African countries: Implications for prevention strategies." Population and Development Review **33**(3): 501-523.
- de-Walque, D., J. Nakiyingi-Miir, et al. (2005). "Changing Association between Schooling Levels and HIV-1 Infection over 11 Years in a Rural Population Cohort in South-West Uganda " Tropical Medicine and International Health **10**(10): 993-1001.
- Denholm, N. (2003). FGM in New Zealand: Information for Health Care Providers. Auckland, Refugee Health Education Programme.
- Denzin, N. K. and Y. S. Lincoln, Eds. (2000). Introduction: Entering the field of qualitative research. Handbook of qualitative research Thousand Oaks, California, Sage Publications.
- Dias, S. F., M. G. Matos, et al. (2006). "AIDS-related stigma and attitudes towards AIDS-infected people among adolescents." AIDS Care **18**(3): 208-214.
- Dickson, N., M. Henrickson, et al. (2012). An Estimate of Currently Resident and HIV Positive Africans in New Zealand. Wellington, Ministry of Health.
- Dodds, C., F. Hickson, et al. (2009). Assessing the sexual and HIV prevention needs of Africans people in England, London. London, Sigma Research.
- Douglas, M. (1966). Purity and Danger: An analysis of concepts of pollution and taboo. London, Routledge & Kegan Paul.
- Douglas, M. (1978). Cultural Bias. Occasional Paper No 35, Royal Anthropological Institute of Great Britain and Ireland
- Douglas, M. (1996). Natural Symbols. London, Routledge.
- Douglas, M. and A. Wildavsky (1982). Risk and Culture. Los Angeles, Berkeley.
- Dowsett, G. W. and M. Couch (2007). "Male circumcision and HIV prevention: Is there really enough of the right kind of evidence?" Reproductive Health Matters **15**(29): 33-44.
- Doyal, L. (2009). "Challenges in researching life with HIV/AIDS: an intersectional analysis of black African migrants in London." Culture, Health & Sexuality **11**(2): 173-188.
- Dressler, W. (1993). "Health in the African American community: Accounting for health inequalities." Medical Anthropology Quarterly **73**: 25-345.

- Duflo, E. (2009). AIDS prevention: Abstinence Vs. risk, VOX.
- Dunkle, K. L., R. K. Jewkes, et al. (2004a). "Transactional sex among women in Soweto, South Africa: Prevalence, risk factors and association with HIV infection." Social Science & Medicine **59**(8): 1581-1592.
- Dunkle, K. L., R. K. Jewkes, et al. (2004b). "Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa." The Lancet **363**(9419): 1415-1421.
- Dunkle, K. L., R. Stephenson, et al. (2008). "New heterosexually transmitted HIV infections in married or cohabiting couples in urban Zambia and Rwanda: an analysis of survey and clinical data." The Lancet **371**(9631): 2183-2191.
- Dyk, A. V. (2000). Traditional African beliefs and customs: Implications for AIDS education and prevention in Africa. International Conference on AIDS, Durban, South Africa.
- Ebin, V. J., C. D. Sneed, et al. (2001). "Acculturation and interrelationships between proble and health-promoting behaviours among Lation adolescents." Journal of Adolescent Health **28**(1): 62-72.
- ECDPC (2009). Migrant Health: Access to HIV prevention, treatment and care for migrant population in EU/EEC countries; Technical Report. Stockholm, ECDPC.
- Edwards, R. and J. Ribbens, Eds. (1998). Feminist dilemmas in qualitative research: Public knowledge and private lives. Introducing our voices: Living on the edges. London, SAGE.
- Egwatu, V. and N. Agusa (1981). "Complications of female circumcision in Nigerian Igbos." Br J Obstet Gynecol **88**: 1090-1093.
- Entwisle, S. (1996). The language of HIV/AIDS, AIDS Calgary.
- Epstein, H. (2004). The fidelity fix. New York Times Magazine: 54-59.
- Epstein, H. (2005). God and the fight against AIDS. New York Review of Books: 47-51.
- Epstein, H. (2007). The invisible cure: Africa the West and the fight against AIDS. London, The Penguin Group.
- Epstein, H. (2008). "AIDS and the irrational." BMJ **337**: a2638.
- Epstein, S. (1996). Impure science: AIDS, Activism and the Politics of Knowledge. LA, California, The University of California Press.
- Erwin, J., M. Morgan, et al. (2002). "Pathways to HIV testing and care by black African and white patients in London." Sexually Transmitted Infection **78**(1): 37-39.
- Escobar, J. I. and W. A. Vega (2000). "Mental health immigration's AAAs: Where are we and where do we go from here?" Nervous and Mental Disease **188**: 736-740.
- Farmer, R. D. T. and D. L. Miller (1983). Lecture Notes on Epidemiology and Community Medicine. Oxford, Blackwell Scientific Publications.
- Fenton, K., M. Chinouya, et al. (2001). "HIV transmission risk among Sub-Saharan Africans in London travelling to their countries of origin." AIDS **15**(11): 1442-1445.
- FHI (2002). Behavioural Change Communication, a strategic framework. Arlington, Virginia FHI.
- FHI (2004). Behavior change: A summary of four major theories. North Carolina, Family Health Internation (FHI).
- Fink, A. J. (1986). "A possible explanation for heterosexual male infection with AIDS." New England Journal of Medicine **315**: 1167.

- Fishbein, M. and I. Ajzen (1975). Belief, attitude, intention and behaviour: An introduction to theory and research. MA, Addison-Wesley.
- Fishbein, M. and S. E. Middlestadt (1989). Using the theory of reasoned action as a framework of understanding and changing AIDS-related behaviours. Primary prevention of AIDS: Psychological approaches. V. M. Mays, G. W. Albee and S. F. Schneider. London, Sage Publications: 93-110.
- Fleshman, M. (2001). "HIV prevention in the ranks." African Recovery **15**(16).
- Foley, E. E. (2005). "HIV/AIDS and African Immigrant women in Philadelphia: Structural and cultural barriers to care." AIDS Care **17**: 1030-1043.
- Ford, K. and A. I. Norris (1993). "Urban Hispanic adolescents and young adults: Relationship, acculturation to sexual behaviour." Journal of Sexual Research **30**: 316-323.
- Forrest, D. B. (1991). "Women, HIV and Mucosal Immunity." Lancet **337**(835): 836.
- Frank, E. (2009). Widow Inheritance in Sub-Saharan Africa. African Studies Review.
- Freimuth, V. S. (1992). Theoretical foundations of AIDS media campaigns. AIDS: A communication perspective. T. Edgar, M. A. Fitzpatrick and V. S. Freimuth. Hillsdale, NJ, Erlbaum: 91-110.
- Galvin, S. R. and M. S. Cohen (2004). "The role of sexually transmitted diseases in HIV transmission." Nature Reviews Microbiology **2**(1): 33-42.
- Gardezi, F., L. Calzavara, et al. (2010). "Experiences of and responses of HIV among African and Caribbean communities in Toronto, Canada." AIDS Care **20**(6): 718-725.
- Gausset, Q. (2001). "AIDS and cultural practices in Africa: the case of the Tonga (Zambia)." Social Science & Medicine **52**(4): 509-518.
- Geduld, J., M. Gatali, et al. (2003). "Estimate of HIV prevalence and incidence in Canada in 2002." CCDR **29**: 197:206.
- Geertz, C. (1973). The Interpretation of Cultures: Selected Essays. New York, Basic.
- Giesecke, J. (2002). Modern Infectious Disease Epidemiology. London, Arnold.
- Gillespie, S. (2008). Poverty, food insecurity, HIV vulnerability and the impacts of AIDS in Sub-Saharan Africa. Washington, DC: , International Food Policy Research Institute.
- Glanz, K., F. Lewis, et al., Eds. (1990). Health behavior and health education: Theory, research and practices. San Francisco, Jossey-Bass Inc.
- Glynn, J. R., M. Carael, et al. (2001). "Why do young women have a much higher prevalence of HIV than young men? A study in Kisumu, Kenya and Ndola, Zambia." AIDS **15**(4): S51-S60.
- Goffman, E. (1963). Stigma. Notes on the Management of Spoiled Identity. New York, Simon and Shuster, Inc.
- Goldani, M. Z., E. R. Giugliani, et al. (2003). "Voluntary HIV counselling and testing during prenatal care in Brazil." Rev Saude Publica **37**(5): 552-558.
- Gower, P. (2004). Police tell refugee's sex partners to see a doctor. NZ Herald. Auckland.
- Gras, M., J. F. Weide, et al. (1999). "Sexual behaviours and sexual mixing patterns among migrants in Amsterdam, The Netherlands." AIDS **13**(14): 1953-1962.
- Gray, R. H., G. Kigozi, et al. (2007). "Circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial." The Lancet **369**(9562): 657-666.
- Gray, R. H., M. J. Wawer, et al. (2001). "Probability of HIV-1 transmission per coital act in monogamous, heterosexual, HIV-1-discordant couples in Rakai, Uganda." The Lancet **357**: 1149-1153.

- Green, A. J., V. J. Caracelli, et al. (1989). "Toward a conceptual framework for mixed methods evaluation." Educational Evaluation & Policy Analysis **11**: 255-274.
- Green, E. A. (2003). As simple as ABC. New York Times. New York.
- Green, E. C., T. L. Mah, et al. (2009). "A framework of sexual partnerships: Risks and implications for HIV prevention in Africa." Studies in Family Planning **40**(1): 63-70.
- Gregson, S., G. p. Garnett, et al. (2006). "HIV decline associated with behavior change in Eastern Zimbabwe." Science **311**(5761): 664-666.
- Gregson, S. and O. Murungi (2006). HIV decline accelerated by reductions in unprotected casual sex in Zimbabwe? Evidence from a comprehensive epidemiological review. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa.
- Gregson, S., J. Todd, et al. (2009). "Sexual Behaviour Change in Countries with Generalised HIV Epidemic? Evidence from Population-Based Studies in Sub-Saharan Africa." Sexually Transmitted Infections **85**(Supple_1): i1-i2.
- Grosskurth, H., R. Gray, et al. (2000). "Control of sexually transmitted diseases for HIV-1 prevention: understanding the implications of the Mwanza and Rakai trials." The Lancet **355**(9219): 1981-1987.
- Guba, E. G. and Y. S. Lincoln (1988). Do inquiry paradigms imply inquiry methodologies? . Quantitative approaches into evaluation in education. D. M. Fetterman. New York Praeger: 89-115.
- Guba, E. G. and Y. S. Lincoln (1994). Competing Paradigms in Qualitative Research. Handbook for Qualitative Research Thousand Oaks, CA, Sage.
- Haerry, D. H. (2008). HIV related travel, residence and regulations. Berne, European AIDS Treatment Group.
- Halperin, D. and H. Epstein (2004). "Concurrent sexual partnerships help to explain Africa's high HIV prevalence: implications for prevention." The Lancet **364**: 4-6.
- Halperin, D. and T. Mah (2008). Measuring and interpreting concurrency: Quality, validity and importance of behavioral data. UNAIDS Reference Group on Estimates, Modelling and Projection.
- Halperin, D. and D. Wilson (2008). "Know Your Epidemic, Know Your Response: A Useful Approach, If We Get It Right." The Lancet **372**: 423-426.
- Halperin, D. and D. Wilson (2008). ""Know your epidemic, know your response": a useful approach, if we get it right." The Lancet **372**(9637): 423 - 426.
- Halperin, D. T. and R. C. Bailey (1999). "Male circumcision and HIV infection: 10 years counting." The Lancet **354**(9192): 1813-1815.
- Hanan, M. S. (2006). "HIV/AIDS prevention campaigns: a critical analysis." Canadian Journal of Media Studies **5**(1).
- Hanson, W. E., J. W. Creswell, et al. (2005). "Mixed methods research designs in counselling psychology." Counselling Psychology **52**(2): 224-235.
- Haour-Knipe, M. (1996). An Astonishingly Bad Idea: News from Norway about HIV/AIDS and Africans. MAA.
- Harawa, N., T. Bingham, et al. (2002). "HIV prevalence among foreign and US-born clients of Public STD clinics." American Journal of Public Health **92**(12): 1958-1963.
- Hardy, C., N. Phillips, et al. (2001). "Reflexivity in organization and management theory a study of the production of the research subjects." Human Relations **54**: 531-560.
- Harris, J., Ed. (1993). Introduction. Global Dimensions of the African Diaspora.

- Washington D.C, Northwestern University Press.
- Hayes, R. and H. Weiss (2006). "Understanding HIV epidemic trends in Africa." Science **311**(5761): 620-621.
- Hebbani, A., L. Obijiofor, et al. (2010). "Intercultural communication challenges confronting female Sudanese former refugees in Australia " Australasian Review of African Studies **31**: 653 637-661.
- Helleringer, S. and H. P. Kohler (2006). The structure of sexual networks and the spread of HIV/AIDS in rural Malawi. Population Association of America, Annual Meeting, Los Angeles, California.
- Herek, G. M., J. P. Capitanio, et al. (2002). "HIV-Related Stigma and Knowledge in the United States: Prevalence and Trends, 1991-1999." American Journal of Public Health **92**(3).
- Herling, A. (2004). Delaying sexual debut among Uganda's youth: evidence and implications. CCIH Annual Conference.
- Hira, S. K., U. G. Mangrola, et al. (1990). "Apparent Vertical Transmission of Human Immunodeficiency Virus type by Breastfeeding in Zambia." Pediatr **117**: 421-424.
- Hobbins, V. M. A., F. Haupt, et al. (2009). Traditional beliefs and consequences on AIDS prevention in Northern Mozambique. Bulletin von Medicus Mundi Schweiz. **113**.
- HPA (2008). Sexually Transmitted Infections among black African and black Caribbeans in the UK. London, Health Protection Agency (HPA).
- HPA (2009). Black Africans and Black Caribbeans. United Kingdom: HIV new diagnoses to end of December 2008. London, Health Protection Agency (HPA).
- Hughes, T. and P. Saxton. (2009). "HIV diagnoses amongst MSM in New Zealand in 2008: Summary and context of the most important epidemiological findings." Retrieved 02/07/2012, 2012, from [http://www.nzaf.org.nz/files/HIV diagnoses among MSM in New Zealand in 2008.pdf](http://www.nzaf.org.nz/files/HIV_diagnoses_among_MSM_in_New_Zealand_in_2008.pdf).
- Hunt, L. M., S. Schneider, et al. (2004). "Should "acculturation" be a variable in health research? A critical review of research on US Hispanics." Social Science & Medicine **59**: 973-986.
- Hyde, A. (1997). The Racial Body: Bodies of Law. Princeton, NJ, Princeton University Press.
- IAS (2009). HIV-specific travel and residence restrictions: Policy paper. Geneva.
- Ibrahim, F., J. Anderson, et al. (2008). "Social and economic hardships among people living with HIV in London." HIV and Medicine **3**: 616-624.
- Iman, N. (1994). Marriage Law in Sub-Saharan Africa. Nuptiality in Sub-Saharan Africa: Contemporary Anthropological and Demographic Perspectives. C. Bledsoe and G. Pison. Oxford, Clarendon Press.
- Ingham, R. and G. v. Zessen (1997). Towards an alternative model of sexual behaviour: from individual properties to interactional processes. London, Taylor and Francis.
- IOM (2005). Costs and benefits of international migration. Geneva, International Organisation for Migration (IOM).
- James, V. and R. Matikanya (2006). Protective Factors: A case study of r Ngudzeni ADP (Swaziland), World Vision Australia/Swaziland.
- Jana, M., M. Nkambule, et al. (2007). Multiple and Concurrent Sexual Partnerships in Southern Africa: A Ten Country Research Report. G. Sue and W. Renay.

- Johannesburg, Soul City Institute Regional Programme: 39.
- Jayakody, A., S. Sinha, et al. (2006). " Illicit and traditional drug use among Black and Minority Ethnicity young people in East London " Public Health **120** (4): 329-338.
- Jewkes, R., K. Dunkle, et al. (2006). "Factors associated with HIV sero-positivity in young, rural South African men." International Journal of Epidemiology **35**(6): 1455-1460.
- Johansen, B. E. (2002). The culture wars: Notes from the front. Black cultures and race relations. J. Conyers. Chicago, Burnham: 269-280.
- Kaiser, R., P. Spiegel, et al. (2002). HIV/AIDS seroprevalence and behavioral risk factor survey in Sierra Leone. Atlanta, Centers for Disease Control and Prevention
- Kalichman, S. C. and L. C. Simbayi (2003). "HIV testing attitudes AIDS stigma and Voluntary HIVCounselling and Testing in Black Township in Cape Town." South Africa Sex Transm Infection **79**(6): 442-447.
- Kaminsky, M. and D. A. Willigan (1982). "pH and Potential Irritancy of Douche Formulations to the Vaginal Mucosa of the Albino Rabbit and Rat." Food Chem Toxicol(20): 193-196.
- Kaplan, E. H. (1998a). Was Israel's Ethiopian Blood Ban Justified?:A CIRA Policy Update New Haven, Connecticut, Yale School of Management.
- Karagwe (2009). Karagwe District Information, Karagwe District Council.
- Keefa, S. and A. Padilla (1987). Chicano ethnicity. Albuquerque, University of New Mexico Press.
- Kent, J. (2005). "Impact of foreign-born persons on HIV diagnosis among Blacks in King County, Washington." AIDS and Education and Prevention **17**(6 Supplement B): 60-67.
- Kerani, R., J. Kent, et al. (2006). HIV among African-born persons in the United States: A hidden epidemic? 2006 National STD Prevention Conference, Jacksonville, Florida.
- KFF (2005). HIV/AIDS Impacting Military Readiness Across African Continent: Kaiser Family Foundation daily report, Kaiser Family Foundation (KFF).
- Kim, Y. Y. (1995). Cross-cultural adaptation: An integrative theory. Intercultural communication theory. R. L. Wiseman. Thousand Oaks, CA, Sage: 170-193.
- Kippax, S. and J. Crawford (1993). Flaws in the theory of reasoned action. The theory of reasoned action: Its application to AIDS-prevention behavior. D. J. Terry, C. Gallis and M. McCamish. New York, Pergamon Press: 253-269.
- Kirk, D. (1996). "Demographic Transition Theory." Population Studies **50**(3): 361-387.
- Kitzinger, J., Ed. (2006). Qualitative research in health care. Focus groups. Massachusetts, BMJ Books.
- Kizito, H. (2001). Refugee Health Care. A Handbook for Health Professionals. Wellington, Ministry of Health.
- Kraft, D. (2007). Domestic violence proves deadly for Ethiopians disoriented by aliyah. Jewish Review.
- Kramer, L. (2011). AIDS is a plague allowed to happen. CNN News: AC360. Atlanta.
- Krentz, H. and M. Gill (2008). "Cost of medical care for HIV-infected patients within a regional population from 1997 to 2006." HIV Medicine **9**(9): 721-730.
- Krueger, R. A. (1994). Focus Groups: A practical guide to applied reserch. Thousand Oaks, California, Sage.
- Kun, K. (1998). "Vaginal Drying Agents and HIV Transmission." International

- Family Planning Perspectives **24**(6): 2.
- Kusow, A. (2003). "Beyond Indigenous Authenticity: Reflections on the Insider/Outsider Debate in Immigration Research." Symbolic Interaction **26**(4): 591-599.
- Laga, M., A. Manoka, et al. (1993). "Non-ulcerative sexually transmitted diseases as risk factors for HIV-1 transmission in women: results from a cohort study AIDS." AIDS **7**(1): 95-102.
- Lau, J. and H. Tsui (2005). "Discriminatory attitudes towards people living with HIV/AIDS and associated factors: a population based study in the Chinese general population." Sex Transm Infect **81**(2): 113-119.
- Lemoh, C., J. Grierson, et al. (2010). Experience of migration-related HIV screening among African-born Australians diagnosed with HIV. 22nd Annual Australasian Society for HIV Medicine, Sydney
- Lichtenstein, B. (1996). Creating Icons of AIDS: The Media and the Popular Culture. Intimate Details and Vital Statistics: AIDS, Sexuality and the Social Order in New Zealand. P. Davis. Auckland, Auckland University Press.
- Lucas, S., B. Curtis, et al. (2008). "National review of deaths among HIV infected adults." Clinical Medicine **8**: 250-252.
- Lupton, D. (1999). Introduction: Risk and sociocultural theory. Risk and sociocultural theory. D. Lupton. Cambridge, Cambridge University Press.
- Lupton, D. and J. Tulloch (2002). "Risk epistemologies among a group of Australians." Sociology **36**(2): 317-334.
- Lupton, D. and J. Tulloch (2003). Risk and Everyday life. London Sage.
- Luque, M. N., M. D. Fernandes, et al. (2006). "Acculturation strategies and attitudes of African immigrants in the South of Spain: Between reality and hope." Cross-Cultural Research **40**(4): 331-351.
- Lurie, M., A. Harrison, et al. (1997). "Circular, migration and sexual networking in rural kwaZulu-Natal: implications for the spread of HIV and other sexually transmitted diseases." Health Transistion Review Supplement **7**(Suppl 3): S15-24.
- Lurie, M. N., B. G. Williams, et al. (2003). "Who infects whom? HIV-1 concordance and discordance among migrant and non-migrant couples in South Africa." AIDS **17**(15): 2245-2252.
- MAA (1996). Norway's African community united in anger. Migrants against AIDS. Geneva.
- Macintyre, K., L. Brown, et al. (2001). "It's not what you know, but who you knew": examining the relationship between behavior change and AIDS mortality in Africa " AIDS Education Preview, **13**(2): 160-174.
- Madrama, C. (1996). The problem HIV/AIDS: A discourse on the subordinate status of women in Uganda. Women's Law. Harare, University of Zimbabwe. **Unpublished Postgraduate Diploma in Women Law**.
- Magnani, R., A. Karim, et al. (2002). "Reproductive health risk and protective factors among youth in Lusaka, Zambia." Journal of Adolescent Health **30**(1): 76-86.
- Mah, T. (2008a). Concurrent sexual partnerships and HIV transmission in Khayelitsha, South Africa. Cape Town, University of Cape Town, Centre for Social Science Research Unit.
- Mah, T. (2008b). Dangerous liason: Concurrent sexual partnerships and the South African HIV/AIDS epidemic. Takemi Fellows Seminar. Boston, Havard AIDS Prevention Research Project.
- Mah, T. L. and D. Halperin (2008). "Concurrent Sexual Partnerships and the HIV

- Epidemics in Africa: Evidence to Move Forward." AIDS Behavior.
- Mah, T. L. and D. Halperin (2010). "Concurrent Sexual Partnerships and the HIV Epidemics in Africa: Evidence to Move Forward." AIDS Behavior **14**(1): 11-16.
- Malungo, J. R. (2001). "Sexual Cleansing (Kusalyaza) and Lavirate Marriage (Kunjilila Mung'anda) in the era of AIDS: Changes in Perceptions and Practices in Zambia." Social Science & Medicine **53**: 371-382.
- Manfred, R., L. Calza, et al. (2001). "HIV disease among immigrants coming to Italy from outside of the European Union: A case-control study of epidemiological and clinical features." Epidemiology and Infections **127**(3): 527-533.
- Marin, B. V., C. A. Gomez, et al. (1993). "Condom use among Hispanic men with secondary female sexual partners." Public Health Reports **108**: 742-750.
- Marin, B. V. and G. Marin (1992). "Predictors of condom accessibility among Hispanics in San Francisco." American Journal of Public Health **82**: 592-595.
- Marin, V. and E. Flores (1994). "Acculturation, sexual behaviour, and alcohol use among Latinas." International Journal of the Addictions **29**: 1101-1114.
- Marks, G., P. J. Cantero, et al. (1998). "Is acculturation associated with sexual risk behaviours? An investigation of HIV-positive Hispanic immigrants in the United States." AIDS Care **10**: 283-296.
- Maswanya, E. S., I. Moji, et al. (1999). "Knowledge, risk perception of AIDS and reported sexual behaviour among students in secondary schools and colleges in Tanzania." Health Education Resources **14**(2): 185-196. .
- Maton, K. (2003). "Reflexivity relationism & research." Space and Culture **6**(1): 52-56.
- Matovu, J., R. Gray, et al. (2005). "Voluntary HIV counselling and testing acceptance, sexual risk behaviour and HIV incidence in Rakai, Uganda." AIDS **19**: 503-511.
- Matthew, J., M. Bengo, et al. (2008). "Ethical aspects of HIV/AIDS prevention strategies and control in Malawi " Theoretical Medicine and Bioethics **29**(5): 349-356.
- Mattson, C. L., R. C. Bailey, et al. (2007). "A nested case-control study of sexual practices and risk factors for prevalent HIV-1 infection among young men in Kisumu, Kenya." Sexually Transmitted Diseases **34**(10): 731-736.
- May, R. and R. Anderson (1987). "Transmission dynamics of HIV infection." Nature **326**: 137-142.
- Mazrui, A. A. (1986). The Africans: A triple heritage. Boston, Little Brown.
- Mbonu, N., B. Borne, et al. (2009). "Stigma of people with HIV/AIDS in Sub-Saharan Africa: A literature review." Tropical Medicine **2009**: 14.
- Mbwambo, J., G. Kilonzo, et al. (2004). Understanding HIV-related stigma in Tanzania. Dar es Salaam, Muhimbili University College of Health Sciences (MUCHS).
- McMichael, C. and S. Gifford (2009). "It is good to know..Before it's too late: Promoting sexual health literacy amongst resettled young people with refugee backgrounds." Sexuality and Culture **13**: 218-236.
- McNeill, E. (2001). The Latex Condom: Recent Advances, Future Directions. North Carolina, Family Health International.
- Meiberg, A. E., A. Bos, et al. (2008). "Fear of stigmatization as barrier to Voluntary HIV Counselling and Testing in South Africa." African Journal of Public Health **5**(2).
- Melkote, R. S. and L. H. Steeves (2001). Communication for development in third

- world: theory and practice for empowerment. London, Sage Publications.
- Merton, R. (1972). "Insiders and Outsiders: A Chapter in Sociology of Knowledge." American Journal of Sociology **78**(1): 9-47.
- Mills, E. (2009). "Trials of circumcision for HIV prevention should be interpreted with caution." PLoS Med.
- Mills, E. J., S. Singh, et al. (2006). "The impact of conflict on HIV/AIDS in sub-Saharan Africa." International Journal of STD and AIDS **17** 713-717.
- Miraglia, E. and R. Law. (1999). "What is culture? ." from <http://www.wsu.edu:8001/vcwsu/commons/topics/culture/culture-index.html>
- Mishra, V., A. Asscheb, et al. (2007). "HIV infection does not disproportionately affect the poorer in Sub-Saharan Africa." AIDS **21**(Suppl 7): S17-S22.
- Mocroft, A., B. Ledergerber, et al. (2003). "Decline in the AIDS and death rates in the EuroSIDA study: an observational study." The Lancet **362**(9377): 22-29.
- Morin, S., G. Khumalo-Sakutukwa, et al. (2006). "Removing barriers to knowing HIV status: same-day mobile HIV testing in Zimbabwe. ." J Acquir Immune Defic Syndr **41**(2): 218-224.
- Morris, K. (2008) "Almost half of Africans with HIV in the UK are diagnosed late." AIDS Map.
- Morris, M. (2002). A comparative study of concurrent sexual partnerships in the United States, Thailand and Uganda. American Sociology Association Annual Meeting Published Abstracts, Anaheim, California
- Morris, M. and M. Kretzschmar (1997). "Concurrent partnerships and the spread of HIV." AIDS **11**: 641-648.
- Morris, M. and M. Kretzschmar (2000). "A microsimulation study of the effect of concurrent partnerships on the spread of HIV in Uganda." Mathematical Population Studies **8**(2): 109.
- Morris, M. and J. Moody (2006). Concurrent sexual partnerships and sexually transmitted infections University of Princeton.
- Mortensen, A. (2008). Social and cultural citizenship rights for refugees in New Zealand health services. Sociology. Auckland, Massey University, Albany. **PhD**: 355.
- Moses, S., J. E. Bradley, et al. (1990). "Geographical patterns of male circumcision practices in Africa: Association with HIV seroprevalence." International Journal of Epidemiology **19**: 693-697.
- Mosha, F., H. Grosskurth, et al. (1995). "Impact of Improved Treatment of Sexually Transmitted Diseases on HIV Infection in Rural Tanzania: Randomised Controlled Trial." Lancet **346** (8974): 530-532.
- Motloun, T., M. Myres, et al. (2004). "Identifying acute HIV infection: A major new public health challenge." S Afr Medical Journal **94**: 531.
- Murphy, C. (2003). Evidence for Action review summary. Global AIDSLink.
- Murphy, E. M., M. E. Greene, et al. (2006). "Was the ABC approach responsible for Uganda's decline in HIV?" PLoS Med. **3**(9): e379.
- Mutenbei, I. and M. Mwesiga (1998). The impact of obsolete traditions on HIV/AIDS rapid transmission in Africa: The case of compulsory circumcision on young girls in Tanzania. International AIDS Conferenc, Geneva, NLM Gateway.
- Muula, A. S. (2006). "On evidence in support of male circumcision in HIV prevention: what next?" PLoS Med. **3**(1): e64-e66.
- Myrdal, G. (1964). An American Dilemma. The Negro in a White Nation. New York, McGraw-Hill Paperback. **Vol 1**.
- Nakanjako, D., M. Kamya, et al. (2006). "Acceptance of routine testing for HIV

- among adult patients at the medical emergency unit at a national referral hospital in Kampala, Uganda." AIDS and Behavior **11**: 753-758.
- NAP (2006). HIV Surveillance Report: Egypt. Cairo, National AIDS Program (NAP).
- Newman, L. M., F. Miguel, et al. (2001). "HIV seroprevalence among military blood donors in Manica Province, Mozambique." International Journal of STD and AIDS **12**: 225-228.
- Nilsson, J. E., C. Brown, et al. (2008). "Acculturation, Partner Violence, and Psychological Distress in Refugee Women From Somalia." Journal of Interpersonal Violence **23** 1(11): 1654-1663
- Nnko, S., J. T. Boerma, et al. (2004). "Secretive females or swaggering males? An assessment of the quality of sexual partnership reporting in rural Tanzania." Social Science & Medicine **59**: 299-310.
- Ntozi, J. P. (1997). Widowhood, Remarriage and Migration during the HIV/ AIDS Epidemic in Uganda. Third World AIDS Epidemic. J. P. M. Ntonzi. Canberra, The Australian National University. **5**: 35-56.
- Nyamathi, A., C. Bennet, et al. (1993). "AIDS-related knowledge, perceptions, and behaviours among impoverished minority women." American Journal of Public Health **83**: 65-71.
- Nyblade, L., K. MacQuarrie, et al. (2003). Disentangling HIV and AIDS stigma in Ethiopia, Tanzania and Zambia. Washington, D. C, International Centre for Research on Women (ICRW).
- Nyblade, L., A. Stangl, et al. (2009). "Combating HIV stigma in health care settings: what works?" International AIDS Society **12**(15).
- Nyirenda, M. (1992). The Behavioural aspects fo dry sex practice in Urban Lusaka. Eighth International Conference on AIDS,, Amsterdam.
- NZ-History (2011). Ten crew of Cook's ship Adventure killed and eaten URL: <http://www.nzhistory.net.nz/ten-crew-of-cooks-ship-em-adventure-em-killed-and-eaten>, . Wellington, Ministry of Culture and Heritage. **2011**.
- Nzioka, C. (2001). "Perspectives of adolescent boys on the risks of unwanted pregnancy and sexually transmitted infections, Kenya." Reproductive Health Matters **9**: 108-117.
- NZIS (1995). Health risks and foreign Nationals. Internal Report. Wellington, New Zealan Immigration Services.
- NZIS (2005). Guide book for Medical Examiners. Wellington, New Zealand Immigration Services, Dept of Labour: 122.
- NZIS (2007). Medical and Chest X-ray Certificate. Wellington.
- NZPA (2010). Man who infected wife with HIV named Published: 7:32PM Tuesday , 201. NZPA. Auckland.
- Ogunlesi, T., F. Adekanmbi, et al. (2008). "Non-puerperal induced lactation: an infant feeding option in paediatric HIV/AIDS in tropical Africa " Journal of Child Health Care **12**: 241-248.
- Olowo-Freers and Barton (1992). In pursuit of fulfilment: A study of cultural behaviour and sexual diversity in Uganda. New York, UNICEF.
- Osagbemi, M. O., A. A. Adepetu, et al. (2007). "Spouse-sharing and Experiences with Sexually Transmitted Diseases Among the Okun of Nigeria." African Population Studies **22**(2): 79-108
- Oyugi, C. (1998). Social cultural factors that promote female circumcision and how this predisposes women to HIV infection. International Conference on AIDS, Geneva, NLM Gateway.
- Padilla, A. M. (1987). Acculturation and stress among immigrants and later

- generation individuals. The quality of urban life: Social psychological, and physical conditions. D. Frick. Berlin, Walter de Gruyter: 101-120.
- Padilla, A. M. and W. Perez (2003). "Acculturation, social identity and social cognition: A new perspective." Hispanic Journal of Behavioral Sciences **25**(1): 35-55.
- Parker, R. (2001). "Sexuality, Culture and Power in HIV/AIDS Research." Annual Review of Anthropology **30**: 163-179.
- Parker, R. and P. Aggleton (2003). "HIV and AIDS related stigma and discrimination: A conceptual framework and implications for action." Social Science & Medicine **57**: 13-24.
- Patten, S. (2010). HIV Impacts within the African and Black Diaspora: Policy Paper. Toronto, AFRICAN and BLACK DIASPORA GLOBAL NETWORK on HIV and AIDS (ABDGN).
- Patterson, B. K., A. Landay, et al. (2002). "Susceptibility to human immunodeficiency virus-1 infection of human foreskin and cervical tissue grown in explant culture." American Journal of Pathology **161**(3): 867-873.
- PEPFAR (2005). ABC guidance The President's Emergency Plan for AIDS Relief, Office for the U.S Global AIDS Coordinator.
- Persons, S. (1987). Ethnic studies at Chicago: 1905-45. Urbana, University of Illinois Press.
- PHAC (2006). Surveillance report Toronto, Public Health Agency of Canada.
- Pilcher, C. D., H. C. Tien, et al. (2004). "Brief but efficient: Acute HIV infection and the sexual transmission of HIV." Infectious Disease **189**(10): 1,785-781,792.
- Pinkerton, S. D. (2008). "Probability of HIV transmission during acute infection in Rakai, Uganda." AIDS and Behaviour **12**(5): 677-684.
- Piot, P. (2001). AIDS and Racism. World Conference Against Racism, Durban, South Africa.
- Pisani, E. (2000). "AIDS into the 21st century: some critical considerations." Reproductive Health Matters **8**(15): 63-76.
- Pope, C. and N. Mays (2000). Qualitative Research in Health Care. London, BMJ Books.
- Porteous, D. (2008). Anxious wait for Good Samaritan who tried to help HIV colleague. Otago Daily Times. Dunedin.
- Porter, K., A. Babiker, et al. (2003). "Determinants of survival following HIV-1 seroconversion after the introduction of HAART." The Lancet **362**(9392): 1267-1274.
- Potash, B. (1986). Widows in Africa: An Introduction. Widows in African Societies. B. Potash. Stanford, Stanford University Press: 1-43.
- Potterat, J. J., D. D. Brewer, et al. (2006). "The protective effect of male circumcision as a faith lift for the troubled paradigm of HIV epidemiology in Sub-Saharan Africa." PLoS Med. **3**(1): e63-e64.
- Potts, M., D. Halperin, et al. (2008). "Reassessing HIV Prevention." Science **320**: 749-749.
- Potts, M., D. Halperin, et al. (2008). "Reassessing HIV Prevention." Science **320**(5877): 749-750
- Rabiee, F. (2004). "Focus group interview and data analysis." Nutrition Society **63**: 655-660.
- Redfield, R., R. Linton, et al. (1936). "A memorandum for the study of acculturation." American Anthropologist **16**: 149-152.
- Rees, S. and B. Pease (2006). Refugee settlement, safety and wellbeing: Exploring

- domestic and family violence in refugee communities Violence Against Women Community Attitudes Project. Melbourne, Victorian Health Promotion Foundation (VicHealth). **Paper 4.**
- Reid, A., V. W.-S. Clair, et al. (1997). Refugees and HIV/AIDS in the New Zealand context. Auckland, Auckland Institute of Technology/New Zealand AIDS Foundation.
- Ritchie, J. and L. Spencer, Eds. (1994). Qualitative analysis for applied policy research. In. Analysing qualitative data. London, Routledge.
- Rocco, T. S., L. A. Bliss, et al. (2003). "Taking the next step: mixed methods research in organizational systems." Information Technology, Learning and Performance **21**(1).
- Rosenstock, I., M. Becker, et al. (1994). The health belief model and HIV risk behaviour change. Preventing AIDS: Theories and Methods of Behavioral Interventions. R. J. DiClemente and J. L. Peterson. New York Plenum Press: 5-24.
- Ruark, A. H. (2008). HIV risk and Marriage in Africa. Christian Connections for International Health Conference.
- Rudmin, F. W. (2003). "Critical History of the Acculturation Psychology of Assimilation, Separation, Integration, and Marginalization " General Psychology **7**(1): 3-37.
- Rungara, A., M. Pitts, et al. (1992). "The Use of Herbal and Other Agents to Enhance Sexual Experience." Social Science Medicine **35**: 1037-1042.
- Ruteikara, S. L. (2008). Let my people go, AIDS profiteers. The Washington Post. Washington.
- Sabogal, F., E. J. Perez-Stable, et al. (1995). "Gender, ethnic and acculturation differences in sexual behaviours:Hispanic and non-Hispanic white adults." Hispanic Journal of Behavioral Sciences **7**: 139-159.
- Sadler, E., C. A. McGarrigle, et al. (2006). "Psychological and Socio-medical Aspects of HIV/AIDS." AIDS Care **18**(4): 398 - 403.
- Sadler, E., C. A. McGarrigle, et al. (2007). "Sexual behaviours and HIV infection in black Africans in England:Results from the Mayisha II survey of sexual attitudes and lifestyles " Sex Trans Infect **83**(7): 523-529.
- Sahlu, T., E. Kassa, et al. (1999). "Sexual behaviours, perception of risk of HIV infection, and factors associated with attending HIV post-test counseling in Ethiopia." AIDS **13**(10): 1263-1272.
- Sale, J. E. M., L. H. Lohfeld, et al. (2002). "Revisiting the quantitative-qualitative debate: Implications for mixed-methods research." Quality and Quantity **36**: 43-53.
- Savage, J. (2009). Former partners of 'active' HIV man urged to come forward. NZ Herald. Auckland.
- Saxton, P., N. Dickson, et al. (2004). GAPSS 2004: Findings from the Gay Auckland Periodic Sex Survey. Auckland, New Zealand AIDS Foundation.
- Saxton, P., N. Dickson, et al. (2002). HIV behaviour surveillance among men who have sex with men. Auckland, New Zealand AIDS Foundation.
- Saxton, P., N. Dickson, et al. (2003). GAPSS 2002: Findings on Maori respondents in the Gay Auckland Periodic Sex Survey. Auckland, New Zealand AIDS Foundation.
- Saxton, P., N. Dickson, et al. (2010). GAPSS:2008 Findings from Gay Auckland Periodic Sex Survey Auckland New Zealand AIDS Foundation.
- Saxton, P., N. P. Dickson, et al. (2006). GAPSS 2006: Findings from the Gay

- Auckland Periodic Sex Survey. Auckland, New Zealand AIDS Foundation.
- Schmitz, P. G. (1998). Is Berry's model of acculturation useful in understanding individual and group differences of acculturative behavior?. 14th Congress of the International Association of Cross-Cultural Psychology, Bellingham, WA.
- Schneider, G. M. (2004). "The intersection of mental and physical health in older Mexican Americans." Hispanic Journal of Behavioral Sciences **26**: 333-355.
- Schoepf, B. G., Ed. (1995). Culture, sex research and AIDS prevention in Africa. Culture and sexual risk. Anthropological perspectives on AIDS. amsterdam, Gordon & Breach.
- Schoepf, B. G. (2001). "International AIDS Research in Anthropology: Taking a critical perspective on the crisis." Annual Review of American Anthropology **30**: 335-361.
- Schwandt, M., C. Morris, et al. (2006). "Anal and Dry Sex in Commercial Sex Work, and Relation to Risk for Sexually Transmitted Infections and HIV in Meru, Kenya." Sex Trans Infect **82**: 392-396.
- Seibt, A. and M. W. Ross (1995). "Relationship between safe sex and acculturation into the gay subculture." AIDS Care **7**: 85-90.
- Seidel, G. (1993). "The Competing Discourses of HIV/AIDS in Sub-Saharan Africa: Discourses of Rights and Empowerment vs. Discourses of Control and Exclusion." Social Science & Medicine **36**(3): 175-194.
- Seidlin, M., M. Vogler, et al. (1993). "Heterosexual transmission of HIV in a cohort of couples in New York City." AIDS **7**: 1247-1254.
- Shama, M. L., L. E. Fiala, et al. (2002). "HIV/AIDS perceptions and risky behaviours in squatter areas in Cairo, Egypt." Journal of Egypt Public Health Association **77**: 173-200.
- Shelton, J. D., D. T. Halperin, et al. (2004). "Partner reduction is crucial for balanced "ABC" approach to HIV prevention." BMJ **328**: 891-893.
- Sinka, K., J. Mortmer, et al. (2003). "Impact of HIV epidemic in Sub-Saharan Africa on the pattern of HIV in the UK." AIDS **17**(11): 1683-1690
- Siraprasasiri, T., S. Thanprasertusuk, et al. (1991). "Risk Factors for HIV Among Prostitues in Chiangmai, Thailand." AIDS **5**: 579-582.
- Slymaker, E., J. B. Bwanika, et al. (2009). "Trends in age at first sex in Uganda: evidence from Demographic and Health Survey data and longitudinal cohorts in Masaka and Rakai." Sex Trans Infect **85**(Suppl): i12-i19.
- Slovic, P. and S. Lichtenstein (1982). Facts Vs Fear. Judgement under uncertainty: Heuristics and biases. D. Kahnemann, P. Slovic and A. Tversky. New York, Cambridge Press.
- Smart, T. (2006). Epidemiologist represents a scientific rationale for focusing on Abstinence & Being Faithful in Sub-Saharan Africa. Aidsmap News.
- Smith, J. K. and L. Heshusius (1986). "Closing down the conversation: The end of the quantitative-qualitative debate among educational inquiries." Educational Researcher **15**(4): 12.
- Spiegel, P. B. (2004). "HIV/AIDS among conflict-affected and displaced populations: Dispelling myths and taking action." Disaster **28**(3): 322-339.
- Spiegel, P. B., A. R. Bennedsen, et al. (2007). "Prevalence of HIV infection in conflict-affected and displaced people in seven Sub-Saharan African countries: a systematic review." The Lancet(369): 2187-2195.
- SSRC (1954). "Acculturation: An exploratory formulation." American Anthropologist **56**: 973-1000.

- Staehelin, C., N. Egloff, et al. (2004). "Migrants from Sub-Saharan Africa in the Swiss HIV cohort study: A single center study of epidemiologic migration specific and clinical features." AIDS Patient Care & STDS **8**(11): 665-679.
- Statistics-NZ (2007). Internal Migration Wellington, Statistics New Zealand.
- Stevenson, H. (1994). "The Psychology of sexual racism and AIDS: An ongoing saga of distrust and the 'sexual other'." J of Black Studies **25**: 62-81.
- Stiles, C. W. (1909). "Hookwork in Relation to the American Negro " Southern Medical Journal **2**: 1125-1126.
- Stoep, L. V. d. (2009). Man inject sleeping wife with HIV[Leigh van der Stoep, on 06/12/2009]. Sunday Star Times Auckland, New Zealand.
- Stoneburner, R. L. and D. Low-Beer (2004). "Population-level HIV declines and behavioral risk avoidance in Uganda." Science **304**(5671): 714-718.
- Stopka, T., M. Singer, et al. (2000). Social mapping of AIDS risk: Understanding Neighbourhoods through the eyes of injection drug users. The 128th Annual Meeting of American Public Health Association (APHA), Boston, MA, APHA.
- Strebel, A., M. Crawford, et al. (2006). "Social construction of gender roles, gender based violence and HIV/AIDS in two communities of Western Cape, South Africa." Journal of Social Aspects of HIV/AIDS **3**(3): 516-528.
- Sweat, M., S. Gregorich, et al. (2000). "Cost-effectiveness of voluntary HIV-1 counselling and testing in reducing sexual transmission of HIV-1 in Kenya and Tanzania " The Lancet **356**: 113-121.
- Szabo, R. and R. V. Short (2000). "How does male circumcision protect against HIV infection?" BMJ **320**(7249): 1592-1594.
- TACAIDS (2009) "Key drivers of HIV/AIDS epidemic in Tanzania."
- Tashakkori, A. and C. Teddlie (1998). Mixed methodology: Combining qualitative and quantitative approaches. Thousand Oaks, CA, Sage.
- Tharao, E., N. Massaquoi, et al. (2006). Silent Voices of the HIV/AIDS Epidemic: African and Caribbean Women in Toronto 2002-2004. Toronto, Women's Health in Women's Hands.
- Timberg, C. (2007). Speeding HIV's Deadly Spread: Multiple, Concurrent Partners Drive Disease in Southern Africa. The Washington Post. Washington.
- Tony, J. (2002). "Domestic Abuse in Kenya." Population Communication Africa(2002): pg 10.
- Treichler, P. A. (1989). AIDS, homophobia and biomeical discourse: An epidemic of signification. Cultural Analysis, Cultural Activism. D. Crimp. Cambridge Mass, MIT Press. **31-70**.
- Triandis, H. C., Y. Kashima, et al. (1986). "Acculturation indices as a means of confirming cultural differences." International Journal of Psychology **21**: 43-70.
- Tschann, M. J., A. C. Gomez, et al. (1993). "Acculturation and gender differences in sexual attitudes and behaviours, Hispanics Vs Non-Hispanics White unmarried adults." American Journal of Public Health **83**: 1759-1761.
- Tse, S. (2007). "Family violence in Asian communities, combining research and community development." Social Policy Journal of New Zealand. Issue **31**: 170-194.
- TZ-Government, P. (2001). National Policy on HIV/AIDS. P. M. s. Office, Tanzanian Government.
- UN (1998). HIV/AIDS and Human Rights, International Guidelines. United Nations Guidelines on HIV/AIDS and Human Rights. Geneva, United Nations: 50.

- Unah, I. and J. Boger (2001). Race and the Death Penalty in North Carolina: An Empirical Analysis: 1993-1997 North Carolina, Common Sense Foundation: North Carolina Council of Churches
- UNAIDS (1998). Gender and HIV/AIDS: Technical Update. Geneva, UNAIDS.
- UNAIDS (2000). HIV Voluntary Counselling and Testing: A gateway to prevention and care. Geneva, UNAIDS.
- UNAIDS (2001a). HIV Prevention Needs and Successes: A Tale of Three Countries. An Update on HIV Prevention Success in Senegal, Thailand and Uganda, . Geneva, UNAIDS.
- UNAIDS (2002). Epidemiological fact sheets on HIV and sexually transmitted infections. Update. Geneva, UNAIDS.
- UNAIDS (2004). Making condoms work for HIV prevention: Cutting-edge perspectives. Geneva, UNAIDS.
- UNAIDS (2005). Uniform Service and HIV/AIDS. Geneva, UNAIDS.
- UNAIDS (2006). Gender based violence, young women and girls and HIV in Southern Africa: Policy and Programme Action Brief. Geneva, UNAIDA.
- UNAIDS (2006). Sweden's HIV/AIDS epidemiological fact sheet Geneva, UNAIDS.
- UNAIDS (2007a). Practical guidelines for intensifying HIV prevention: towards universal access. Geneva, UNAIDS.
- UNAIDS (2007a). UNAIDS Annual Report: Knowing your epidemic. Geneva, UNAIDS.
- UNAIDS (2007b). Sub-Sahara Africa: AIDS epidemic update, Regional Summary. Geneva, UNAIDS.
- UNAIDS (2008). HIV Epidemic update. Geneva, UNAIDS.
- UNAIDS (2008a). Epidemiological fact sheet on HIV and AIDS: Core data on epidemiology and response/United Republic of Tanzania. Geneva, UNAIDS.
- UNAIDS (2009). HIV Epidemic update. Geneva, UNAIDS.
- UNAIDS (2011). Epidemic Update. Geneva, UNAIDS.
- UNAIDS and WHO (2007). Male circumcision: global trends and determinants of prevalence safety and acceptability. Geneva, UNAIDS and WHO.
- UNAIDS/IOM (2004). UNAIDS/IOM statement on HIV/AIDS-related travel restrictions. Geneva, UNAIDS/IOM.
- UNAIDS/UNHCR (2007). HIV and Refugees. Policy Brief. Geneva, UNAIDS/UNHCR.
- UNAIDS/WHO (2001). Fighting HIV related intolerance: Exposing the links between racism, stigma and discrimination. Geneva, UNAIDS/WHO.
- UNCHR (1951). The 1951 Convention relating to the Status of Refugees. Geneva, UNHCR.
- UNESCO and UNAIDS (2000). Migrant populations and HIV/AIDS. The development and implementation of Programs: Theory, Methodology and Practices. Geneva, UNESCO & UNAIDS.
- UNICEF (2008). Writing a Communication Strategy for Development Programmes: A Guideline for Programme Managers and Communication Officers. Dhaka, UNICEF Bangladesh.
- Wailoo, K. (2001). Dying in the City of the Blues: Sickle Cell Anemia and the Politics of Race and Health Chapel Hill, University of North Carolina Press.
- Wailoo, K. (2006). "Stigma, race and disease in 20th Century America." The Lancet **367**(9509): 331-533.
- Wambo, G., J. Bazing-Feigenbaum, et al. (2009). HIV-Seroconversion following immigration in Germany: Analysis of reported HIV cases among immigrants

- from Sub-Saharan Africa in Germany 2001-2008. Berlin, Robert Koch Institute.
- Wasserheit, N. (1992). "Epidemiologic synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases." Sexually Transmitted Diseases(9): 61-77.
- Watts, C. L. and R. M. May (1992). "The influence of concurrent partnerships on the dynamics of HIV/AIDS." Mathematical Biosciences **108**(1): 89-104.
- Wawer, M., R. Gray, et al. (2005). "Rates of HIV-1 transmission per coital act, by stage of HIV-1 infection in Rakai, Uganda." Journal of Infection Disease **191**: 1403-1409.
- Wawer, M., N. Sewankambo, et al. (1999). "Control of sexually transmitted diseases for AIDS prevention in Uganda: a randomised community trial. Rakai Project Study Group " The Lancet **353**(9152): 525-535.
- WEF (2010). The Global Gender Gap Report for 2010. Geneva, World Economic Forum (WEF).
- Weinhardt, L., J. W. Carey, et al. (1999). " Effects of HIV counselling and testing on sexual risk behaviour: a meta-analytic review of published research, 1985-1997." American Journal of Public Health **89**(9): 1397-1405.
- Weinreich, N. K. (1999). Hands-on social marketing: A step-by-step guide. California, Sage.
- Weinreich, P. (1998). From acculturation to enculturation: Intercultural, intracultural and intrapsychic mechanisms. 14th Congress of the International Association for Cross-Cultural Psychology, Bellingham, WA.
- Weiss, H. A., M. A. Quigley, et al. (2000). "Male circumcision and risk of HIV infection in Sub-Saharan Africa: a systematic review and meta-analysis" AIDS **14**(15): 2361-2370.
- Weller, S. and K. Davis (2003). Condom effectiveness in reducing heterosexual HIV transmission. Oxford, The Cochrane Library, Issue 2. **Oxford**.
- Welling, K., J. Johnson, et al. (1994). Sexual behaviours in Britain: The national survey of sexual attitudes and lifestyle. Middlesex, Penguin Books.
- Were, W., J. Mermin, et al. (2006). "Undiagnosed HIV infection and couple HIV discordance among household members of HIV-infected people receiving antiretroviral therapy in Uganda." J Acquir Immune Defic Syndr **43**(1): 91-95.
- WHO (1987). Report of the consultation on International Travel and HIV infection WHO/SPA/GLO/87.1. Geneva, WHO.
- WHO (1988). Special Programme on AIDS: Counselling in HIV infection and disease. Geneva, WHO.
- WHO (2002). Dying for Change: Poor people's experience of health and ill-health. Geneva, WHO.
- WHO (2006). Prevention and control of sexually transmitted infections: draft global strategy. Geneva, World Health Organization (WHO).
- WHO (2009). HIV and Infant Feeding: Revised Principles and Recommendations. Rapid Advice. Geneva, World Health Organization (WHO).
- WHO (2010). Female genital mutilation: Fact Sheet no 241. Geneva, World Health Organisation (WHO).
- WHO/UNAIDS (2007). Guidance on provider-initiated HIV testing and counselling in health facilities. Geneva, WHO/UNAIDS.
- WHO/UNAIDS/UNICEF (2007). Towards Universal Access: Scaling up Priority

- HIV/AIDS Interventions in the Health Sector. Geneva, WHO/UNAIDS/UNICEF.
- WHO/UNAIDS/UNICEF (2010). Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector. Progress report Geneva, WHO/UNAIDS/UNICEF.
- WHO/UNICEF/UNAIDS (2009). Toward universal access: Scaling up priority HIV/AIDS interventions in the health sector. Progress Report. Geneva, WHO.
- Wiessner, P. and K. Lemmen (2008). Entry and residence regulations for people living with HIV and AIDS: Quick Reference Guide. Berlin, Deutsche AIDS-Hilfe e. V.
- Wildavsky, A. and K. Dake (1990). "Theories of risk perception: Who fears what and why?" Daedalus **119**: 41-60.
- Williams, D. R. (1997). "Race and Health: Basic question, emerging directions." Annals of Epidemiology **7**: 322-333.
- Worth, H. (1995). AIDS and the other: Race, gender and social policy in the Peter Mwai affair. Auckland, New Zealand AIDS Foundation.
- Worth, H. (1996). Out Of Africa; AIDS, race and social policy in The Peter Mwai affair. International Conference on AIDS, Vancouver.
- Worth, H., A. Reid, et al. (1997). Refugees and HIV/AIDS in the New Zealand Context. Auckland, Auckland Institute of Technology and New Zealand AIDS Foundation.
- Worth, H., A. Reid, et al. (1997). Refugees and HIV/AIDS in the New Zealand Context. Joint Research of Auckland Institute of Technology and New Zealand AIDS Foundation. Auckland, AIT Press.
- Yewoubdar, B. (2000). "Potential HIV risk behaviours among Ethiopians and Eritreans in the diaspora: A bird's eye view." Northeast African Studies **7**(2): 119-142.
- Young, H. (2006). "Two groups not on all fours." PLoS Med. **3**(1): e66-e77.
- Zeitzen, M. L. (2010). The many wives of Jacob Zuma: Why the South African president's polygamy is about more than womanizing. BBC News. London.

Appendix 1: Invitation to Join the Mayisha Study for Community Researchers

We are wondering in what way you would be interested in joining the Mayisha-NZ core research group. The aims of the core research group are to:

1. Develop a group of community researchers and advisers for the Mayisha-NZ project
2. Develop culturally appropriate research methods that can be used to conduct a community survey on knowledge, attitudes and behaviours on HIV/AIDS
3. Carry out the survey in the African migrant and refugee communities in New Zealand
4. Decide on how the results from the survey are to be disseminated

What will Mayisha-NZ offer?

Mayisha-NZ will be unable to pay for salaries for community researchers. However, the following can be provided:

1. Training on research methodologies in the community
2. Pay for the cost incurred in participation (or example travel, food and accommodation if necessary)
3. On-going support in the area of community research and development

It is anticipated that the research conducted will be of the great benefit to the Africans

in New Zealand, as it will provide vital information that can guide and inform HIV/AIDS prevention in the community.

Who will be in the Mayisha-NZ core research group?

Associate Professor Oliver Davidson will be heading up the group, and Gerida Birukila will be working as an Assistant Research Fellow. The rest of the group will be made up of key representatives from the different NZ African communities who are concerned about HIV in their communities and who are interested in addressing those concerns through Mayisha-NZ Research.

What is the next step?

Once the core research group has been formed, the next step will be to conduct research training, social mapping, survey design, and then to carry out a pilot survey. More information will be provided after the formation of the research group.

Appendix 2: Survey Questionnaire

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Te Whare Wānanga o Otago

Mayisha Study

This survey aims to help us develop sexual health services to make them more relevant for you. Some of the questions are of a personal nature; however, your replies will be very useful.

This questionnaire is strictly anonymous and confidential. Do not write anything that could identify you.

Please answer the questions as fully and as accurately as possible.

This study is conducted by the University of Otago School of Medicine.

Please tick or write as appropriate.

1. Gender: (please tick one) Female Male

2. Age in years: (last birthday) _____

3. How long have you been living in New Zealand? _____

4a. In which country were you born? _____

4b. In which country were you living when you were aged 10-16 years old?

5. Are you currently: (tick one or more)

- Employed Unemployed Home/family caring
- Full-time education Part-time education Other
- _____

6. What is the highest level of formal education that you have achieved? (please tick one)

- None Primary / Elementary Secondary / High School
- University Professional training Other
- _____

7. At present are you: (please tick one)

- Married Widowed Living with partner
- In relationship (not living together) Single

8a. What is your religion? (please tick one)

- Christian (specify denomination) _____ Islam
- Other _____ None

8b. Apart from special occasions (e.g. weddings, funerals) how often do you attend religious services? (please tick one)

- Once a week or more

Once a month or more

Twice a year

Once a year

Never / practically never

9a. Have you ever been diagnosed with a sexually transmitted disease (STD) other than HIV? (please tick one)

Yes

No

Not sure

9b. If yes when was the last time you were diagnosed? (please tick one)

Less than 1 year ago

1 to five years ago

Greater than 5 years ago

10a. When did you last have an HIV test? (please tick one)

Never

Less than 1 year ago

1 to 2 years ago

2 to 5 years ago

Greater than 5 years ago

10b. Where did you have your last HIV test? (please tick one)

GP

Sexual health clinic

Antenatal (pregnancy)

Hospital

Asylum clinic

Refugee centre

(Mangere)

Other _____

11a. In the last year, how many **different partners** have you had sexual intercourse with?

(please tick one)

0

1

2

3-4

5-9

10-15

16+

11b. In the last year, how many **new partners** did you have sexual intercourse with for the **first time**? (please tick one)

0

1

2

3-4

5-9

10-15

16+

12a. Was condom used the last time you had sexual intercourse? (please tick one)

Yes

No

12b. If yes was it to stop: (please tick one)

Pregnancy

STD/HIV

Both pregnancy &

STD/HIV

Other _____

13. In general are the people you have sex with: (please tick one)

Male

Female

Male and female

14. Thinking of your most recent or current sexual partner, what ethnicity are they?

(please tick one)

Black African

White

Asian

Mixed / Coloured

Maori

Pacific

Other _____

15. I do not think that I am at risk of catching HIV/AIDS: (please tick the answer that best describes your opinion)

Strongly agree

Agree

Disagree

Strongly disagree

16. Always using condoms during sexual intercourse with new partners would be: (please tick the answer that best describes your opinion)

Very hard to do

Fairly hard to do

Fairly easy to do

Very easy to do

17. I think I could convince a new sexual partner to use a condom, even if they did not want to use one: (please tick the answer that best describes your opinion)

Strongly agree

Agree

Disagree

Strongly disagree

18. How many of your closest friends do you think use condoms with a new sexual partner? (please tick one)

- Almost all
- More than half
- Half
- Less than half
- Almost none

19. Most people who are like me do not think it is important to use condoms with new sexual partners: (please tick the answer that best describes your opinion)

- Very true
- True
- Untrue
- Very untrue

20. If I was to have sexual intercourse with a new partner, I do not intend to use a condom:

(please tick the answer that best describes your opinion)

- Very likely
- Likely
- Unlikely
- Very unlikely

21. Some people find that using herbs or grains to dry or tighten the vagina can increase sexual enjoyment. Have you or your sexual partner(s) ever used this technique? (please tick one)

- Yes, frequently in New Zealand
- Occasionally / sometimes in New Zealand
- Not in New Zealand, but I used to back home
- No, not at all (at home or in New Zealand)
- I don't know

22. Does your culture do the following practice in NZ or Africa?

(please tick where the practice is done)

	NZ	Africa
Male Circumcision	<input type="checkbox"/>	<input type="checkbox"/>
Dry Sex (drying of vagina to increase sexual enjoyment)		<input type="checkbox"/>
<input type="checkbox"/>		
Polygamy (having more than one wife)		<input type="checkbox"/>
<input type="checkbox"/>		
Female Circumcision	<input type="checkbox"/>	<input type="checkbox"/>
Widow Cleansing or Sexual Cleansing		<input type="checkbox"/>
<input type="checkbox"/>		
Spouse Sharing between people of the same clan, family or age group		<input type="checkbox"/>



Thank you for filling out this questionnaire.

Please return to researcher in the envelope provided.

Appendix 3: Information Sheet for Study Participants

HIV-RELATED KNOWLEDGE, ATTITUDES AND BEHAVIOURS AMONG AFRICANS IN CHRISTCHURCH

INFORMATION SHEET FOR PARTICIPANTS

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you of any kind and we thank you for considering our request. The main aim of this project is to assess HIV-related Knowledge, Attitudes and Behaviour among Africans in Christchurch. The information you provide will help to design appropriate HIV prevention interventions. We are interested in Africans living in Christchurch. The age for the participants is 18 years and above.

What will Participants be Asked to Do?

Should you agree to take part in this project, you will be asked to complete a questionnaire. You will not be asked to provide any identifying information about yourself in the questionnaire and every effort will be made to protect your anonymity. This questionnaire asks detailed questions about sexual behaviour. If you feel uncomfortable disclosing such information you may decide not to take part in the project without any disadvantage to yourself of any kind. Furthermore, you may discontinue participation at any stage during the project.

What Data or Information will be collected and What Use will be Made of it?

Names will not be recorded on questionnaires to preserve anonymity of participants. Results of this project may be published and will be available in the University of Otago library, but any data included will in no way be linked to any specific participant. To maintain anonymity of information collected, the data collected will be securely stored in such a way that only those directly involved in the project will be able to gain access to it. The raw data, on which the results of the project depend, will be retained in secure storage for five years. All data may be completely destroyed after this compulsory five years. This is a requirement of the University's research policy.

Important Information

Your participation in the project is entirely voluntary and you are free to withdraw from the project at any time without any disadvantage. Any raw data on which the published results of the project depend will be retained in secure storage for five years, after which they will be destroyed. If the questionnaire content causes any distress you are encouraged to contact a health and counselling service provider. The local providers of such services in Christchurch are: *New Zealand AIDS Foundation (NZAF) Telephone number 03-3791953. Sexual Health Clinic Christchurch Telephone number 03-364 0485.* If you have any questions about our project, either now or in the future, please feel free to contact either: **-Gerida Joseph Birukila Tel 03-3643688/0212254198 or Oliver Davidson Tel 03 4747007 Extension 7367.**

This project has been reviewed and approved by the University of Otago Human Ethics Committee