THE EXPERIENCE OF PRACTICE NURSES WHO HAD OBTAINED A POSTGRADUATE NURSING QUALIFICATION AND HOW THE KNOWLEDGE WAS UTILISED IN THE GENERAL PRACTICE SETTING.

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ABSTRACT

BACKGROUND: It has been recognised at Government level that a well developed and organised primary health care system must be a priority to meet growing demands on the health sector. Practice nurses are a key part of the future primary health care workforce and, as such, have been supported to develop advanced skills and knowledge through postgraduate education programmes. Despite the growing number of nurses who had graduated from postgraduate programmes it was not clear how that knowledge was being translated to the general practice setting.

AIM: The aim of this study was to explore the experiences of practice nurses who had obtained postgraduate nursing qualifications and how they utilised that knowledge in the general practice setting.

METHODOLOGY: A qualitative inductive study was conducted in the lower South Island of New Zealand in 2010 during which data was collected from nine practice nurses who had undertaken postgraduate education. Their education ranged from Postgraduate Certificates through to Masters Degrees. The nurses were all interviewed individually and thematic data analysis was undertaken using NVIVO 9 software. Ethical approval for this study was obtained from the Lower South Regional Ethics Committee

RESULTS: Five main themes emerged from the interview data, namely (1) making the knowledge count, (2) personal and professional growth, (3) changing practice, (4) organisational support and (5) experience of interactions with doctors.

CONCLUSION: Practice nurses with postgraduate education had developed skills in advanced health assessment, critical thinking, clinical reasoning, pharmacology, managing health inequalities, chronic disease management and leadership as a direct result of postgraduate education. Nurses reached their potential, and applied their knowledge most effectively, in organisations that valued and supported advanced nursing practice. These results were particularly important as there were no other New Zealand studies that had examined the outcomes of postgraduate education for practice nurses and consequently provided useful recommendations for optimising patient care in the primary health care sector.

PREFACE

There are so many people who have supported me through my postgraduate journey. Their support has made the ability to undertake a thesis possible and for this I am extremely grateful.

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LIST OF ABBREVIATIONS

General Practitioners	GPs
Government Medical Subsidy	GMS
Primary Health Organisations	PHOs
The Organisation for Economic and Co-operative Development	OECD
Integrated Family Health Centres	IFHCs
Health Workforce New Zealand	HWNZ
Clinical Training Agency	CTA
Professional Development Recognition Programmes	PDRPs

1. CHAPTER ONE: INTRODUCTION

Postgraduate nursing education programmes were widely promoted both nationally and internationally as an effective means for nurses to gain the knowledge required to advance nursing practice (Ministry of Health, 2010). In the last ten years postgraduate nursing education in New Zealand was adapted to incorporate clinically focused programmes (Spence, 2004b) into the existing academic programmes. The development of clinically focused Masters programmes in New Zealand has been driven by significant history and multiple factors (Jacobs, 2005). Possibly the most important driver was the decision of the Nursing Council of New Zealand to add the Nurse Practitioner scope of practice to the nursing register (Ministry of Health, 2002)

The changes in postgraduate nursing education, coupled with the release of the Primary Health Care Strategy (Ministry of Health, 2001), set the scene for the reorganisation of primary health care, providing opportunities for primary health care nurses to change the way they worked and practised. The Labour Government wanted all health professionals to fully utilise their skills to provide a wider range of services and more comprehensive health care to patients (Ministry of Health, 2001). It was recognised that a highly skilled nursing workforce was crucial for the implementation of the Primary Health Care Strategy (Ministry of Health, 2001). Practice nurses, as the largest group of primary health care nurses, needed to become more actively involved in patient care with training and education to support this. Support for training and education for primary health care nurses followed with the release of the Postgraduate Scholarship Fund by the New Zealand Government. King (2003) said in a press release that the fund was "one of the biggest separate investments Government has made into New Zealand nurses' education, since the 1980's".

In return for the Government's financial investment it was expected that the capacity and capability of the primary health care nursing workforce would increase and nurse practitioner roles would be developed in primary health care (King, 2003). Primary Care Scholarship funding was incorporated into the Postgraduate Funding model introduced in 2007 but ring-fenced for primary health care, rural and long term conditions (Ministry of Health, 2010). The funding for postgraduate nurse education saw the number of nurses graduating with postgraduate qualifications almost double between 2002 and 2006 (Health Workforce New

Zealand, 2009) with a steady rise in the number of primary health care nurses applying for ring-fenced funding (Ministry of Health, 2010).

Given the context outlined above, while completing the Nursing Research Methods paper in 2010 the researcher developed an increased interest in the link between postgraduate nursing qualifications and advanced nursing care in general practice. A literature review was undertaken to identify the outcomes of postgraduate qualifications for practice nurses in New Zealand, which then posed the question, "has postgraduate education enabled practice nurses to provide advanced nursing care in the general practice setting?" Although a range of evidence pertaining to the link between postgraduate education and advanced nursing practice was found (Armstrong & Adam, 2002; Carnwell & Daly, 2003; Nicolson, Burr, & Powell, 2005; Spence, 2004a, 2004b), there was no specific research found on New Zealand practice nurses and outcomes after undertaking postgraduate education.

Given the significant Government investment in developing the practice nurse workforce, without any evidence the investment was translating into improved primary health care services, it was important to understand how practice nurses utilised the knowledge from postgraduate qualifications in the general practice setting. In order to help advance the role of the practice nurse it was important for nursing leaders, nurse educators and policy-makers to understand the experiences and the factors that had shaped the use of knowledge in clinical settings for practice nurses once they had completed a postgraduate nursing qualification. Qualitative research was conducted to explore the experience of practice nurses utilising the knowledge from a postgraduate nursing qualification in the general practice setting.

1.1. THE AIM OF THE STUDY

The aim of this research was to explore the experience of practice nurses utilising the knowledge from a postgraduate nursing qualification in the general practice setting.

1.2. STRUCTURE OF THE THESIS

Chapter Two: Background

Chapter two situates the practice nurse within the complex primary health care environment where they work. The chapter also outlined the role of the practice nurse in New Zealand including a comparison between urban and rural practice nurse roles. The chapter concludes with a brief outline of the development and aims of postgraduate nursing education in New Zealand.

Chapter Three: <u>Literature Review</u>

In the third chapter a review is provided of the national and international literature related to the impact of postgraduate nursing education on nursing practice. The literature has been analysed and collated within general themes. The literature review is divided into two sections. Section one includes the outcomes of postgraduate nursing education and section two examines the postgraduate challenges faced by nurses.

Chapter Four: <u>Method</u>

The theoretical paradigms and perspectives underpinning the study are explored alongside locating the researcher's position in the study. The chapter outlines the research strategies, method of collecting and analysing the data and concludes by discussing the interpretation and evaluation of the study.

Chapter Five: <u>Results</u>

Chapter five presents the results from the individual interviews of nine practice nurses. The five themes that resulted from thematic analysis of the interview transcripts were defined and presented. The results were supported with narratives from participants, with pseudonyms being used to protect their identity.

Chapter Six: <u>Discussion</u>

The study demonstrated that practice nurses with postgraduate education were able to provide advanced nursing care to patients if they were supported by organisational structures, nursing leadership, practice models and doctors who valued the potential and actual contribution advanced practice nurses made to the team. The key findings and limitations of the research are discussed in this chapter. Links are made to the national and international research on the topic and the relevant social and political influences on the development of practice nursing in New Zealand.

Chapter Seven: <u>Conclusion/ Recommendations</u>

The final chapter concludes the study by providing a summary of the significant points and provides recommendations for future research.

2. CHAPTER TWO: BACKGROUND

Primary health care in New Zealand experienced a period of significant change in the last ten years as a result of Government policy. Changes to the way primary health care was constructed and delivered was considered essential if health care services were going to meet the increasing health needs of the aging population and burden of chronic disease. Nurses, as the largest provider of primary health care services in New Zealand, were therefore affected by the considerable changes that were made. The first section of the background chapter situates practice nurses within the complex primary health care environment where they work. The second section outlines the role of the practice nurse in New Zealand, including a comparison between urban and rural practice nurse roles. The chapter concludes with a brief outline of the development and aims of postgraduate nursing education in New Zealand and sets the scene for the research.

2.1. SECTION ONE: STRUCTURE OF PRIMARY HEALTH CARE IN NEW ZEALAND

2.1.1. PRE- PRIMARY HEALTH CARE STRATEGY

The ability of primary health care, and particularly general practice (where the majority of practice nurses were employed), to respond to Government changes was influenced by the history and structure of the traditional general practice model that has been dominant for a long time. Prior to the release of the Primary Health Care Strategy (Ministry of Health, 2001) most General Practitioners (GPs) in New Zealand were private business owners. Some GPs who owned and operated small practices with others had chosen to join together and form larger practices. GPs were paid on a fee-for-service basis that provided a partial subsidy, in the form of the Government Medical Subsidy (GMS) from the Ministry of Health, for most GP consultations. GPs were able to charge patients co-payments to ensure that the full cost of the consultation was covered. However, practice nurse consultations could not be claimed for under the fee-for-service model. Instead GPs could employ a practice nurse and claim the practice nurse subsidy which then contributed toward the practice nurse's salary (Docherty, 1996). Although there had been significant developments in primary health care in the last 10 years, many general practices in New Zealand still remained privately owned businesses (Medical Council of New Zealand, 2010a).

2.1.2. THE PRIMARY HEALTH CARE STRATEGY AND DEVELOPMENT OF PRIMARY HEALTH ORGANISATIONS

The Primary Health Care Strategy was released in 2001 (Ministry of Health, 2001) and set the scene for the reorganisation of primary health care in New Zealand. Primary Health Organisations (PHOs) were formed and charged with improving the health of their enrolled population. PHOs were supposed to work to remove barriers and inequalities to health care ensuring primary health care was well co-ordinated and embraced a population health approach in favour of episodic care (Ministry of Health, 2001). PHOs were funded on a capitation funding model and provided opportunities for care to be offered in a different way as funding was not directly linked to the GP who provided the service. The alteration in the funding model was a significant change from the traditional fee-for-service model that had operated previously. The intent of the Primary Health Care Strategy was that all health professionals would work together and be able to fully utilise their skills. It was expected that practice nurses would provide a wider range of services and more comprehensive health care to patients (Ministry of Health, 2001). It was recognised that a highly skilled and educated nurse workforce was crucial for the successful implementation of the Primary Health Care Strategy and acknowledged that nurses needed to be supported with development and education (Ministry of Health, 2001). The support and funding for postgraduate nursing education will be outlined later in the background chapter.

PHOs were formed around New Zealand and varied in size from small PHOs with an enrolled population of less than 4,000 patients to PHOs with greater than 350,000 enrolled patients (Mays & Blick, 2008). Although some PHOs functioned very effectively, and brought about considerable change and improvement to patient care as a result, others have not been as successful (Mays & Blick, 2008). The capitation funding model that was introduced as an incentive to keep the population healthy was, in the majority of situations, used to fund first level services with practices setting up internal systems to pay doctors something similar to the old fee-for-service model (Mays & Blick, 2008). There were smaller additional funding streams available to PHOs including Services to Improve Access Funding, Health Promotion, Careplus and later PHO Performance Management Funding. Some of

these funding streams were used to expand nursing services and establish nurse-led clinics (Finlayson, Sheridan, & Cumming, 2009; Love, 2008).

The Organisation for Economic Co-operation and Development (OECD) (2009) was critical of the New Zealand Primary Health Care reforms considering that the PHO as the conduit for improving primary health care outcomes had failed. Although the PHOs did encourage patient consultation rates to grow, with better incomes for GPs, it was unclear whether the aims of the Primary Health Care Strategy were being met under this model (Organisation for Economic Co-operation and Development, 2009). The strategy failed to deliver "on strong and expanded involvement of nurses" (Ryall, 2009) However, PHOs with an enrolled population of less than 20,000 were increasing the role of nurses and utilising them more fully {Mays & Blick, 2008). Although some gains were made with the Primary Health Care Strategy and subsequent formation of PHOs (Primary Health Care Advisory Council, 2009) the current system was considered unsustainable as the demand for primary health care services continued to increase (Midlands Health Network, 2011).

Following the criticism of PHOs the Minister of Health signalled that he wanted larger PHOs and encouraged DHBs to consolidate the number of PHOs in their region (Ministry of Health, 2011/12; Ryall, 2009). This led to a reduction from 80 PHOs in 2008 to 32 in July 2011. For the Southern region that covered Otago and Southland the consolidation process resulted in nine PHOs reducing to one. It was an expectation that DHBs would work with the larger PHOs to help reduce acute demand and develop new models of care such as Integrated Family Health Centres (Ministry of Health, 2011/12).

2.1.3. "BETTER, SOONER, MORE CONVIENENT HEALTH CARE"

In 2008 there was political change in New Zealand with the National Party elected to lead Parliament. The National Government agreed with the OECD report (2009) that not enough progress was being made in implementing changes in primary health care. The National Government subsequently released its aims of providing "Better Sooner More Convenient Health Care" for all New Zealanders that had first been proposed in 2007 by the then opposition National Party (Ryall, 2007). "Better" was about health professionals embracing a collaborative approach to patient care through shared information and continuous care (Ministry of Health, 2011). "Sooner" related to improved waiting times with improved transition between different parts of the health service and involved up-skilling the workforce so that some services that were currently provided by specialist clinics could be done more

quickly in primary health care (Ministry of Health, 2011). "More convenient" concerned patients being able to access services as close to home as possible and in certain circumstances moving care out into the community so that some hospital admissions could be avoided (Expert Advisory Group on Primary Health Care Nursing, 2003). Underpinning the "Better Sooner More Convenient Health Care" policy was the need for all health professionals to be working more closely together (Ministry of Health, 2011) with implementation occurring in primary health care through the formation of Integrated Family Health Centres (IFHCs) (Primary Health Care Advisory Council, 2009).

2.1.4. INTEGRATED FAMILY HEALTH CENTRES

IFHCs are to be built around patient-centred care with an expanded, multidisciplinary primary health care team taking a proactive approach to planning and managing patient care (Midlands Health Network, 2011; Primary Health Care Advisory Council, 2009). IFHCs will seek to advance some of the work that has already started with PHOs but will involve a significant change away from the traditional small-scale model of general practice that still operates in many areas (Ryall, 2009). IFHCs will change the way providers work and will include triage and stratification of patient need, better use of information technology, use of virtual medicine, and addition of other roles such as health care assistants to support general practice teams. They will work to ensure integration with secondary care services so that all areas of the health sector are working together to manage acute demand (Midlands Health Network, 2001; Primary Health Care Advisory Council, 2009). It is also expected that there will be service devolution where some hospital services may move into the community, for example minor surgical procedures, antibiotic treatment for cellulitis and allied health professionals aligned with IFHCs (Ministry of Health, 2011).

The expanded general practice team will be important to the development of Integrated Family Health Centres with the expectation that all health professionals, including registered nurses, will be required to work to the "top of their licence" (Davies & Hansen, 2011, p. 12) supported through professional development and postgraduate education (Primary Health Care Advisory Council, 2009). In order to support IFHC development in New Zealand the Ministry of Health called for Expressions of Interest and provided support for nine large organisations to work on developing and implementing the model in their area. It was expected that these organisations would share their knowledge with the rest of the sector and

this has now started with the release of "Better, Sooner, More Convenient Health Care in the Community" that profiles IFHC development (Ministry of Health, 2011).

2.1.5. WHY WE NEED A STRONG PRIMARY HEALTH CARE NURSING WORKFORCE IN NEW ZEALAND

Globally, changes occurred to the population structure (Ministry of Health and District Health Boards New Zealand Workforce Group, 2007; Pruitt et al., 2002) and New Zealand was no exception. It was anticipated that the changing structure would place considerable demand on the health service over the next five to ten years (District Health Board New Zealand, 2006). There were a range of population drivers that impacted on health services including the aging population and an associated increase in chronic disease that required more complex care (District Health Board New Zealand, 2006). New Zealand had also experienced changes in its ethnic mix with Maori, Pacific and Asian populations all predicted to rise in the next 10 years (District Health Board New Zealand, 2006). It was recognised that Maori and Pacific people had higher health needs and experienced greater difficulty accessing health services (Ministry of Health, 2001). In addition, the New Zealand population was sparse with one in four New Zealanders living in rural areas or small towns where access to health services was variable (District Health Board New Zealand, 2006).

Nurses were recognised as a key workforce (District Health Board New Zealand, 2006). Both in relation to the number of nurses and the contribution nurses made to health care delivery (Health Workforce New Zealand, 2009). It was imperative that the primary health care sector was developed and that care was provided by interdisciplinary teams where nurses made a contribution (District Health Board New Zealand, 2006). It has been found that strong primary health care teams with increased nurse involvement could lead to improvements in health inequalities and improve population health in a cost-effective manner (Beasley, Starfield, Van Weel, Rosser, & Haq, 2007; Expert Advisory Group on Primary Health Care Nursing, 2003; Kent, Horsburgh, Lay-Yee, Davis, & Pearson, 2005; Smith, 2007).

Primary health care nursing leadership that spanned the continuum from practice level to clinical governance,(at PHO, District Health Board level and nationally) was recognised as a key contributor to helping facilitate change and development (District Health Board New Zealand, 2006; Expert Advisory Group on Primary Health Care Nursing, 2003; Finlayson, et al., 2009; Mackay, 2008; McMurray, 2007).

2.2. SECTION TWO: BACKGROUND TO PRACTICE NURSING, PROFESSIONAL REGULATION AND NURSING LEADERSHIP

2.2.1. BACKGROUND TO PRACTICE NURSING AND INFLUENCES ON ROLE DEVELOPMENT IN NEW ZEALAND

Practice nurses are the largest group of primary health care nurses in New Zealand. Other primary health care nurses include public health, occupational health, sexual health, district, and family planning (Ministry of Health, 2001). A practice nurse is a registered nurse who usually works with GPs in the general practice setting. The role has evolved since the 1970's with substantial variation across practices (Love, 2008). The National Primary Medical Care Survey (2001/2002) reported that practice nurses were providing clinics focused on disease management, immunisations, wound care, dietary and lifestyle advice and arranging repeat prescriptions (Kent et al; 2005). More recently, Love (2008) reported that although some practice nurses were still providing traditional practice nurse roles that supported the GP consultation, there were other practice nurses developing more advanced, autonomous roles that included long-term condition management, minor injury/illness diagnosis and treatment, through to nurse-led clinics. Generally the practice nurse role in New Zealand was focused on maintaining wellness and health promotion, prevention of disease, and early detection and treatment of illness, (McKinlay, 2006) with various expanded roles in rural settings outlined later in the background chapter.

The increased emphasis on primary health care teams was a move away from the traditional wholly "GP-centric model of care" (Mays & Blick, 2008) where the GP was the main provider and in control of patient care. Although it was recognised that teamwork was an important component in general practice, research from the Commonwealth Fund International Survey 2006 (www.commonwealthfund.org/Surveys/2006) found that only 30% of general practices in New Zealand operated as a primary health care team. The inability of general practices to operate as primary health care teams could be attributed to the fact that some health professionals, particularly GPs, did not understand what teamwork was (Finlayson, et al., 2009). It was found that nurses reported the greatest level of job satisfaction from working as part of a team where there were trusted working relationships (Ross, 1995). Where positive working relationships existed practice nurses tended to stay for the long term (Ross, 1995; Ross, 2000). Barriers to developing teamwork have been

identified and included patch protection issues between GPs and practice nurses, GPs attitudes to nurses (particularly around nurse competence and doctor confidence in the nurse), willingness of the GP to support the expanded nurses' role (Finlayson, et al., 2009)and poor professional identity (Mitchell, Parker, & Giles, 2011). Where a teamwork approach was evident practice nurses had been able to expand their roles(Finlayson, et al., 2009). Conversely, where practice nurse development had been slow it had been attributed to GPs, as practice nurse employers, being slow to change (Finlayson).

Due to the Government changes outlined earlier in the background chapter there have been moves away from the traditional general practice model of service delivery where the GP owned the business and employed the nurses (Kent, et al., 2005). However, in some areas innovative models of care had developed that have seen practice nurses' roles expanded and grown accordingly (Finlayson, et al., 2009; Love, 2008). Difficulties in recruiting GPs to rural settings had seen some District Health Boards providing primary health care services that would traditionally have been provided by a GP, and nurses had been able to develop roles to meet community need (Ministry of Health, 2005). Primary Health Care Innovation Funding also facilitated the development of new and innovative models of primary nursing and included projects that provided first contact nurse-led services in areas with no GP, as well as outreach nursing services for high risk groups and provided youth health services (Nelson, Wright, Connor, Buckley, & Cumming, 2009). The changed structure and innovations in primary health care had led to changes in the employment arrangements of some practice nurses and subsequently to their role development.

Finlayson et al. (2009) reported on the challenges, enablers and barriers that practice nurses experienced with role development as part of a report on Nursing Developments in Primary Health Care 2001-2007. Finlayson et al (2009) found that nursing services had expanded in certain areas following the release of the Primary Health Care Strategy (Ministry of Health, 2001). The area where expansion was common was in chronic disease management and for nurses working with the most disadvantaged or underserved populations. These areas were supported by new funding streams that came with PHO development including Careplus and services to improve access funding (Love, 2008). Support from GPs and practice managers were also found to be contributors to practice nurses expanding their roles (Finlayson, et al., 2009). Similarly, Love (2008) found that practice nurses who were employed in settings that

had robust practice leadership and strong management processes were able to expand their roles.

Practice nurses who had not expanded their roles lacked the supportive structures listed in the previous paragraph. Additional barriers were also identified including the lack of nursing awareness regarding opportunities, greater workloads with no extra resources, increased administrative burden, reporting requirements, lack of time, lack of access to training and education, GP attitudes and concerns about nurse competency levels, patient's attitudes, lack of nurse willingness, competence and confidence, and GP dominated PHO Boards (Finlayson, et al., 2009). Nurses as employees of GPs sitting on PHO Boards were raised as an issue related to power imbalance (Finlayson, et al., 2009).

2.2.2. RURAL PRACTICE NURSING IN NEW ZEALAND

In comparison the role of the rural practice nurse in New Zealand was more advanced than their urban counterparts with rural nurses being recognised as being at the forefront of advanced nursing practice (Davison, 2010). Rural practice nurse development could possibly be attributed to the doctor shortage with rural practice nurses tending to outnumber GPs in some areas (Goodyear-Smith & Janes, 2008). Practice nurses working in rural areas were required to provide more advanced nursing services to their communities out of need. In some areas the rural practice nurse's role had expanded sufficiently that they provided first contact services traditionally provided by GPs including triaging and referral to secondary care services, health promotion roles (Health Workforce Information Programme, 2009) and Primary Response in Medical Emergencies known as PRIME (http://prime.stjohn.org.nz).

In recent years there has been a changing profile to the rural workforce that has seen rapid growth in the number of rural nurses and a decline in the rural medical workforce (Health Workforce Information Programme, 2009). With the trend toward more rural nurses, combined with the changing demands on health services associated with an aging population and increased prevalence of chronic disease, it will be important to grow and develop the rural nursing workforce to ensure service delivery to rural areas (Health Workforce Information Programme, 2009). In order to gain the necessary knowledge and skills for the roles rural nurses would be required to perform it was recommended that when they commenced work in rurals areas nurses needed to complete clinical health assessment, primary health care and pharmacology postgraduate courses. Ideally they would continue postgraduate education in order to gain Nurse Practitioner status which will be described later

in this section (Health Workforce Information Programme, 2009). However, rural locality was challenging for nurses who wanted to partake in tertiary level education as there was often increased travel demands, increased costs, and difficulty in obtaining funding for relief for clinical release (Health Workforce Information Programme, 2009).

Rural nurses have had access to postgraduate education programmes for many years with some taking up the opportunity to enrol in the interdisciplinary Postgraduate Diploma in Primary Rural Health developed by the Centre for Rural Health in conjunction with the Christchurch School of Medicine, University of Otago (Maw, 2008). Unfortunately, this programme stopped due to funding issues in late 2002. However, the programme did a lot to raise the profile of advanced rural nurse roles and the need for postgraduate education to support their practice (Maw, 2008).

2.2.3. INTERNATIONAL DEVELOPMENTS

Many countries moved in the same direction as New Zealand with regards to primary health care nurse development as the pressures on the health sector with an aging population, increase in chronic disease, increased health sector costs and technological advances were mirrored internationally. Countries were developing advanced nurse roles generally supported by postgraduate education but not necessarily regulation (Sheer & Kam Yet Wong, 2008). Expansion of advanced roles in primary health care were common and nurses were also working in advanced roles in acute care, minor injury and illness and long-term conditions management providing safe and efficient care (Bonsall & Cheater, 2008). However, similar issues with practice nurse development related to lack of teamwork and organisational barriers found in New Zealand studies (Finlayson, et al., 2009) have been reported internationally (Bonsall & Cheater, 2008).

2.2.4. STRUCTURE OF PRIMARY HEALTH CARE AND PRIMARY HEALTH CARE NURSING LEADERSHIP IN THE SOUTHERN REGION

In 2009 the recently merged Otago and Southland District Health Boards, now the Southern District Health Board, made the decision that there would be one PHO for the region. The nine existing PHOs for the region transitioned into the Southern PHO which commenced operation in October 2010 (www.southernpho.health/nz). It was estimated that 400 practice nurses worked in the field of primary health care within the Southern PHO boundaries. Prior

to the formation of the Southern PHO a Chief Nurse for Primary Health Care existed for the Southland region. This position was partially funded by the Southland District Health Board and partially funded by the combined Southland PHOs. There was no Chief Nurse role established with the formation of the Southern PHO and, therefore, the incumbent was made redundant. Between 2003 and 2006 the Otago District Health Board employed a Director of Primary Health Care Nursing to provide a link between primary and secondary care services; however this role was disestablished as part of cost cutting measures (Medlin, 2006). The Southern PHO currently provide no nursing leadership or professional development for primary health care at the time of writing this thesis.

In comparison the Southern District Health Board, secondary care services provider arm had a robust senior nursing leadership structure that included Chief Nursing and Midwifery Officer, Deputy Chief Nursing and Midwifery Officer and nine Nurse Directors for approximately 2000 nurses (P. Tippett, personal communication, November 24, 2011). A further management structure existed below this including charge nurse level.

2.2.5. REGULATION OF THE NURSING WORKFORCE IN NEW ZEALAND

When considering the experience of practice nurses utilising the knowledge from a postgraduate nursing qualification in the general practice setting it was important to understand how nurses were regulated in New Zealand along with limitations and opportunities for nurses to legally work in advanced/expanded scope roles.

In New Zealand the Nursing Council is the regulatory authority responsible for registration of nurses, setting scopes of practice and defining the qualifications required for registration (www.nursingcouncil.org.nz). There are two scopes of practice for registered nurses, either the Nurse Practitioner scope or Registered Nurse scope with an additional option of expanded scope. The Nurse Practitioner scope of practice was added to the Nurse Register in 2001 and provided a career pathway for expert nurses with a clinical Masters Degree to work independently as the regular health provider for a particular patient group within a defined scope of practice, for example, primary health care or adult mental health (Ministry of Health, 2002). Nurse Practitioners provide a wide range of services including, assessment, diagnosis, and treatment which may include prescribing (Ministry of Health, 2002).

Nurse practitioner development has been slow. The first Nurse Practitioner was registered in 2001 and ten years later there were only 98 registered Nurse Practitioners of whom 75 are

authorised to prescribe (Nursing Council of New Zealand, 2011). Of this cohort there are 32 Nurse Practitioners with Primary Health Care listed as their scope of practice (Nursing Council of New Zealand, 2011)

In response to the slow development of the Nurse Practitioner role in New Zealand, combined with the rapidly changing health care environment and subsequent opportunities for expanded nursing roles, the Nursing Council of New Zealand reviewed registered nurse scopes of practice in 2010. In 2011 they made an amendment to the registered nurse scope of practice to include an expanded scope for registered nurses. The Nursing Council of New Zealand (2010) defined expanded practice as:

> Expansion of the registered nurse scope of practice occurs when a nurse with demonstrated nursing expertise assumes responsibility for a health care activity or role which is currently outside their scope of practice. Expanded practice may include areas of practice that have not previously been in the nursing realm or have been the responsibility of other health professionals (p.5).

The expanded scope must be applied for when the registered nurse applied for an Annual Practicing Certificate. The nurse must demonstrate how the registered nurse competencies and expanded scope competencies were met. The competencies for expanded practice as described by Nursing Council New Zealand (2011) are listed below:

> • Demonstrates initial and ongoing knowledge and skills for specific expanded
>
> practice role/activities through postgraduate education, clinical training and
>
> competence assessment.
>
> • Participates in the evaluation of the outcomes of expanded practice, e.g.
>
> case review, clinical audit, multidisciplinary peer review.
>
> • Integrates and evaluates knowledge and resources from different disciplines
>
> and health-care teams to effectively meet the health care needs of
>
> individuals and groups. (p.8).

Recently the Minister of Health announced that there would be another amendment to the Medicines Act (1984) and the Medicines (Standing Order) Regulations (2002) where nurses working in defined expanded scopes endorsed by the Nursing Council of New Zealand, with

the necessary qualifications, may be able to prescribe a limited range of medications (Ryall, 2011).

2.3. SECTION THREE: BACKGROUND TO POSTGRADUATE NURSE EDUCATION IN NEW ZEALAND

2.3.1. THE MOVE TOWARDS CLINICALLY FOCUSED POSTGRADUATE EDUCATION IN NEW ZEALAND

Postgraduate nurse education was seen as an essential component for gaining professional status (Clunie, 2006) and for developing the nursing profession to meet the growing health care needs of the New Zealand population (Ministerial Taskforce, 1998). The last decade in New Zealand had seen significant changes and developments to the way postgraduate nursing education was provided. There were a number of aspects that had led to the changes, with one of the changes being the development of the Nurse Practitioner scope, as discussed previously. However, there were also a wide range of other influences including the reforms in pre-registration nurse education. The Education Amendment Act (1990) enabled polytechnics, who were the main providers of nurse education, to offer degrees. Prior to this it was only universities that could award degrees (Jacobs, 2005). The change in the Education Amendment Act (1990) was embraced by polytechnics and from 1996 onward every polytechnic that had previously offered a Diploma in Nursing was offering degrees (Jacobs). The Nursing Council of New Zealand responded and from 1998 entry to the Nursing Register for Registered Nurses was via degree (Jacobs). Prior to this, entry to the register had been via diploma or hospital-based nursing programmes.

With the change to pre-registration nurse education many of the programmes that offered post-registration nursing education (such as apprentice-style training courses and advanced diploma programmes) shut down as registered nurses who had entered the nursing register with diplomas or hospital-based training programmes looked to degree programmes (Jacobs, 2005). Master and Doctoral programmes were offered by a small number of universities, for example Victoria and Massey Universities. However, it was contended that these programmes did not advance clinical practice but rather provided preparation for education, administration or research positions (Jacobs, 2005). At this time Ministry of Education funding was limited to academic postgraduate programmes.

The Ministerial Taskforce on Nursing (1998) and the Expert Advisory Group on Primary Health Care Nursing (2003) identified several issues with postgraduate nursing education in New Zealand including a lack of clinically focused programmes, access problems (especially to clinical programmes), high costs associated with postgraduate education, lack of consistency between programmes, development of programmes that were not linked to sector requirements and the lack of a cohesive framework for postgraduate education. Strategies for change were recommended by both groups including the implementation of The Framework, Guidelines and Competencies for Post Registration Nursing Education (Nursing Council of New Zealand, 1998), that set a national direction for the formal development and recognition of post-registration nursing programmes and provided competencies for advanced nursing practice on which education providers were able to base postgraduate education programmes. The competencies for advanced nursing practice later transitioned into the Nurse Practitioner competencies with some changes.

Other recommendations from the Ministerial Taskforce on Nursing (1998) included more involvement by providers of nursing services in programme development, a review of funding arrangements, and increased Nursing Council involvement in postgraduate development around specific specialist competencies.

At the same time, momentum increased for the development of advanced nursing practice (Wilkinson, 2008) with several factors occurring almost simultaneously which drove the development of advanced nursing practice and subsequent postgraduate nursing programmes to support this development. The developments included:

- Recommendations made by the Ministerial Taskforce (Ministerial Taskforce, 1998).
- Funding being made available from 1998 for clinically focused postgraduate nurse education (Jacobs, 2005)
- The development of a position paper by the Nurse Executives of New Zealand on advanced practice roles of the clinical nurse specialist and nurse practitioner modelled on United States advanced practice roles (Jacobs, 2005)
- In 1998 the Minister of Health announced an amendment to the Medicine Act 1981 that enabled the extension of prescribing rights to other health professionals (Wilkinson, 2008). The extension of prescribing rights to nurses was eventually linked to Nurse Practitioner status described below and influenced the content of Masters Programmes in New Zealand.

The announcement of the Nurse Practitioner Scope of Practice and competencies in 2001 and the requirement for nurses applying for Nurse Practitioner status to have a clinically focused Masters Degree, helped raise the impetus for tertiary institutes to ensure their Masters programmes were clinically focused. There was a wide range of clinically focused postgraduate nursing programmes available, ranging from a Postgraduate Certificate through to a Masters with some funding available from Health Workforce New Zealand (www.healthworkforce.govt.nz), formerly the Clinical Training Agency (CTA), to support nurses in identified priority areas. The Expert Advisory Group on Primary Health Care Nursing (2003) was critical about the lack of funded clinical programmes specific for primary health care nurses. In response Annette King, the then Minister of Health, announced an 8.1 million dollar package to support and encourage primary health care nurses, with some of this funding tagged to a postgraduate scholarship fund (King, 2003). The CTA (now Health Workforce New Zealand (HWNZ)) ring-fenced funding which remained available for primary health care nursing, rural health and long-term conditions management (Ministry of Health, 2010). The funding available from HWNZ was for nurses undertaking postgraduate education and was intended to advance nursing practice and subsequently improve health outcomes (Ministry of Health, 2010).

For several years nurse education in New Zealand was in a state of constant change and the background provided here is important to understand as some nurses who participated in this research project had been involved in the transition phase. Nurses who graduated with a pre-registration diploma, or from a hospital-based training programme, may have completed a post-registration degree, Postgraduate Certificate, Diploma or Masters Degree prior to development of a clear Clinical Masters pathway. Subsequently, some nurses have undertaken further postgraduate study to meet Nursing Council of New Zealand requirements for Nurse Practitioners to have a clinically focused Masters Degree.

2.3.2. AIMS OF POSTGRADUATE NURSING EDUCATION

When considering the experience of practice nurses utilising the knowledge gained from a postgraduate nursing qualification in the general practice setting it was useful to scrutinise the aims and expected outcomes of postgraduate nurse education in New Zealand. Registered nurses embarked on postgraduate education to be professionally and intellectually challenged, to improve credibility and professional status, for professional development and career advancement, and to improve knowledge and skills related to research processes in

order to strengthen clinical practice with evidence (Watkins, 2011). Nurse Managers tended to value practical Masters programmes that brought about direct benefits to clinical sites (Drennan & Hyde, 2009), while nurse academics considered that a Masters Degree should be based on the development of scholarship and critical thinking that would impact on clinical practice (Gerrish, Ashworth, & McManus, 2000).

For the purpose of this study it was important to identify what generic attributes universities wanted their graduates to have. Broadly speaking, universities were concerned with developing an effect on the way graduates thought and acted (Biggs & Tang, 2009). Biggs and Tang (2009) discussed ideal graduate attributes that included critical thinking, ethical practice, creativity, independent problem solving, professional skills, communication skills, teamwork and lifelong learning. Barrie (2004) considered that there were lower level generic attributes that were related to all disciplines and included scholarship, global citizenship and lifelong learning. Then there were higher level attributes that were related to particular disciplines and included research and inquiry, information literacy, personal and intellectual autonomy, ethical commitment, social and professional and communication skills, and commitment (Barrie, 2004).

The development of scholarship, critical thinking and reflective practice were generic attributes that were considered important in the international literature (Barrie, 2004; Biggs & Tang, 2009; Brockbank & McGill, 2007; Mann, Gordon, & MacLeod, 2009) and it was thought that they should be present in all graduates of higher education programmes (Drennan, 2010). One of the aims of higher education was to develop a student's capability for deep critical thinking (Brockbank & McGill, 2007). Critical thinking was defined as the ability to: "Identify central issues and assumptions in an argument, recognise important relationships, make inferences from data, deduce conclusions from information or data provided, interpret whether conclusions are warranted on the basis of the data given, and evaluate evidence" (Pascarella & Terenzini, 1991, p. 118).

Critical thinking skills were developed through a teaching and assessment process that taught students how to think (Daly, 1998) and were considered an important skill for nurses when advances in health care and technology were occurring so rapidly (Drennan, 2010). Reflective practice helped to develop critical thinking skills and was defined as the: "purposeful critical analysis of knowledge and experience, in order to achieve a deeper meaning and understanding" (Mann, et al., 2009, p. 597). Reflective practice occurred at

different levels, from the more superficial level through to critical reflective analysis (Brockbank & McGill, 2007; Mann, et al., 2009). As an example, at the largest university in the South Island, the University of Otago, there was a Teaching and Learning Plan 2005-2010 that applied to undergraduate and postgraduate teaching. This plan included identifying goals, objectives and strategies that were similar to Barrie's (2004) ideas and outlined six dimensions for quality learning (Higher Education Development Centre, 2008). The Centre for Postgraduate Nursing Studies, University of Otago, Christchurch, like many other academic institutes in New Zealand, offered a range of clinically and academically focused programmes that led to Masters and PhD qualifications. Information on the University of Otago website ([www.otago.ac.nz/christchurch/otago)](www.otago.ac.nz/christchurch/otago) stated that the clinical programme incorporated both theoretical and practice components congruent with the Advanced Competencies as set out by the Nursing Council of New Zealand and was aligned with National Health Policy directives and the Nursing Council Framework for Postgraduate Nursing Education. The aim of the Centre for Postgraduate Nursing Studies was to focus on postgraduate nurse education and research for the advancement of nursing to enhance the health of the population.

2.3.3. THE PRACTICE NURSE AND POSTGRADUATE EDUCATION

The New Zealand National Medical Survey in 2001/2002 found that practice nurses had limited postgraduate qualifications (Kent, et al., 2005). The Nursing Council of New Zealand's first survey of registered nurse qualifications in 2000 showed that only 0.7% of the registered nurse workforce had a Masters Degree (Nursing Council of New Zealand, 2000). Despite collecting the educational status of registered nurses annually, as part of the Annual Practicing Certificate process, the Nursing Council of New Zealand did not report on postgraduate qualifications in their 2010 report (Nursing Council of New Zealand, 2010).

However, the changes outlined earlier in this section have seen the number of nurses engaged in postgraduate education increase and this has been linked to the implementation of CTA-funded study for registered nurses (Health Workforce New Zealand, 2009). Ring-fenced funding for primary health nurses saw a 178% increase in applications for funding between Semester Two in 2007, when it was first offered by CTA, and Semester Two in 2008 (Ministry of Health, 2010). There was also an increased number of nurses accessing the rural and long-term conditions fund (Ministry of Health, 2010) and many of these nurses worked in primary health care.

The number of nurses engaged in postgraduate nursing education may have also been influenced by the Health Practitioner Competency Assurance Act (2003). This act led the Nursing Council of New Zealand to implement competency requirements where registered nurses were required to provide evidence of ongoing professional development in order to apply for an Annual Practicing Certificate. With the introduction of the Health Practitioners Competency Assurance Act (2003), Professional Development Recognition Programmes (PDRPs) were seen as the Nursing Council of New Zealand's solution to ensuring all nurses met the requirements needed to maintain their scope of practice (Clunie, 2006). Registration on a recognised PDRP for registered nurses was encouraged as it provided a clear career pathway and recognition system and negated the possibility of audit by the New Zealand Nursing Council. PDRP's were a way of ensuring nursing expertise was visible and was a means for nurses with postgraduate qualifications to gain recognition that their knowledge, skills and ability to integrate theory and practice was at a higher level (Nursing Council of New Zealand, 2012). For example there was the Primary Health Care Nurse Professional Development and Recognition Programme that practice nurses could participate in (New Zealand College of Primary Health Care Nurses, 2010) which was based on the previous practice nurse accreditation programme. The current programme was based on the recommendations of the national PDPR working party (2009) and provided a clear career pathway from beginning nurse to expert practitioner. Within the proficient and expert level was the criterion that nurses needed to have completed, or were in the process of, completing a postgraduate nursing qualification.

In the last ten years there has been an increased focus generally on registered nurse professional development that has included PDRP's and postgraduate education. More specifically primary health care nurses have been able to access funding to support postgraduate education that has seen an increased uptake of nurses into postgraduate study in primary health care (many of whom will be practice nurses). It was therefore important to gain an understanding of how those nurses were utilising the knowledge gained in the clinical setting.

2.4. SUMMARY

This chapter provided the background to the research situating the practice nurse in the primary health care and postgraduate education environment. The chapter offered the reader an insight into the complex environment, and multiple influences, on the practice nurse's

ability to function and develop. It is important the context of the practice nurse's environment is understood before exploring the experiences of practice nurses with postgraduate nursing education utilising their knowledge in the general practice setting. The following chapter reviews the impact of postgraduate nurse education on practice.

3. CHAPTER THREE: LITERATURE REVIEW

3.1. INTRODUCTION

The aim of this research was to explore the experience of practice nurses who had obtained postgraduate nursing qualifications and how they utilised that knowledge in the general practice setting. The literature relating to practice nurses and the impact of postgraduate education was almost non-existent. Therefore, the focus the literature review has taken was to look broadly at the link between postgraduate nurse education and the experience of nurses utilising that knowledge in practice, irrespective of the practice setting. Although there had not been an abundance of research undertaken in this area it appeared that in the last five years there had been increased attention to the outcomes of postgraduate nurse education.

This chapter reviewed the national and international literature related to the impact of postgraduate nursing education on nursing practice. The literature was analysed and collated within general themes. The literature review has been divided into two sections. Section one included the outcomes of postgraduate education and incorporated advanced clinical practice, advanced nursing leadership, critical thinking skills, confidence and professional credibility, and career advancement. Section two examined the postgraduate challenges faced by nurses that included doctor tensions, lack of collegial and management support and concluded with the personal challenges faced by nurses.

3.2. SEARCH STRATEGY

The CINAHL, Medline, Ovid, Web of Science and Google scholar databases were searched using the following terms and keywords

1.   education, Masters, graduate, postgraduate, academic qualifications, academic achievement
2.   practice nurse, advanced nursing practice, nurse roles, clinical outcomes, career mobility, outcomes, practice
3.   primary health care, family health care, general practice

When primary research was found, forward and backward citation searching was used. University Library databases were also searched to identify any relevant thesis and word-of-mouth references and this identified one New Zealand research project (Barnhill, 2010).

The search process was not straightforward due to the lack of consistent terminology around postgraduate education and the difference between levels of education internationally. There was an abundance of literature pertaining to advanced practice roles but the link with postgraduate education was often missing. It was also unclear what level of education was required for nurses to work in the vast array of advanced nursing roles that had developed internationally. After a comprehensive search was completed, 30 articles of literature were obtained and these were included in the literature review if they examined the impact of postgraduate nurse education on personal and professional development and clinical practice. From the 30 articles available, 17 met the inclusion criteria as they covered primary research on postgraduate nurse education linking it to advanced clinical practice and/or career development.

3.3.   SECTION ONE: OUTCOMES OF POSTGRADUATE EDUCATION

3.3.1.   ADVANCED CLINICAL NURSING PRACTICE

Advanced clinical practice involved a nurse having expert clinical skills in order to conduct a comprehensive health assessment resulting in diagnosis and treatment of illness (Furlong & Smith, 2005). Nurses who worked in advanced roles and provided direct patient care challenged traditional boundaries that existed between nursing and medicine (Furlong & Smith, 2005). It was important to understand whether nurses who had undertaken postgraduate education provided advanced clinical care to patients.

The literature review identified only one study that explored the development of the advanced nursing role in primary health care (Carnwell & Daly, 2003). Exploratory research in the West Midlands of the United Kingdom investigated the development of 31 primary care nurses (including district nurses, health visitors and practice nurses) after completion of a Masters Degree. Although there were only five practice nurse participants the findings were considered relevant and important to the New Zealand context. The United Kingdom, like New Zealand, was trying to expand nurses' roles to meet the changing demands of the population and to help manage the difficulty recruiting medical staff to some areas (Carnwell & Daly, 2003). Nurses in the West Midlands' study reported that their roles had developed and changed as their personal confidence increased. Previously, practice nurses had seen patients with defined presentations but as the roles developed nurses were seeing patients with a wider variety of needs and could diagnose, treat, and refer, based on the individual patient's presentation. The nurses considered the care they provided was more holistic and

patient education was focused on improving patient self-management (Carnwell & Daly, 2003). More independent nursing practice was considered a positive outcome by the practice as the advanced practice nurse was offering appointments in a similar way to GPs resulting in reduced patient waiting times. Patients were positive following the consultation with the nurses with some patients unsure of the difference between the advanced practice nurse and the GP (Carnwell & Daly, 2003).

Other international researchers have reported similar findings, notably that nurses with postgraduate education had the skills and confidence to assess patients with complex conditions (Hardwick & Jordan, 2002; Whyte, Lugton, & Fawcett, 2000). Whyte, Lugton & Fawcett (2000) conducted a 10-year follow up study in Edinburgh evaluating the influence of Masters Courses offered by the University of Edinburgh on subsequent professional development of students. The research was used to assist with the development of future Masters courses that were responsive to the needs of the workforce (Whyte, et al., 2000). Hardwick & Jordan identified how participants in a part-time post-registration degree and Masters course at one institute in the United Kingdom perceived that their knowledge had changed as a result of their learning from the course.

Results from the small number of New Zealand studies conducted on the outcomes of postgraduate nurse education concur with the international findings. National research has demonstrated that postgraduate nurses, across settings, reported improved clinical skills providing benefits to the patients and organisation (Barnhill, 2010; Bennison, 2009; Spence, 2004b). Qualitative research undertaken by Spence (2004b) that involved 20 registered nurses found that postgraduate education had expanded the nurses' knowledge and skill base including the ability to undertake more comprehensive assessments resulting in possible diagnosis. As a result nurses reported improved clinical judgement that enabled them to become more involved in the health care team (Spence, 2004b). Another mixed method research project investigated 105 emergency nurses' perceptions of the impact of postgraduate education on their practice and found that the increased knowledge, critical, reflective and independent thinking skills gained from postgraduate education had enabled emergency nurses to advance clinical practice and improve patient care (Bennison, 2009). Similarly Barnhill conducted quantitative research that explored the impact of postgraduate education on the practice of registered nurses who worked in the medical and surgical wards at Counties Manukau District Health Board. It was found that the majority of nurses reported an increase in the application of knowledge to clinical practice that included improved ability to carry out

technical procedures and assisted them with the ordering and interpreting of diagnostic tests (Barnhill, 2010). The same study found that nurses considered postgraduate education had improved patient outcomes. The nurses considered that they could explain care better, were more confident talking to patients and families, and were better at evaluating underlying causes for patient problems (Barnhill, 2010).

In contrast, Armstrong & Adam (2002) undertook a qualitative study that examined the impact of a postgraduate critical care course on nursing practice. The researchers found that nurses did not report an improvement in clinical skills as a result of the course, noting that nurses valued knowledge that was directly applicable to clinical practice. Other qualitative United Kingdom researchers had also found that course development needed to focus on practical application to clinical practice (Gerrish, et al., 2000; Gerrish, McManus, & Ashworth, 2003).

3.3.2. ADVANCED NURSING LEADERSHIP

As outlined in the background section, primary health care nursing leadership was recognised as a key contributor to facilitating the change required to meet future demands facing the primary health care sector (District Health Board New Zealand, 2006; Expert Advisory Group on Primary Health Care Nursing, 2003; Finlayson, et al., 2009; Mackay, 2008; McMurray, 2007). It was, therefore, important to consider how postgraduate level education had developed nursing leadership skills nationally and internationally. The research evidence demonstrated that the application of knowledge from postgraduate education extended to all aspects of nursing practice, not just direct patient care. Nurses had a more strategic approach to the development of organisational practice (Whyte, et al., 2000) with some nurses having developed leadership roles focused on practice development and consultancy services (Carnwell & Daly, 2003).

Nurses in the critical care course study reported that postgraduate education gave them a wider view of speciality nursing, facilitating the development of knowledge in broader areas to help with management, teaching and leadership roles (Armstrong & Adam, 2002). Others reported that nurses with a broader view and increased skills were more effective at implementing practice changes that led to postgraduate nurses being held in higher regard by their managers (Gerrish, et al., 2000).

However, without supportive leadership structures nurses reported difficulty applying the knowledge and skills gained from postgraduate education into practice (Spencer, 2006). The

difficulty applying knowledge was most apparent in junior nurses who considered that to effect change and make decisions you needed to hold a senior position (Spencer, 2006). As outlined in the background chapter many practice nurses in New Zealand were employed directly by GPs and, therefore, held no positional power (Finlayson, et al., 2009).

3.3.3. CRITICAL THINKING SKILLS

A number of authors suggested that graduates should develop scholarship with the corresponding attributes of information literacy, research and inquiry (Biggs & Tang, 2009; Cirocco, 2007; Daly, 1998). As outlined in the background section, critical thinking skills were considered an important outcome of nursing education. Critical thinking skills were developed by teaching students how to think and seek out information rather than all the material being supplied by course tutors (Daly, 1998). Several studies identified that nurses developed information literacy, as well as research and inquiry skills, as a result of postgraduate education with critical inquiry skills then being used in the practice setting (Barnhill, 2010; Bennison, 2009; Clodagh Cooley, 2008; Drennan, 2010; Gerrish, et al., 2000; Hardwick & Jordan, 2002; Lofmark & Mamhidir, 2010; Spence, 2004b; Spencer, 2006; Van Wissen & McBride-Henry, 2010; Whyte, et al., 2000). Masters graduates who participated in a quantitative cross-sectional cohort study in Ireland were found to have significantly higher critical thinking scores when compared to those commencing the programme (Drennan, 2010). Although local studies have not quantitatively measured critical thinking scores, nurses in two studies reported that postgraduate education had a positive influence on critical thinking skills (Barnhill, 2010) with nurses themselves recognising the importance of basing practice on research findings (Bennison, 2009).

Nurses with postgraduate education thought differently and as a result had become more critical and questioning of practice (Hardwick & Jordan, 2002; Lofmark & Mamhidir, 2010). Löfmark & Mamhidir (2010) in a descriptive qualitative study in Sweden investigated student and preceptor perceptions and experiences of Masters level education in primary health care concentrating on the clinical area. They found that nurses were more able to question as a result of having developed critical thinking skills (Lofmark & Mamhidir, 2010). The development of critical thinking skills and questioning behaviour was linked to the development of the necessary academic and research skills required to find relevant research and read and critique research articles, for example learning how to access electronic data

bases. (Bennison, 2009; Clodagh Cooley, 2008; Hardwick & Jordan, 2002; Lofmark & Mamhidir, 2010; Spence, 2004b;Spencer, 2006; Whyte, et al., 2000).

Academic research skills led to more structured and broader thinking, enabling nurses to reflect, problem solve and link the reflective process with relevant research evidence (Spence, 2004b; Whyte, et al., 2000). An Australian longitudinal study of registered nurses undertaking postgraduate education followed graduates' career movements and future study plans (Pelletier, Donoghue, & Duffield, 2003; Pelletier, Donoghue, & Duffield, 2005). Pelletier et al., (2003) found that 87% of nurses reported being able to make care decisions based on research findings. Van Wissen & McBride-Henry (2010), in a qualitative New Zealand study that explored the impact of studying in a postgraduate bioscience course, found that nurses were more confident about integrating theoretical knowledge into practice. The improvement to patient care and clinical practice occurred when nurses had developed the analytical skills and confidence needed to challenge their own practice, the practice of their colleagues (Spencer, 2006) and organisational superiors (Gerrish, et al., 2003). Strong critical thinking skills were shown to provide nurses with the tools to effectively manage unpredictable situations in everyday practice and to cope better with the limitations of the health care system (Gerrish, et al., 2000).

In contrast, other nurses reported anxiety when they tried to integrate theory into practice. This was the case in a mixed method research study that explored the experience of nurses transitioning into an advanced neonatal nurse practitioner role following completion of an Advanced Neonatal Nurse Practitioner Course (Nicolson, et al., 2005). Some of the difficulty was found to be dependent upon the individual nurse's confidence level, time available and managerial support (Carnwell & Daly, 2003; Clodagh Cooley, 2008; Nicolson et al., 2005).

3.3.4. CONFIDENCE/ PROFESSIONAL CREDIBILITY

Several studies reported that postgraduate education had a positive impact on nurses' confidence (Armstrong & Adam, 2002; Bennison, 2009; Carnwell & Daly, 2003; Clodagh Cooley, 2008; Nicolson, et al., 2005; Spence, 2004b; Van Wissen & McBride-Henry, 2010; Whyte, et al., 2000). Postgraduate education gave nurses the knowledge and ability to be more confident at many levels within the practice environment. Nurses were more confident expressing opinions with all levels of health care providers (Van Wissen & McBride-Henry, 2010; Whyte, et al., 2000). Bennison (2009) reported that 85.4% of nurses had increased confidence when questioning decisions of their colleagues, including medical colleagues.

Similarly Pelletier, Donoghue & Duffield (2005) reported 81% of nurses considered that postgraduate education had increased their ability to question care decisions made by other colleagues, including doctors. Nurses who participated in postgraduate education reporting being more articulate with other professional groups (Spence, 2004b) and that this contributed to increased confidence with other team members.

Nurses also reported increased confidence about producing and publishing papers (D. Armstrong & Adam, 2002), influencing practice (Carnwell & Daly, 2003), writing submissions, being more political (Bennison, 2009), taking on management positions (Carnwell & Daly, 2003), and with leading discussions and sharing knowledge with other team members (Clodagh Cooley, 2008). Nicolson (2005) reported that postgraduate education had made participants more confident in a variety of areas including counselling (89%), acting as a peer resource (100%), providing leadership for a specialist team (91.8%), linking nursing and medical activities (97.2%), facilitating research and knowledge (78.3%), and carrying out complex clinical procedures (61.2%).

Additionally, postgraduate education increased the professional status of the nurse affording them greater recognition by their colleagues and the wider health care team (Armstrong & Adam, 2002; Bennison, 2009; Whyte, et al., 2000). Gerrish, McManus & Ashworth (2003) found that Masters level education increased nurses' credibility with health care managers and medical colleagues, and provided students with the skills to manage many of the organisational constraints that existed in the health sector.

3.3.5. CAREER ADVANCEMENT

The potential for career advancement and promotion was one of the main reasons nurses commenced postgraduate education (Hardwick & Jordan, 2002; Spencer, 2005; Whyte et al., 2000). Clodagh Cooley (2008) found that nurses studied not only to aid professional development but also to gain access to speciality nurse areas, to increase their promotion and employment opportunities, for personal survival, and to be more academically credible preceptors. Pullon & Fry (2005) found that nurses were significantly more likely to anticipate enhanced career opportunities as a result of postgraduate education. However, there was considerable variation in the destination and career advancement of nurses with postgraduate qualifications (Drennan, 2008; Hardwick & Jordan, 2002; Pelletier, Donaghue & Duttfield, 2005; Whyte et al., 2000).

Drennan (2008) undertook a quantitative study in Ireland that explored the professional and academic destination of 322 nurses following completion of Masters Degrees and found that 50% of graduates worked in clinical practice, 16% worked in nurse education, 16% in nursing management, with the remaining nurses employed in research or other roles. There was a 21.8% reduction in the number of nurses employed at staff nurse level with many of these nurses shifting into Director Assistant, Director of Nursing, Advanced Nurse Practitioner or lecturer positions (Drennan, 2008). Whyte et al., (2000) found that although 92% of nurses went back to nursing careers on completion of postgraduate study, the majority went to teaching posts with only 13% in clinical roles. A major limitation of this study was the lack of baseline information making it difficult to attribute any role change to postgraduate study.

Another longitudinal study that recruited participants in cohorts over five years explored personal and professional development of nurses (Pelletier, et al., 2005). By six years postgraduate over 50% of two of the five cohorts had changed position in the previous two years (Pelletier, et al., 2005). Improved work satisfaction was the most commonly cited reason for changing position (Pelletier, et al., 2005). Hardwick & Jordan (2002) reported that 23% of clinicians had moved into management roles since commencing postgraduate studies. Similarly Spencer (2005) found that 42% of nurses who had attained postgraduate qualifications moved into roles that involved less direct patient care. Conversely, Barnhill (2010) found that postgraduate study improved nurses' professional development and had a positive impact on their career progression with 81% of nurses stating they considered they had an "increase in clinical responsibility since completing postgraduate qualifications" (p.52).

However, it was not uncommon for postgraduate nurses who held relatively junior nursing positions to experience frustration and challenges when they wanted to make changes to practice (Spencer, 2006). Nurses were often left feeling powerless and were, therefore, more likely to seek promotion (Spencer, 2006). Even though there were advantages to nurses moving into management posts where they could provide support to other clinical nurses (Hardwick & Jordan, 2002) it reduced the pool of nurses with the learning associated with academic qualifications to provide advanced nursing care at the clinical level (Hardwick & Jordan, 2002). Sometimes there was no financial reward for moving into advanced practice nurse roles (Carnwell & Daly, 2003). Therefore, Nurses who sought career advancement for improved status and financial rewards sometimes needed to forgo roles that involved direct patient care (Spencer, 2005). Although in some countries and settings the financial value

placed on direct patient care has been less than for other roles, this may well change in the future with expanded role development, for example Nurse Practitioners (Ministry of Health, 2002).

3.4. SECTION TWO: POSTGRADUATE CHALLENGES

3.4.1. DOCTOR TENSIONS

The previous section provided research evidence related to the outcomes of postgraduate education for registered nurses. The research demonstrated that postgraduate qualifications completed by registered nurses either enhanced existing skills or facilitated the development of new skills including research, critical analysis, reflection, change management, and presentation and communication skills (Hardwick & Jordan, 2002; Nicolson, et al., 2005; Spencer, 2006; Whyte, et al., 2000). These enhanced skills gave nurses the confidence to question existing practices that might have previously gone unchallenged, sometimes resulting in conflict with the clinical team (Armstrong & Adam, 2002; Hardwick & Jordan, 2002; Spencer, 2006; Whyte, et al., 2000).

Although nurses who worked in advanced practice roles were found to be of increased benefit to patients (Carnwell & Daly, 2003) these roles were also noted to have caused tension between nurses and doctors (Armstrong & Adam, 2002; Carnwell & Daly, 2003; Hardwick & Jordan, 2002; Nicolson, et al., 2005; Spencer, 2006; Whyte, et al., 2000). The tension occurred when advanced nurses tried to assume responsibility for traditional medical tasks (Carnwell & Daly, 2003; Gerrish, et al., 2003; Nicolson et al, 2005).

Two studies (Carnwell & Daly, 2003; Nicolson, et al., 2005) found inconsistent attitudes within medical teams over the advanced nurse role resulting in conflict and confusion for the nurse. Carnwell & Daly (2003) reported that different GPs from the same practice could be equally supportive or unsupportive of the advanced nurse role. Nurses needed to have a functional working relationship with the GP as second opinions were often required. Additionally, nurses often needed doctors' support to manage the primary/secondary interface as it was not uncommon for secondary care consultants to refuse to accept referrals from nurses. Similarly Nicholson et al., (2005) reported variation between neonatal consultants with some who viewed the advanced practitioner as autonomous and others who would not even allow the nurse to make an independent decision related to care that had always been the domain of nurses.

Nurses often relied on medical staff who could be either helpful or obstructive, and this impacted on the ability of nurses (who had the theoretical knowledge required of an advanced practice nurse) to develop advanced clinical skills that required mentoring and support (Nicolson, et al., 2005). Medical colleagues' ambivalence toward nurses undertaking postgraduate study was reported by Spencer (2006) with nurses reporting that consultants could not understand the point of them undertaking postgraduate study. Conversely Hardwick and Jordan (2002) found that only 7% of nurses had experienced resentment from doctors when utilising postgraduate skills and knowledge in the practice setting. A positive working relationship was important for teamwork with Carnwell & Daly (2003) suggesting that an improved understanding of professional roles may help to mitigate some issues between medical and nursing colleagues and foster more collaborative ways of working. Doctors and nurses could provide mutual support for each other with nurses in advanced roles requiring the support of doctors for second opinions and helping to negotiate access to consultants, and likewise nurses could provide advice and support to doctors (Carnwell & Daly, 2003).

An interesting New Zealand study on the outcomes of an interprofessional postgraduate education programme, looking predominately at primary health care providers, reported that interprofessional learning helped to improve the understanding of another professional group's competencies and skills in 79% (n 114) of participants (Pullon & Fry, 2005). Although 96% (n 28) of nurses reported an improved understanding of another professional group's competencies and skills, doctors reported only a 70% (n 79) improvement. Pullon & Fry provided no explanation for the different outcome between providers but suggested that learning in this way might reduce "unhelpful professional attitudes" (p 575). This New Zealand research was interesting and although the research demonstrated some intriguing results the authors noted that nurse participants numbers were low, possibly because of barriers that existed for interprofessional learning in New Zealand (Pullon & Fry, 2005). As the programme was not endorsed by the Nursing Council of New Zealand and did not attract Health Workforce New Zealand funding (District Health Board New Zealand, 2006) nurses are required to self fund participation.

Although postgraduate education provided nurses with the confidence to manage the doctor/nurse professional interface the nurse's personality was also found to be important (Nicolson, et al., 2005). Nurses who had a more positive, optimistic approach could see a clearer pathway forward and could navigate the challenges involved in developing advanced practice roles (Nicolson, et al., 2005). Although some studies provided evidence that

postgraduate education improved nurses' professional status and credibility (Whyte, et al., 2000), with nurses gaining increased respect from medical colleagues (Armstrong & Adam, 2002), other studies reported that nurses with a postgraduate qualification should not assume that the qualification would provide credibility (Gerrish, et al., 2003). Instead they found it was the combination of competence combined with the qualification that led to nurses gaining credibility.

3.4.2. LACK OF COLLEGIAL/MANAGEMENT SUPPORT

Several studies identified that lack of management support was detrimental to nurses being able to utilise knowledge gained from postgraduate education in clinical practice settings (Armstrong & Adam, 2002; Bennison, 2009; Clodagh Cooley, 2008; Gerrish, et al., 2000; Gerrish, et al., 2003; Hardwick & Jordan, 2002; Nicolson, et al., 2005). Hardwick and Jordan found 38% of respondents did not feel valued by their manager and a significant number of this group (8/11) had not received any formal recognition or mention of their graduate status. Spence (2004 b) found that the climate in certain settings was not conducive for supporting nurses undertaking postgraduate education and questioned the "costs of not having proactive and visionary managers and senior nurses" (p24). Similarly in a New Zealand study some nurses reported that there was a lack of professional recognition and corresponding career or progression opportunities for nurses with postgraduate qualifications (Bennison, 2009).

Tensions arose when the learning that had taken place on the programme was not valued by employers and managers, or the organisation did not value the individual's potential contribution (Gerrish, et al., 2000; Gerrish, et al., 2003). The performance of the postgraduate nurse in practice was dependent upon individual motivation, organisational receptiveness (Gerrish, et al., 2000), unit culture (Armstrong & Adam, 2002) as well as the interpersonal dynamics and politics of the area in which they worked (Nicolson, et al., 2005). Postgraduate nurses became frustrated as they identified issues with health care delivery but without full knowledge or management support they were unable to make the necessary changes to clinical practice (Clodagh Cooley, 2008).

Nursing colleagues were sometimes as unsupportive as doctors and managers, with some nurses openly verbalising thoughts about postgraduate education in a negative way within hearing range of the graduate nurse (Hardwick & Jordan, 2002). Other nurses adopted negative attitudes toward the postgraduate nurse and it was perceived that some managers were unsupportive (Clodagh Cooley, 2008). Nicholson et al., (2005) reported that some

nurses considered that senior sisters were threatened by nurses who had completed postgraduate education (Nicolson, 2005).

3.4.3. PERSONAL CHALLENGES

The challenges many nurses faced when undertaking postgraduate education is well known and documented (Bennison, 2009; Clodagh Cooley, 2008; Spence, 2004a; Whyte, et al., 2000). The common challenges were lack of time, money, juggling family commitments, lack of funding, lack of remuneration and lack of rewards, (Clodagh Cooley, 2008; Spence, 2004a ; Spencer, 2006). Managing the academic workload combined with working was also identified as a significant challenge (Whyte, et al., 2000) particularly for nurses working full-time (Bennison, 2009). Some nurses reported irretrievable damage to friendships and relationships (Bennison, 2009) and feelings of guilt because they were not spending time with family (Clodagh Cooley, 2008). Family support was important as it helped nurses with their postgraduate journey (Bennison, 2009 ; Clodagh Cooley, 2008).

3.5. SUMMARY

This literature review provided an overview of the current research that broadly provided a link between postgraduate nurse education and the experience of nurses utilising the knowledge in practice, irrespective of the setting. Although there was only one international study that involved practice nurses and postgraduate education the broader research identified some common themes relevant to this study. The following chapter will present the research methodological approach used in the current research.

4. CHAPTER FOUR: METHODOLOGY AND METHOD

4.1. INTRODUCTION

A qualitative research approach was chosen to answer the research question : What were the experiences of practice nurses who had obtained postgraduate nursing qualifications and how they utilised that knowledge in the general practice setting?.

 Denzin and Lincoln (2005) defined qualitative research as:

> Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (p. 3).

Denzin & Lincoln (2003) went on to describe the five phases that underpinned the qualitative research process. These phases have been outlined in this chapter and were used to plan the research project.

- Phase 1:   The researcher as a multicultural subject
- Phase 2:   Theoretical paradigms and perspectives
- Phase 3:   Research strategies
- Phase 4:   Methods of collection and analysis
- Phase 5:   The art, practices, and politics of interpretation and analysis

The methodology chapter will describe the theoretical paradigms and perspectives of this study including locating the researcher's position in the project. Further on the chapter will outline the research strategies, method of data collection and data analysis and will conclude with a discussion of the interpretation and evaluation of results.

4.2. PHASE 1: THE RESEARCHER AS A MULTICULTURAL SUBJECT

Qualitative researchers understand the socially constructed nature of reality and the role that the researcher plays in this construction (Denzin & Lincoln, 2003; Hewitt, 2007). There have been many factors identified that contribute to the researcher's position in the world including background, social class, gender, values, and beliefs (Denzin & Lincoln, 2003). All of these factors have been shown to influence how the researcher developed a research project, how research questions were constructed, through to how the data was collected, analysed and interpreted (Denzin & Lincoln, 2003). Because of the influence of self on any qualitative research project it is recommened researchers identify such influences through a self-reflective process (Sword, 1999). Outlining the influence of self on the research process then provided transparency that allowed the audience to understand the reasons why the data might have been interpreted in a certain way, thus providing a more meaningful context to the audience

The researcher was a 43-year-old married female, of New Zealand European descent, with two children and who lived in a Dunedin city. The researcher had worked as a registered nurse for 23 years, initially in secondary care services (both in New Zealand and overseas) and then for the last 13 years in a large urban general practice. Within the practice the researcher had worked as Practice Nurse Co-ordinator for six years and following that as the Nurse Development Manager. A key responsibility of this role was to develop the nursing team to meet the health care needs of the enrolled population. Many nurses were providing advanced roles in the area of mental health, long-term condition management and as advanced generalist practice nurses working under standing orders. The practice had also looked at the development of a Primary Health Care Nurse Practitioner role. Developing advanced roles and the subsequent expansion of nursing services within the general practice setting developed the researcher's thinking around enablers and barriers for nurses utilising their postgraduate qualifications in the practice setting.

The researcher was also the nurse representative on the Primary Health Organisation Board for seven years and was the Chair of the Primary Health Care Nurse Leadership Group in 2009/2010. The Primary Health Care Nurse Leadership Group was instrumental in developing the ONE programme for practice nurse education in the Otago region that co-ordinated and ran programmes focused on developing and updating core skills and knowledge for practice nurses.

In addition to it being part of her role as Nurse Development Manager, the background and experience of the researcher led to her supporting nurses with their professional development. This included postgraduate education, as well as developing expanded roles for nurses within the context of one large general practice. Through the influences on the researcher's own life she understood that although people might have had similar experiences, education and opportunities in life each individual was likely to approach a similar situation differently.

The researcher brought her experience and knowledge from one general practice into the research project and was seeking to gain a broader understanding of the experiences of practice nurses by interviewing them in differing settings.

4.3. PHASE 2: THEORETICAL PARADIGMS AND PERSPECTIVES

Through recognising the researcher's values, beliefs and influences over the research process individual epistemological positions can be identified (Crotty, 1998; Denzin & Lincoln, 2003). Epistemology was described as a way of understanding and explaining how we know what we know (Crotty, 1998; Davidson & Tolich, 2003). There were a range of epistemological stances with each one providing significant differences in how research was conducted and presented (Crotty, 1998). There was no ideal epistemological position and the stance taken needed to match the research question and what the researcher wanted to know (Braun & Clarke, 2006).

Following review of differing epistemological positions the researcher opted for the constructionist epistemological approach (Crotty, 1998) as the researcher aimed to understand the experiences of practice nurses. The constructionist approach recognised that the meanings and experiences of research participants were constructed as they interacted with the world in which they lived (Crotty, 1998; Thomas, 2006). As such, meanings were socially produced and reproduced, rather than being predetermined, signifying that each research participant might have a different view and perception of the same experience (Patton, 2002). The constructionist approach offered the researcher the opportunity to capture individual views through open-ended interviews with interaction between the participant and researcher (Patton, 2002).

When the researcher was conducting the interviews it became very clear that although many of the nurses had similar experiences, how they interpreted and responded to those experiences was very different. Some of the differences were related to the experience level of the nurse but from the researcher's perspective there also appeared to be differences linked

to background, motivation, personal attitude and self-confidence of the nurse. Those nurses who appeared more outwardly self-confident, motivated and assertive tended to have constructed their reality in a more positive way. For the rural nurses their experiences appeared to be influenced by the rural world in which they lived. Through the interactive process with participants, who had very different experiences it became apparent that there might not be a simple explanation for the differences reported (Appleton & King, 1997).

The advantages offered by the constructionist approach were significant in this research. The interactive process between the researcher and participant was beneficial and helped with the construction of reality (Appleton & King, 1997). The majority of nurses were very clear about their experiences, and what those experiences meant for them, and during those interviews the researcher mainly listened. However, one participant was not as clear and the interview was more conversational. This appeared to be useful for the participant and helped her formulate her thoughts through the interactive process. Another advantage of the constructionist approach was the ability of the researcher to bring experience and knowledge to the research setting helping to negate the need for impartiality (Charmaz, 2005). During all the interviews it was difficult to remain impartial as often nurses sought confirmation from the researcher about the researcher's experiences, often asking "have you found that". It was recognised that impartiality was difficult when nurses were studying real life nursing issues and had close experience with the research topic (Appleton & King, 1997). When the researcher became involved she endeavoured to offer a factual account of her personal experiences and sometimes discussion ensued. The discussion often reassured participants that they were not alone in their experiences; however, it was apparent that the interpretation of individual experience was different. The constructionist epistemological approach (Crotty, 1998) worked well in practice.

4.4. PHASE 3: RESEARCH STRATEGIES

Koch (1995) and Crotty (1998) recommended that before choosing a research method the researcher needed to examine the philosophical assumptions underlying the method to ensure they were consistent with the researcher's own philosophies and that the methodology was appropriate to the question. After careful review and consideration of several qualitative research methods, including phenomenology (Polit & Beck, 2010) and grounded theory (Charmaz, 2005) the general inductive approach was chosen as it offered a systematic

procedure for analysing qualitative data without the complexities of other methods (Thomas, 2006).

Qualitative inquiry was orientated towards inductive logic (Patton, 2002). Inductive analysis started with specific observations building toward general patterns and then progressed to theory development, without making assumptions in advance about what the important aspects would be (Patton, 2002; Thomas, 2006). Inductive analysis involved allowing the research findings to emerge from frequent, significant patterns, themes, and categories from the raw data without the researcher trying to fit the data into any preconceived idea (Patton, 2002 ;Thomas, 2006). However, Thomas and Braun & Clarke (2006) noted that findings were inevitably shaped by the experiences of the researcher who conducted the study and carried out the evaluation in alignment with the constructionist approach adopted.

Braun & Clarke (2006) went on to describe how themes were identified at either a semantic or latent level. At the semantic level the researcher looked at the surface meaning of the data and did not look for any deeper meaning. In contrast, the latent level started to identify some of the deeper meanings, ideas and assumptions with the subsequent development of themes. Because of the identification of deeper meanings within the data latent level analysis fitted within the constructionist epistemological approach (Braun & Clarke, 2006) and this was the approach the researcher took with data analysis.

One disadvantage of the general inductive approach was that it was not as strong for theory or model development as alternative options such as grounded theory, discourse analysis or phenomenology (Thomas, 2006). However, it was considered an appropriate choice for a novice researcher because of its usability and suitability for a thesis project and it did not have the same structural restraints as other methodologies (Thomas, 2006).

4.5. PHASE 4: METHODS OF COLLECTION AND ANALYSIS

4.5.1. SAMPLING/ PARTICIPANTS

Qualitative researchers will seek samples that allow the researcher to develop a rich, holistic understanding of the phenomena being studied (Polit & Beck, 2010), and as a consequence small samples are generally chosen (Patton, 2002). One common technique used in qualitative research was purposive sampling (Patton, 2002) which involved the non-random selection of individuals to participate in a study based on their particular knowledge of the phenomena under investigation (Streubert & Carpenter, 1998). Within purposive sampling

maximum variation could also be used (Polit & Beck, 2010). Maximum variation aimed to recruit participants that had a high potential to impart information-rich material and who also had a wide variation of experiences in an assortment of settings. The advantage of using this approach was that it identified unique cases as well as identifying shared patterns experienced by a broad range of participants (Patton, 2002). Although small sample sizes were often sought by the qualitative researcher (Polit & Beck, 2010) it was recommended that a minimum of six participants were required when trying to understand the important nature of participant experience (Morse, 1994).

Purposive sampling was used to recruit practice nurses (with postgraduate nursing qualifications ranging from Postgraduate Certificate through to Masters Degree) working in general practice in Otago or Southland. Nurse Practitioners were excluded as their scope of practice was different to registered nurses. Also excluded were practice nurses from the practice where the researcher was employed. Particpants were recruited from advertisements placed in the Otago Practice Nurse Education newsletters and via post for the Southland practice nurses. The Southern Primary Health Organisation assisted with the postal addresses for the Southland practices. As suggested by the Univeristy of Otago Board of Studies an intermediatary person was used to help with recruitment in order to avoid any conflict of interest with the researcher's other positions. Ethical approval was granted by the Lower South Regional Ethics Committee. Futher information is included in the appendices Participant Information Sheet (Appendix One), Consent Form (Appendix Two) and Ethics Approval (Appendix Three).

From the intial advertising six recruits came forward who were predominatly rural nurses. To ensure maximum variation (Polit & Beck, 2010) three urban practices were targeted with another postal drop and another urban nurse was recruited. The seven interviews were conducted over a six-week period and during this time another rural and urban nurse volunteered to be part of the research if required. Following discussion with the researcher's supervisors it was decided to include these two nurses because of both the locality of their practices and the considerable postgraduate education both nurses had undertaken. In total nine nurses across Otago (8) and Southland (1) were recruited and participated in the research. No significant obstacles were identified during the recruitment process.

Although all of the nurses recruited were practice nurses some had changed their titles to reflect where they worked. Five of the nurses worked in rural practices, three in urban

practices and one nurse shared her work time between an urban and rural practice. All of the recruits were female and self-identified their ethnicity as New Zealand European. The age range of recruits was between 28 and 63 years with the median and average age being 47 years. The length of service as a practice nurse varied from 2.5 to 18 years with the median length of service as a practice nurse being 7.5 years. Four of the recruits had a Postgraduate Certificate; two of these participants were still studying and expected their exit qualification to be a Masters Degree. Three recruits had a Postgraduate Diploma, and one of these participants was still studying and expected her exit qualification to be a Masters Degree. Two recruits had a Masters Degree and one was still studying to complete academic requirements to apply for Nurse Practitioner status.

4.5.2   DATA COLLECTION

Several forms of data collection can be used in qualitative research including interview, direct observation, and the analysis of artefacts, cultural records and documents (Denzin & Lincoln, 2003). The researcher had to make a choice about what method of data collection would produce high quality data that could be translated into meaningful results (Polit & Beck, 2010). The available options were considered and interview was chosen as the method of data collection. Interviews have become the most common form of data collection in qualitative inquiry because they generate the most useful information about the lived experience and its meanings (Denzin & Lincoln, 2003). Interviews can be conducted in a multitude of ways ranging from unstructured interviews to highly structured interviews and from individual interviews to interviewing in focus groups (Denzin & Lincoln, 2003).

Within the constructivist approach the interview is seen as a social interaction between the interviewer and interviewee where the data and story are created from the shared experience of both participants in the process (Charmaz, 2002; Patton, 2002). Constructivists get as close to the inside of the experience as they can so that they can study how participants construct meaning and actions thus enabling the research to locate the data collected in the context of the individual's life (Charmaz, 2005). The social interaction relationship that developed between interviewer and interviewee within the constructivism approach also aligned with feminist interviewing ethic that operated from the premise that the researcher and participant were co-equals and discussed mutually relevant issues (Denzin & Lincoln, 2003). Feminist interviewing required openness and emotional engagement that might lead to the development of a long-term relationship between researcher and participant (Denzin &

Lincoln; Oakley, 1988). Denzin (2002) commented that the development of a closer personal relationship between interviewer and interviewee could help minimise the status differences that sometimes occurred when more traditional approaches to interviews were used, for example researchers coming from a positivistic world view (Karnieli-Miller, Strier, & Pessach, 2009) that required objectivity and detachment (Fontana & Frey, 2005)

The level of information imparted by interviewees could be enhanced if there was a relationship between interviewee and interviewer that was based on trust and understanding and this could be improved by the interviewer contributing to the interaction by answering questions and expressing feelings (Denzin & Lincoln, 2003; Kvale, 2006). Although this approach was valuable in order to develop rapport and, therefore, gained information-rich material there were also ethical issues that might arise. For example, participants might disclose painful or sensitive material that they did not intend to reveal (Hewitt, 2007).

Semi-structured interviews (Denzin & Lincoln, 2003) were conducted across Otago and Southland at mutually agreed times and locations, with most of the interviews taking approximately one hour to complete. The semi-structured approach used an interview guide (included in the appendix four) that ensured all participants were asked the same questions but provided the flexibility the researcher sought. This allowed the interviewer to ask more in-depth questions, probing more deeply into other subject areas, when it was considered appropriate. The interview guide was very useful for a novice researcher and ensured that the limited time available for the interview was used constructively (Denzin & Lincoln, 2003). Additional baseline demographic data was collected from each participant. Interviews were recorded on a digital recorder and brief field notes were kept by the researcher during the interview. This helped with the formulation of additional questions that needed to be asked and was used to help prompt the researcher to seek clarification of issues.

During the course of the interviews the researcher felt that rapport had developed with the participants relatively quickly. As noted earlier, the level of information imparted by interviewees could be enhanced if there was a relationship between interviewee and interviewer that was based on trust and understanding and that this relationship could be improved by the interviewer contributing to the interaction by answering questions and expressing feelings (Denzin & Lincoln, 2003; Kvale, 2006). The researcher, in her professional role, had previous contact with four of the participants as they had served together on advisory groups or committees. For the most part this existing relationship

seemed to enhance the rapport and the level of disclosure was similar to the other nurses interviewed. However, one of the four nurses appeared uncomfortable in the interview setting and was careful with her responses. The nurse appeared notably more relaxed when the interview was completed. The interview transcript for this nurse had fewer stories than the majority of other participants indicating that the interview was probably of a poorer quality (Kvale, 1996). The researcher had met two other participants at various nursing events but they were not well known to the researcher.

Following the interviews the tapes were checked to ensure that the data had been recorded correctly and some post interview notes were made which reflected on the interview, the setting, and interviewees' responses. The checking process helped the researcher to review poorly worded questions and allowed for self-reflection if problems had developed in building rapport with a participant (Patton, 2002). Although the researcher felt that a close rapport had been developed with the majority of participants, and that this had enhanced the disclosure of information-rich material, there was some evidence that participants had disclosed painful or sensitive material that they had not intended to reveal (Hewitt, 2007). For example, one participant gave examples of distressing patient presentations that she had been involved with and how she had handled those situations. She had also discussed the lack of support she had received in her professional role. The examples she had provided were information-rich but when the transcript was returned to her for checking the participant subsequently asked for whole sections to be removed from the transcript. The researcher recognised that valuable content would be lost in the removal process so asked the participant if the material she wished to delete could be coded for analysis only and not be used in any of the narratives. The researcher wanted to ensure that the participant felt no pressure to consent to the use of the data so opted to use a more impersonal form of contact (i.e. email) rather than face-to-face or telephone contact. The ongoing nature of informed consent was important given the feminist interviewing style that was used, as the level of information imparted could be greater than when other approaches were used (Fontana & Frey, 2005; Kvale, 2006). Participants wanting sections of transcripts removed or altered has been a recognised problem with ongoing consent processes (Karnieli-Miller, et al., 2009) but it was important to the researcher that participants were comfortable with how the data was to be used. This particular participant consented to the data being coded but not included in the narratives.

It has been found by other researchers that listening to interview tapes provided interviewers with an opportunity to reflect on their own personal interview style and communication techniques while also assessing the quality of the interview (Patton, 2002). In this instance, despite the researcher being concerned about how inarticulate she sounded on taped interviews, the reflective process was indeed useful and helped with future interviews. With progressive interviews the researcher attempted to become less concerned about short silences and, rather than try to fill silences with prompts, she adapted her style to give the participant time to think and respond. A range of complex reasons for silences in qualitative interview have been identified including difficulty developing a rapport with participants and inexperienced interviewers (Poland & Pederson, 1998). However, when the researcher reviewed the tapes the silences were very short and on reflection occurred more often with questions that required the participant to provide a particular example or patient scenario.

Listening to the tapes also identified that the researcher paraphrased as part of the prompting process for the next set of questions. This caused problems with one participant who struggled to answer the questions, and often left the researcher floundering. Although it has previously been established that the overall quality of an interview is benefited by the extent to which an interviewer paraphrased and sought clarification of meaning from participant responses (Kvale, 1996) this was not the case with this participant. Review of this nurse's interview tape identified that when she had difficulty answering the questions the interviewer talked more, which was a sign of a poor quality interview (Kvale, 1996). Therefore, the amount of useful material on the tape from this particular interview was minimal. There appeared to be no issues regarding the building of rapport as the participant seemed relaxed and comfortable.

As a novice researcher it was challenging undertaking interviews but with practise personal confidence increased. The interviews generally provided rich material in a narrative style that was relevant to the research question (Kvale, 1996). Although there were two interviews that challenged the researcher, these interviews provided opportunities for learning and reflection.

4.5.3 DATA ANALYSIS

The challenge of qualitative data analysis was to make sense of a large volume of raw data collected to produce a report that clearly communicated the research results (Patton, 2002). As described previously inductive analysis involved allowing the research findings to emerge from frequent, significant patterns, themes, and categories from the raw data without the

researcher trying to fit the data into any preconceived idea (Patton, 2002; Thomas, 2006). The purpose of the inductive approach was to condense the raw data into a summary format, establish clear links between the research objectives and summary findings, and to develop a model or theory about the underlying experiences from the raw data (Thomas, 2006). The method of thematic analysis, as described by Braun & Clarke (2006), was used to analyse the research data. The process for undertaking thematic analysis as discussed by Braun and Clarke is outlined in table 1.

Table 1: *Phases of Thematic Analysis*

Familiarising yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas
Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant into each code
Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
Reviewing the themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis
Defining and naming the themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions of each theme
Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

(Reproduced Braun and Clarke, 2006 p 87): Reproduced with permission from publishers.

Several authors have suggested undertaking your own transcribing as a way of getting closer to the data (Patton, 2002; Braun & Clarke, 2006). However, in order to save time all tapes were transcribed verbatim by a trained transcriber. The text was then checked against the tapes by the researcher to ensure accuracy. Listening to the tapes and checking the transcripts helped the researcher become very familiar with the content of the research data which then aided the development of initial codes. (Patton, 2002). Potential themes were also identified in the field from the field notes. Utilising both the field notes and initial transcript readings, initial codes were created.

Braun & Clarke (2006) recommend coding as many potential themes as possible as some might be useful later. It was also recommended that the code was kept relevant by including some of the surrounding text and remembering to code individual sections of text into as many themes as possible. Heeding Braun and Clarkes (2006) advice the researcher started by reading the transcripts and developing codes. Initially over 70 codes were identified and the researcher started coding the transcripts in a word document using balloons. After two transcripts were coded using this method a meeting with the researcher's supervisors was held to review coding and processes. It became apparent that there were too many codes to be manageable and also coding in a word document was going to be very time consuming when it came to collating codes. It was suggested that the researcher considered using a software package such as NVIVO (www.qsrinternational.com). NVIVO 9 had purpose built tools for classifying, sorting and arranging information and assisting the researcher to analyse information and identify themes. The software was relatively straightforward to use and saved valuable time.

Following the software decision, work then started on reducing the 70 codes down to 30. The researcher reviewed the transcripts and codes to reduce any overlap. By reading and re-reading the transcripts, listening to the tapes, and reviewing the codes it became apparent what the codes should be. It also became clearer what sections of the transcripts should be coded in certain ways. Working to revise and continually refine the coding process in this way was a recommended process in thematic analysis (Thomas, 2006). Once the coding was completed and reviewed the process of working out what codes fitted together, commonly called convergence, commenced (Patton, 2002). At this point some codes were merged again and this brought the final number of codes to 24.

The codes were sorted, reviewed and initial themes were identified but not finalised. Identifying common themes was a non-linear, iterative process (Braun & Clarke, 2006) that required the researcher to continually move backward and forward between the data sets. It was important that themes fitted together in a meaningful way (internal homogeneity) and there should be clear, bold differences between themes (external homogeneity) (Patton, 2002). The aim was that eventually there should be three to eight important themes (Thomas, 2006). These themes would require further in-depth analysis and refinement in order to develop a thematic map (Braun & Clarke, 2006). To gain clarity around potential themes the researcher discussed options with her supervisor and then with a work colleague. Having talked through ideas and sorted potential groups of codes into themes, this helped the researcher to clarify her thought processes. The 24 codes identified were then grouped together in five themes.

NVIVO 9 (www.qsrinternational.com) enabled the development of a thematic map (Braun & Clarke, 2006) that allowed visualisation of the main themes and all the codes that had been merged under that theme, along with the data extracts. The thematic map was used to identify the essence of each theme, and for each individual theme there was a detailed analysis with accompanying narratives from the transcripts to support it. The themes were then further analysed in the discussion by linking the themes to the relevant literature.

The qualitative data analysis process involved coding and development of themes and raised the potential for misrepresentation of the data. It was possible that this process might leave participants feeling unhappy or lacking control about how narratives were interpreted and presented, raising issues about informed consent (Hewitt, 2007). To avoid this, final descriptions and narratives were returned to the participants so they could validate the interpretations, thus assisting the researcher to verify that there were no major misrepresentations or exclusions made (Strubert & Carpenter, 1999). At this point the researcher had identified the particularly useful stories that she wanted to put into narrative form in the thesis. The narratives the researcher wanted to use were also returned to the participants and Stage Two consent (see Appendix Two) was obtained in order to use the stories.

4.6 PHASE 5: THE ART AND POLITICS OF INTERPRETATION AND EVALUATION

Denzin and Lincoln (2005) discussed the complexity related to the interpretation of qualitative research findings, citing that the interpretation would be both artistic and political with the possibility of the results being used by multiple communities. The literature contained numerous options about how to assess qualitative research (Guba 1981; Koch & Harrington, 1998; Polit & Beck, 2010; Tracy, 2010; Whittemore, Chase, & Mandle, 2001) and some researchers suggested that a single standard for assessing quality was problematic (Lincoln & Guba, 2005). Each consumer of research had a preferred assessment tool but the researcher of this study used the model described by Guba (1981) to guide the research process.

Guba (1981) proposed four criteria for judging the soundness of qualitative research. They were credibility, transferability, dependability and confirmability, all of which are still widely used. Credibility was one of the most important factors in establishing trustworthiness (Lincoln & Guba, 1985) and Shenton (2004) provided a range of provisions to ensure this had occurred. The single most important provision recommended to increase credibility was to ensure that results were credible or believable from the perspective of the research participant and this was achieved in two ways. Firstly original transcripts were returned to participants to ensure their words matched what was intended as well as checking for accuracy. Secondly, narratives were returned to the participants for second stage consent so that narratives could be used to support the themes developed during the thematic analysis. The researcher endeavoured to include information-rich narratives in the results to help enhance credibility in relation to the research results.

The transferability of findings in qualitative research is not concerned with the ability of the findings to be transferred to other settings as would happen with quantitative research. Instead qualitative research allowed the consumer of the research to make decisions about applying relevance of the findings to other settings (Lincoln & Guba, 1985). Likewise constructionist assumed a relativist ontological position meaning that research findings could only be understood within the context from which they were taken and could not be generalised (Patton, 2002). Although the findings from this study might be relevant to other practice nurses and the extended nursing community in New Zealand the results need to be

considered in the context of the Southern environment as that may well be very different to other areas (Shenton, 2004).

Dependability (Guba, 1981) in quantitative research referred to the stability of data over time and conditions (Polit & Beck, 2010), meaning another researcher would be able to reproduce the same findings with the same participants and setting. However, qualitative research is interpretative with meanings and interpretations constructed as part of the research process (Denzin & Lincoln, 2005). Therefore, the essence of qualitative research was not to generate reproducible results as over time situations and participants' responses might change. Equally, participants in the same study, but in a different environment, might have different experiences (Polit & Beck, 2010). Dependability can be enhanced by providing a detailed report as to how the research was undertaken so that it could be repeated, allowing that the results might be different (Shenton, 2004). The researcher provides a detailed account of the research process and can be contacted if any further information is required.

The final criterion was confirmability (Guba, 1981) that the research findings were the true results and experiences of the participants versus the researcher's own (Shenton, 2004). A detailed methodological description has been provided for the reader so they can understand how coding and theme development decisions were made. The researcher provided a personal and professional background for the reader so any potential bias that might have existed was easily identifiable. The researcher's supervisors also provided objective support throughout the research project.

4.7 SUMMARY

The researcher's decisions regarding the theoretical paradigms and perspectives, research strategies, and method of collection and analysis of the data were influenced by the researcher's own values, beliefs and identified influences over the research process. The research question necessitated a qualitative approach to fully explore the practice nurse's experience and, therefore, inductive analysis combined with a constructionist epistemological approach was chosen. The constructionist approach was ideal as it enabled the researcher to bring her own experiences and knowledge to the research setting while also recognising that each research participant brought their own experience and subsequent meanings to the project.

Thematic analysis was used to categorise the results into five themes which will be presented in the next chapter. Each theme was defined, followed by a detailed analysis, and included

narratives from the participants to support both the themes and analysis. The themes provided an interesting insight into the experience of practice nurses utilising the knowledge gained from a postgraduate nursing qualification in the general practice setting.

5 CHAPTER FIVE: RESULTS

5.5 INTRODUCTION

This chapter presents the results of a qualitative research study that explored the experience of practice nurses utilising knowledge gained from a postgraduate nursing qualification in a general practice environment. The five themes that resulted from thematic analysis of the interview transcripts are defined and presented. The results are supported with narratives from participants, with pseudonyms being used to protect their identity.

The five themes from the thematic analysis were:

1. Making the knowledge count
2. Personal and professional growth
3. Changing practice
4. Organisational support
5. Experience of interaction with doctors

5.6 THEME ONE: MAKING THE KNOWLEDGE COUNT

The first theme captured the nurses' journey through the course of postgraduate study, from the initial excitement about learning, culminating in an unclear pathway forward for professional development. This theme demonstrated how early in the nurse's postgraduate journey there was a desire to gain immediate knowledge relevant to their current position. Nurses initially enrolled in courses that met the requirements their position needed but were generally undertaken without a long-term course or career plan. The results indicated that when nurses successfully completed initial postgraduate papers many of them became passionate about postgraduate education and realised the need for course and career planning.

Although it was expected that nurses commencing postgraduate education would have a clear study plan most of the participants in this study started postgraduate education with no predetermined outcome or structured education plan. Instead many of the nurses based their initial study around papers that were relevant to their current roles rather than as part of a cohesive plan for their future development. Generally, there was a strong desire from practice nurses to advance knowledge in patient assessment, diagnosis, pharmacology and long-term condition management. Jackie said: "I really enjoyed the clinical papers. I started with the pharmacology paper which I absolutely loved". Similarly, Mary said she did: "...advanced

health assessment initially to give my assessment skills a kick start because I was entering practice nursing". Emma the practice nurse manager participant opted to take postgraduate papers to develop her leadership and management skills: "I had been promoted to nurse manager and I felt inadequate and lacked the confidence in my own ability to undertake the role. It was my lack of confidence that made me opt for the leadership and management paper". Through the postgraduate journey, participants' knowledge levels improved thus highlighting the knowledge gaps in their peers. Several nurses made comments about the importance of nurses being able to undertake a systematic patient assessment with statements such as:

> Advanced assessment paper is a must for all practice nurses. I just think it's a fantastic paper and I think that it doesn't matter at what level you're practicing; I think it's really useful ... I think it should be a prerequisite, and working with a new practice nurse recently it's interesting how a lot of nurses don't have a systematic form of assessing a patient and I think that it does teach you how to do that (Jackie).

Participants in this study began their postgraduate journey with papers that provided knowledge that could be transferred into their immediate roles but through the process of learning became positive about the opportunities postgraduate education provided more generally. Emma said: "I like the whole thing about post grad and learning, I like that I'm being challenged in my job and role". Then, in order to "make the knowledge count", nurses had to develop a long-term study and career plan. Jackie succinctly expressed a common theme: "they kind of do a post grad paper and go, oh that's quite cool I might do another one, and they sort of get half way along and think this is fantastic I think I'd like to complete this and then they discover that it's been a bit patchy". The need for clear course advice and career planning from the beginning of their journey came through very strongly from the nurses interviewed. Only one nurse on the Masters pathway reported she had obtained clear course advice. The other two nurses had not received this assistance which meant that both nurses would need to take additional papers in order to meet Nursing Council requirements for Nurse Practitioner endorsement should they decide to apply in the future. The nurse that had a clear vision and associated Masters education plan was very complimentary about the course advice she had received from a lecturer in the postgraduate school she attended: "Every year she would say this is the paper you need to do and this is the paper that's got to be done" (Jackie). In contrast, another nurse interviewed, who held a Masters Degree, had

continued postgraduate education in order to met Nursing Council requirements for a Nurse Practitioner but had lost count of the number of papers she had completed. Sue said: "I got advice that wasn't right for my career for my planning so I ended up doing research rather than a clinical Masters so I've done I don't know how many papers". Two nurses with Postgraduate Diplomas were contemplating their future pathway aware that all of the papers they had completed toward their Postgraduate Diploma might not be credited into a clinical Master's programme.

The results of the research also highlighted the lack of a clear career pathway linked to postgraduate education for practice nurses in the Southern Region. Although participants identified how the knowledge gained from postgraduate education was utilised in the general practice environment (described later in the results) there was limited clarity about how the postgraduate qualification would advance their careers. Debbie, an urban nurse who had almost completed her Masters, was not sure there would be a role where her skills and knowledge would be utilised: "I see primary care changing. I don't see it staying as it is and hopefully there'll be a place for me to be able to use it".

The opportunity for a definite Nurse Practitioner role as an outcome of postgraduate education was an option for only one nurse. However, once nurses completed their Masters Degrees they have the opportunity to apply for Nurse Practitioner status and can then apply for Nurse Practitioner roles as they are advertised. It was noted that for some of the nurses interviewed the current pathway to gaining Nurse Practitioner status was challenging. One nurse with a Postgraduate Diploma was delaying continuing on the Masters pathway because of potential changes to Nurse Practitioner development: "I have heard whispers about possibly changing the whole way the Nurse Practitioner thing is done and developing a Nurse Practitioner course which I would really like so I've decided I'm just going to wait in a wee holding pattern for a year or two." (Emma).

Another rural nurse with a Postgraduate Diploma was contemplating whether or not to complete her Masters as she was unsure that she wanted to be a Nurse Practitioner:

> This year's been a turning point for me in the sense that I'm actually quite nervous about carrying on because I can see that if I do, that my option real option is to become a Nurse Practitioner where I am because my future is on the farm with my husband and my kids at this stage. So that if I go on and become a Nurse Practitioner, you know, a lot of what I'm going to be doing is

prescribing should I become one and that's actually quite scary because of the lack of GP support (Mary).

Interviews for this research were conducted early in 2011 prior to Nursing Council New Zealand formalising the expanded scope for registered nurses on the Nursing Register. The results suggested that for some practice nurses the registered nurse expanded scope may provide other career opportunities for them. Jackie said:

> I quite like the idea that they're going to bring in an advanced nurse role as I think that will go a long way to addressing issues for some nurses when they haven't decided where they want to go. I know nurses that quite like the idea of this.

The first theme "making the knowledge count" outlined the practices nurses' postgraduate journey. It commenced with nurses studying postgraduate papers that were directly applicable to their role through to considering what qualification they were seeking and the possible career opportunities that might be available as an outcome of postgraduate education. The theme provided a positive account of practice nurses' experience with postgraduate education.

5.7 THEME TWO: PERSONAL AND PROFESSIONAL GROWTH

The second theme defined the "personal and professional growth" that practice nurses experienced as a result of postgraduate nurse education. The theme "personal and professional growth" was developed from three main codes namely (1) confidence, courage and assertiveness, (2) enhanced reflection and evidence based practice, and (3) scope and boundary issues. This theme demonstrated how nurses developed and utilised skills such as critical thinking in everyday nursing practice.

The most significant area of personal growth for nurses in this study was an overall increase in personal confidence. Nurses reported improved confidence in many areas, including written and verbal communication with doctors, that enhanced the way they were able to practice. Sarah reported:

> So it's good to have that language to be able to communicate with other doctors because if you don't have the right language they're not really interested in talking to you but if you can speak the lingo they're happy to hear what you're saying.

Nurses identified that having language and terminology consistent with advanced nursing practice in order to seek help and advice from other health professionals, mainly doctors, was an outcome of postgraduate education. Nurses working in rural areas reported being able to be direct about their patient assessments and the actions they had taken as well as being assertive in seeking advice from doctors in secondary care services. Jackie articulated a change in the way she practiced: "In the past I would have rung them up and asked for their advice rather than actually saying well this is what I've done what do you suggest I do next"

The increased confidence nurses experienced spanned a variety of practice environments. Alongside improving the direct care provided to the patient, nurses also reported indirect benefits. Nurses felt more empowered to implement change at an organisational level. Nurses were able to challenge current practices and felt better equipped to discuss their rationale for change. Grace considered she was: "much more assertive with the doctors … I won't cater to them if I think there's things that need to be changed. I feel that I can actually argue a case a lot better".

Although having the confidence to discuss the rationale for changes was important, nurses were also required to formalise ideas into written proposals. Emma developed a proposal that changed the management structure at the medical centre where she was employed. The proposal was accepted resulting in the formation of a nurse leadership role for the practice, a role that Emma subsequently secured. Her increased confidence helped with the role transition from practice nurse to nurse leader. Emma reported that her employers had noticed a change in her personal and professional abilities as a result of postgraduate education. Emma's new found confidence also enabled her to be involved in leading Cornerstone Accreditation for the practice. Emma said: "I would never have gone anywhere near it if I had not done any post grad. I never would have had the courage, the confidence in my own ability to do it". Similarly, another nurse considered that postgraduate education gave her the confidence to undertake a new role as a practice nurse. She was able to use the knowledge gained from postgraduate study to facilitate the role transition and role development.

Alongside the personal growth nurses experienced as a result of postgraduate education nurses also reported a growth in professional skills. Importantly, nurses articulated a clearer insight into scope of practice and boundary issues. Nurses who had completed Postgraduate Diplomas or Masters Degrees, and particularly those that worked in rural areas, reported insight into scope and boundary issues more than those that had completed Postgraduate

Certificates or worked in urban areas. The increased knowledge gained from the broad range of postgraduate papers that usually included papers covering advanced assessment, pharmacology and research, raised the nurses' knowledge level and awareness leading them to report that they were more careful with their practice. Sarah said:

> I suppose having done postgraduate it makes you more aware of what you might not know and I think it makes you a much more careful person, a more careful nurse as far as your scope and boundaries and things go.

Scope of practice and boundary issues were an issue for rural nurses often precipitated by the lack of doctor cover in rural areas. Nurses reported inconsistent doctor cover for long periods of time resulting in nurses taking on more advanced roles. Although supported by postgraduate education, the nurses reported scope of practice and boundary challenges. There were several examples of care being provided at an advanced level while the nurses felt unsupported by doctors, their employing organisations and secondary care services. What constituted support is discussed further in Theme Four "Organisational Supports". With lack of support nurses were left questioning their scope of practice and boundaries. As Mary stated:"It's making those decisions you know, without medical backup, I mean we're not doctors and I think sometimes that … our edges of our scope are just pushed that far that it's actually quite scary".

Another challenge for rural nurses was that they were often providing care to people in the same community they lived in, knowing many of the patients on a personal level. Nurses reported being approached at school and at community events, as well as being telephoned at home. An example of this was provided by Jackie:"I had a guy ring me about 7:15 am at home asking me how busy I was that day …could he get in to see me … could I make him an appointment." Nurses discussed the importance of being very clear with patients about boundary issues and stated they were more confident about doing this as a result of postgraduate education.

Another area of professional growth developed through postgraduate education was reflective practice. The majority of nurses interviewed considered they had become reflective questioning practitioners as a result of postgraduate education. Many of the nurses described being taught how to use reflection to improve nursing practice. Sarah said:

When I did my training exemplar writing and things like that weren't even in the programme and then I did a postgraduate Bachelor of Nursing and exemplar writing wasn't in that either so it was a big thing to learn.

Many of the nurses said they were using the reflection skills they had learned as part of postgraduate programmes in every day practice. Examples included reviewing patient notes when they referred patients to other providers, thinking and writing about patient presentations, considering how they could do things better, discussing patient presentations with peers and submitting exemplars for publication. Some nurses reported reflecting more thoroughly, and at a deeper level, now that they had finished study and were not confined by assignment timeframes. Mary gave a good example of this:

Whereas now I can actually, you know pick out the other things I'm interested in and have a look at them and read up about them and go back to some of the education that I did and think well how does this relate to this.

Many of the nurses talked about reviewing consultations using a reflective process, especially for consultations that did not go as well as they would have liked. Grace's comment was common among participants: "Actually after a consultation that I feel unsettled with, more than proud, I actually sit down and write about it." Nurses reported they were using reflection when they questioned doctors over treatment options and considered this enhanced their learning when they worked with doctors who did not mind being questioned over clinical decisions. As Debbie said: "I think it's probably started initially with the questioning yeah and they see me questioning like I might ask why they would be doing something with the patient or you know or have you thought about something or and they do they just come and sit down and well what do you think about, yeah".

The utilisation of research in the practice environment was another area of professional growth for practice nurses in this study. Following completion of a research methods course, participants reported they had learned how to find relevant research material and had developed skills to critique the research to guide their clinical decisions. Nurses also reported using research skills to develop and review clinical guidelines. Several participants reported using research to justify decision making as they felt their clinical decisions were open to challenge from other health professionals. However, using evidence to inform decision making caused some participants to experience conflict with other health professionals. An example of this was given by a nurse involved in standing order development who

experienced difficulties in gaining agreement amongst doctors. As Jackie said: "The doctors tend to go oh well they've got bronchiolitis just give them a steroid". Well in fact we've discovered that no, you're not giving them steroids anymore." For the development of standing orders, the nurse said she had reviewed the latest research to inform best practice treatment for bronchiolitis rather than rely on individual doctor preferences.

In summary, the personal and professional growth nurses experienced as a result of postgraduate education included increased confidence, raised awareness about scope and boundary issues and the increased use of reflective practice and evidence based practice. For practice nurses the personal and professional growth translated into a change in the way they approached issues in clinical practice as they had a wider set of skills to inform their practice.

5.8 THEME THREE: CHANGING PRACTICE

The third theme was defined as "changing practice". This theme explored the experiences of nurses changing practice as a result of their postgraduate qualification. The change spanned many areas from developing day-to-day clinical practice through to addressing deprivation issues and providing advanced leadership. This theme was the result of merging several overlapping codes together including addressing deprivation, advanced approach, application to work, enabled advanced leadership, wanting to do things better, big impact on practice and wider political influences. The change in the way nurses worked as a result of postgraduate nursing education was extremely varied and not confined to any particular aspect of nursing practice.

The nurses were able to articulate the way their clinical nursing practice had changed as a result of postgraduate education. It was evident in many of the clinical examples given that several of the nurses, particularly those working in rural environments, were practising at an advanced level as a result of their postgraduate education. Although the quote below is lengthy it clearly outlines how many nurses practised as a result of postgraduate education.

> Well I guess the wee one I saw this morning with abdominal pain is a good example because by doing the advanced health assessment paper I was able to examine her stomach and do you know she was actually quite tender all down her spleen and I wasn't quite sure if it was enlarged or not but I kind of started thinking that it probably was. Essentially she had sort of just really non-specific abdo pain here whereas previously I probably would of just taken her temperature, taken her history and you know sort of perhaps thought of a

couple of things in my mind but I was also able to examine her from top to toe. So I had a look in her ears, I had a look in her throat I was able to examine her neck and reveal that in fact… her tonsils [were] very enlarged so then I started thinking more of a syndrome thing whereas before I possibly would of thought oh she's just got a bit of a strep you know. She had really fetid breath…, she was febrile and I thought all those things. Oh she's got a strep throat she needs some antibiotics I'll tell the doctor and give her some antibiotic. In being able to assess her in that way I started thinking of other things and so then I had the, I guess, the skills to be able to elicit some testing so I did a complete blood count, I did a CRP, we did a mono swab, well we did a liver function, did a urinary function, a renal function did a urine analysis just in case there was something else going on that I was missing so I guess it's that bigger picture stuff again whereas before, like I say, I would of done a basic assessment on her decided she was febrile and then gone to the doctor for advice. Whereas now I think well tomorrow I'll chase her results up if nothing comes back on the results then I'll go and talk to the GP and look at assessing her you know with an ultra sound or something (Jackie).

Two nurses gave examples of a patient presentation and how they assessed and treated the patient prior to postgraduate education and how they would have treated the patient differently if they presented again. The first scenario related to a three-week-old baby who had been pushed out of his buggy and banged his head. Anna recalled standing and thinking: "how should I assess this child". Following completion of the advanced health assessment paper the nurse could confidently articulate the assessments she would have undertaken. Although not related to this scenario the nurse also discussed differential diagnosis when undertaking a patient assessment.

In the second scenario a patient presented with a chainsaw wound to his knee. The nurse (Mary) assessed the wound but without advanced knowledge she simply cleaned and dressed the wound and gave the patient oral antibiotics. However, three days later the patient needed to be referred to secondary care services for a surgical washout and intravenous antibiotics. The nurse clearly described how her postgraduate education would now influence her decision-making and should she be presented with a similar situation how this would lead to an improvement in patient management: "Oh he would go straight to secondary care I would not hesitate" (Mary).

The majority of nurses reported that their chronic disease management had improved significantly as a result of postgraduate education. Several of the nurses interviewed were providing care to patients on the Careplus programme, a Ministry of Health initiative that provided additional funding for patients with long-term conditions. Participants reported being more confident with Careplus reviews and reported a broader interest in chronic disease. Nurses considered they were providing more holistic care, often considering issues at a deeper level and trying to anticipate potential outcomes from different interventions. Sue stated:

> I have a much broader interest in knowledge about what's going on with their conditions and especially when they've got more than one condition it makes their case more complex and understanding the interactions not only of the conditions but the medications used to treat them and so I find I'm always trying to think about well what's going on here...

Because nurses had improved knowledge and skills from postgraduate education they considered the care they provided was beneficial to the practice and patients. Nurses reported that their triage and patient management skills improved and they were able to manage patients more autonomously, only referring those patients that they could not manage under standing orders back to the doctor. "I would have got them to make a doctor's appointment to get that managed, now I can manage that with a patient in collaboration with a GP" (Sue). Pharmacology papers provided additional knowledge on how to manage patients on specific medications as well as titrating medication doses to optimise patient treatment. A rural nurse discussed how having medication knowledge and working collaboratively with the GP was beneficial for the patients. She stated there was a cohort of patients she could manage under standing orders saving the patients unnecessary visits to the GP. The nurse considered this approach to be in alignment with the Government's Better, Sooner, More Convenient objective: "I mean that's the whole government policy if you're just seeing them it's more convenient that's what I want to be you know as people have got so much in their lives to manage" (Sue).

Postgraduate nurses articulated an increased awareness of the need to complement lifestyle advice with medication in contrast to their previous focus on lifestyle education in isolation. Similarly, nurses who had completed pharmacology papers reported feeling more confident about questioning long term medication treatment for example asking questions such as: "Why is a 92-year-old on a statin?" (Jackie).

The majority of nurses interviewed clearly expressed the difference postgraduate education made to the way they viewed and managed health inequalities. Many participants were more aware of the impact of ethnicity and deprivation on patients' access to primary health care services and health outcomes. Improved awareness changed the way nurses approached many situations. Nurses talked about arranging and providing community education sessions for programmes such as Meningococcal B vaccination programmes and domestic violence. Others talked about being aware of the wider social issues that might affect some people, giving examples of asking about housing and heating: "I do think more about asking people, especially the elderly living on their own, about their firewood situation and about their home heating situation" (Sue). Another nurse outlined a scenario where her knowledge enabled the practice to change its approach with an elderly Maori gentleman who had poorly controlled diabetes. The gentleman did not like making appointments, often turning up to the practice requesting prescriptions. When he did this the receptionist would say to him: "No, you can't because you don't have an appointment we haven't got time to see you" (Emma). Emma was able to work with the reception team to develop a plan to ensure the gentleman would get a prescription when he required it. As part of the plan Emma asked reception to inform her whenever he arrived and she would see him. The different approach had a positive outcome for the patient and the practice as: "It almost seemed like because we'd made the effort to meet him halfway … he would then turn up for his appointments. He'd get blood tests done. We were definitely engaging in a much better way" (Emma).

Grace talked movingly about how she had arranged her room and managed consultations so that patients felt comfortable. She stated that postgraduate education made her very aware that all the practice signage was in English despite having patients from a broad range of ethnic backgrounds. Now, when a new family arrived from a different culture, she asked them to write "Nurses' Room" on her door in their language. She reported that this had been positive for the nurse and the patients: "it's interesting because like another culture or family come in …and they actually watch me trace their fingers on the words and find their language and it's the most simple thing isn't it?" (Grace)

Recently the same nurse was interviewed by the Ministry of Health about the Gardasil Immunisation Programme that targets 12-18 year old females. The Ministry was interested in innovative ways to improve Gardasil vaccination rates in high need groups, particularly Maori and Pacific people. Grace said that prior to her postgraduate education she would have thought, "Well they get three letters like everybody else" and compared this to her changed

approach: "I really find I have to do it differently and that is how different people groups respond so now I make a phone call". She said that making personal contact and utilising her relationship ensured a much better response to many screening and vaccination programmes.

In another example raised awareness of access and deprivation issues prompted one rural nurse to do additional training to take cervical smears as the only option available for women in her area was a male GP. The nurse wanted the practice cervical screening rates to be higher so as to improve women's health. The nurse said:

> The thought of doing cervical smears… I said oh well I won't be doing that [it's] not my cup of tea,… so of course …. You learn about it and you learn you know more about your physiology and anatomy and … you want to do it for women's health, that's what it's all about ... (Sue).

Another positive outcome from postgraduate education was the change in the way nurses viewed the wider primary health care sector, including political influences. Excitement was expressed about the potential of primary health care and the difference nursing could make. From Emma:

> It changed in the last 20 years, even 30 years, when you look at [it] compared to when you're a kid and what it was like going to the doctors. It's changed so much and it's exciting because it's going to change more, way more

and from Debbie

> I guess it's been a gradual increase in my awareness of what could happen. Looking it's enabled me to look broader than what I just see in front of me. In doing my job as a practice nurse has enabled me to look at primary health as a whole...

Greater political awareness led to nurses wanting to become more involved in organisations in order to influence change. Examples include one nurse being elected to a Primary Health Organisation Board. Grace stated that: "One of the marks of advanced learning was becoming involved in influencing policy ... so that really encouraged me to get into working on the PHO". Another nurse had become a member of the PRIME committee with the expectation that she could influence decision making.

As indicated through the examples given above, nurses were aware of the wider political influences on practice and were prepared to take on leadership responsibilities as a result of

postgraduate education. Although many nurses were taking on leadership responsibilities, only one participant had a formal nurse leadership role. The Nurse Leader clearly identified how postgraduate education changed the way she managed herself in the leadership role. The changes involved proposal development, structural changes, introducing procedures and trying to standardise practice, advocating for nurses, and developing and trialling nurse-led clinics within the practice. This nurse found that postgraduate papers that provided knowledge and skills in nursing leadership were very beneficial, especially when managing change. The Nurse Leader acknowledged that mistakes were made when she first went into the role stating that:"There were some things that I look at in hindsight I could have done better … [a] lot of the theory around change management and cycles of change …was probably the biggest thing" (Emma). The Nurse Leader was confident that the knowledge gained from postgraduate study would help her more effectively lead the team in the future

The results presented in this theme demonstrated that nurses had changed the way they practised as a result of postgraduate education across a number of areas including clinical practice, addressing inequalities, becoming more politically aware and in leadership roles.

5.9   THEME FOUR: ORGANISATIONAL SUPPORT

The fourth theme defined the "organisational support" required to assist the practice nurses on their postgraduate journey. This theme was made up of six main codes that were easily merged into one theme. The codes included lack of structures, accreditation, collegial nursing support, experience with unsupportive workplaces, experience with supportive workplaces and unsupportive workplace structures. Organisational support included structures that enabled advanced nursing practice such as functional management systems, organised appointment books, defined practice structures (e.g. regular team meetings), collegial support, and employment relationships that enhanced nursing development. It was found that the ability of practice nurses to utilise knowledge gained from a postgraduate nursing qualification in the general practice environment was influenced by the level of organisational support.

Good management systems were identified as necessary to help nurses utilise the knowledge they had gained from postgraduate education. Five nurses talked about the importance of management support when undertaking postgraduate study, especially for access to additional funding, study leave, and for encouragement. Management support came from various people such as Practice Managers, Practice Directors and for one nurse from a Nurse Leader.

Management support was demonstrated through statements such as: "My manager's very pro" (Mary) and:

> Support of bosses, that's been really important. Like when I did the management papers, the funding wasn't sufficient to cover all my study days and because of the reason that I was doing the management papers, I felt it was very relevant for my role and asked them to fund the extra which they were really happy to do... (Emma).

Functional management systems enabled nurses to effect change within the practices they worked in while they were on the postgraduate pathway. For nurses, functional management systems tended to involve clear communication channels, a formalised management structure, and regular meetings with nurse participation. Three nurses who worked in separate practices talked about the importance of structure and instigating regular meetings. Regular meetings enabled nurses to present ideas for change to a collective group rather than having to canvas each individual Practice Director. The Nurse Manager noted the change that had taken place in the practice she worked in and the results that had arisen:

> We have a practice meeting which is a huge improvement. We have two practice meetings a week, in the morning, of about three quarters of an hour or so with the directors and myself and we also have a monthly meeting, a directors meeting, more strategic-type planning and stuff (Emma).

Emma reported attendance at these meetings had helped advance nursing within the practice: "It helps if you're working in an organisation where there's structural support and some leadership".

Four nurses worked in practices without management systems that provided clear pathways for communication or regular meetings. Nurses reported frustration about the lack of opportunities to discuss potential practice or patient care improvements. Liz considered that the contribution nurses could make to the running of the practice was not valued saying: "We have had some meetings but they [are] usually called by Dr 1 for her agenda". It can be difficult for nurses to change practice structures. However, two nurses interviewed from separate practices outlined how Cornerstone Accreditation, designed by the Royal New Zealand College of GPs (www.rnzcgp.org.nz), had provided the necessary mechanism for practice change. Cornerstone Accreditation is a voluntary quality improvement process for practices to assess their level of performance against an established standard. Cornerstone

defines standards for management structures that support practice quality and development. The two nurses involved with the Cornerstone process considered it had been beneficial to advancing nursing practice.

> So I guess the other thing that came into there was the catalyst for further change … the practice decided to do Cornerstone accreditation so then that sort of gave me … an extra backup that …we had to do this because we were not doing it right for Cornerstone this was how I suggested to do it, sort of thing (Emma).

Within the theme "organisational support", management support was identified as an enabler for nurses with postgraduate qualifications. Another enabler was the presence of a formal nursing leadership structure within the organisation where the nurses were employed. The majority of participants in this study were not supported by formal nursing leadership structures provided by their employer, Primary Health Organisation or District Health Board. Two of the nurses interviewed worked within organisations with nursing leadership structures, one was a practice nurse and one was a Nurse Leader. The practice nurse valued having a Nurse Leader, recognising the importance of her role in organising the nurses and encouraging and facilitating educational opportunities. Anna commented: "My Nurse Leader is really organised and facilitates study opportunities as long as you give her enough warning. I'm lucky they are really supportive". The Nurse Leader spoke about her role within the organisation and how she saw it as very important for providing nursing leadership and direction for the nursing team and the practice as a whole. The Nurse Leader clearly articulated how postgraduate education had enhanced her practice and ability to undertake the leadership role thus using the knowledge gained from education for the benefit of the general practice. She considered that her role was important for organising the way nursing services were delivered in the practice. She could identify the potential of the nursing workforce, and had goals for the future of the nursing team, but found it difficult to motivate other nurses to undertake postgraduate education.

For nurses without formal nursing leadership support the support, of their colleagues was identified as a contributor to them practicing at an advanced level. The rural nurses talked about reflecting through informal case reviews and discussions that provided support for their advancing nursing practice. As Sarah stated: "I wouldn't say there's been like managerial support or anything like that ... [I have] been self motivated with collegial support". Even

nurses working in isolation talked about having greater collegial support because of the internet and email.

However, some of the same nurses were aware of the lack of collegial support that arose out of particularly difficult patient presentations. Nurses needed to provide care because of their rural location and were able to manage the difficult patient presentations because of the advanced knowledge they had from postgraduate education, seeking advice and support from secondary care consultants when required. Although nurses did everything right, and in alignment with best practice and expert advice, sometimes unpredictable events occurred. Examples were provided of unsupportive behaviour directed at nurses from their colleagues with comments like: "oh I wouldn't have done that you should have put them straight in a helicopter" (Mary). The lack of collegial nursing support was not just an issue for nurses with postgraduate education but needed to be considered in the wider context when organisations were planning to utilise nurses with advanced practice skills.

The presence of nursing leadership support and/or management support impacted on the way nurse workloads were organised. Nurses in this study reported that the ability to utilise the knowledge gained from postgraduate education was linked to the way nurses' appointment books were organised and workloads were distributed within the practice. Several examples were given of nursing skills not being fully utilised because practice structures had not, or would not, change. Debbie, an urban practice nurse, reported that she wasn't fully utilising the advanced health assessment skills she had gained because of the way patients were booked in to see her. No changes had been made to the types of patients she was seeing despite her knowledge level increasing as a result of postgraduate education. She attributed this to two main factors. Firstly, as she worked in a small practice, there was limited scope to alter the way her day was structured. Secondly, the GPs who employed her did not understand what her role could be. Debbie commented:

> The way our appointment books are set up, I would say that is the main barrier… but I can see in the future that it would change, that we're going to use nurses more but a lot of GPs don't perhaps even understand what the roles could be … but watch this space because I think primary care is going to change.

A similar situation was reported by a rural nurse where a few nurses in the practice she worked in, despite having postgraduate education, tried not to have too much role division or

hierarchy and there was no system of triaging patients to the most appropriate provider. The challenge of workload distribution and managing appointment books appeared to be more significant for smaller practices, particularly those in rural environments. Sarah stated:

> It sort of muddles along and we try not to have too much role division you know we try not to separate people out into levels of clinical expertise. Yeah so I guess it's a bit hit and miss which isn't going that well but our manager is quite resistant to having any role division.

For some practice nurses the ability to practise at a more advanced level was controlled by practice structures. Other nurses, particularly those in rural areas, were fully utilising their postgraduate knowledge but expressed a lack of support in their roles. The lack of organisational support for rural nurses with advanced roles was very evident, and had a negative impact on their experience of utilising the knowledge gained from postgraduate education in the general practice environment. In some areas rural nurses were providing primary health care services due to the difficulties recruiting and retaining doctors. All the participants in this study who worked in rural areas expressed the pressure this put on them both personally and professionally. The nurses felt professionally unsupported and often isolated. As Mary expressed:

> I think that personally I feel that we all work a little like we're walking on eggshells a bit because we don't have a lot of backup support from the GP so we're often in the firing line. You know look I, myself, have been thinking about my options. You now I have been standing in a paddock with no cellphone reception, trying to make calls on this guy that's fallen off the back of a truck onto his head with a huge impact injury the ICU team won't take him in the helicopter because he's too aggressive because he's been drinking all afternoon so what am I meant to do, you know.

Sarah, a rural nurse, spoke of two very challenging patient scenarios that she had dealt with in a very short space of time. However, she said she did not want the examples used because of the potential for her to be identified. Sarah was very concerned about the lack of support she had received both at the time and following the event stating: "The support at work is terrible, there's a big lack of it really…. apparently we do have a debriefing plan but I've never seen it and yeah I wasn't offered any debrief counselling or anything like that".

Rural nurses stated the challenges they faced included that they were often caring for someone they knew well in the community, they had a lack of back up, lack of formal debriefing, no professional supervision, and faced obstacles related to the environment such as limited cell phone coverage. The lack of organisational support for paid access to professional supervision was identified as an issue for several of the nurses, particularly those working in rural environments. "If we want professional supervision we have to seek it out ourselves" (Jackie). Although several nurses recognised the need for professional supervision, because of their advanced practice roles and isolation, only two nurses attended on a regular basis and they self-funded this attendance. The nurses recognised that they were providing a valuable service to the community but they were left questioning how much further along the postgraduate pathway they could continue in the absence of organisational support.

Whilst the presence or absence of organisational support impacts on the nurses' ability to utilise the knowledge gained from a postgraduate nursing qualification in the general practice environment there is the additional barrier of the employment arrangements of many practice nurses. The employment structures of nurses influenced the nurses' ability to change the way they practised. All of the nurses interviewed were employed either by community trusts or privately owned general practice businesses. The nurses employed by community trusts expressed some frustration about the lack of nurse representation at governance level. The clinical representative at governance level on one particular community trust board was always the GP despite nurses often being the most stable health workforce in the area. The lack of nurse representation at governance level had left many nurses feeling that advanced nursing practice and Nurse Practitioner roles were not well understood at community trust board level, impacting on their potential development. As Jackie explained: "Well it's a given that the clinical leader is a GP and they will not have nurses on board which I really struggle with because it just frustrates me".

Although the nurses expressed concern about the community trust governance structure they also acknowledged they had received good support, noting that the community trust board: "recognised early on that the nurses were underutilised and that we could be up-skilled" (Jackie). However, from the nurses' perspective the results suggested that the good support nurses received for postgraduate education might come about because it was one of the few ways community trusts could see to solve the rural workforce issue, without fully

understanding the range of supports nurses required to perform advanced roles. As one rural nurse said:

> I think they think that well she's got her masters and then she just got this portfolio thing and then it's going to be a given and in fact it's not, there's quite a major process to have to go through and then because they're not clinical people they don't understand that when I get to nurse practitioner status I'm not automatically going to be able to do all these things you know they don't kind of have a, so knowledge is a bit of a, yeah educating them as to what it's all about and even the people that, patients that I see now they say oh you know what's the difference why don't you go and be a doctor, because I don't want to be a doctor (Jackie).

For nurses employed by general practice businesses, there was awareness that the employee-employer relationship could be a barrier to nurses utilising postgraduate knowledge in general practice. Three nurses from three separate practices thought the biggest barrier for nurses utilising knowledge and changing practice was the "employer-employee relationship". (Emma) because: "they pay your wages" (Liz) and, therefore, had control over the way nurses practised. Emma raised concerns about how the general practice owned model does not fit within the modern environment:

> The practice model where we are employed by the doctors who are the directors of the business does not always fit. I have a very good relationship with my employers but every so often, even the really good ones, there will be something happen and you can see the power play and they make sure you don't get too big for your boots.

Nurses who were reliant on their weekly income may not be as prepared to raise contentious issues with their employer. As Liz stated:

> She's [a] very generous boss and she always rewards us really well at Christmas time. But there is that 'but' there, that you know, I just think that we could be doing a lot of good stuff there that isn't being addressed.

In this study the employment arrangements of nurses did impact on their ability to utilise the knowledge gained from postgraduate education. The results of the theme organisational

support clearly outlined the prerequisites to nurses successfully utilising the knowledge they had gained from postgraduate education in the general practice environment. There were a range of factors that contributed to nurses' ability to utilise the knowledge including functional management systems, nursing leadership, collegial support and employment arrangements that recognised the contribution nurses with advanced knowledge could make to the general practice team.

5.1 THEME FIVE: EXPERIENCE OF INTERACTIONS WITH DOCTORS

The fifth theme identified that the experience of practice nurses utilising knowledge gained from postgraduate education in general practice was influenced by their daily interactions with doctors. The nurses' experiences of these interactions were generally the day-to-day exchanges a nurse would have with a doctor and encompassed both the positive and negative aspects of such interactions. The range of interactions was not restricted to GPs but covered all doctors across primary and secondary services. The theme "experience of interactions with doctors" was developed by merging together the codes doctors' confidence in nurse, lack of medical support, and medical support.

The nurses interviewed reported a dichotomy within the medical fraternity. Some doctors were overwhelmingly supportive of nurses on the postgraduate pathway and some were overwhelmingly unsupportive. This dichotomy existed within the same General Practice or District Health Board. Although organisations may have been supportive, this was not always evident at the individual doctor level.

The nurses interviewed all desired good medical support to aid advancing their nursing practice, and valued the team approach to health care. The desired support included mentoring and training, back-up support when they were on call or working in isolation, care review, and for teamwork and support. Medical support was required at all levels from having a GP available, either onsite or in phone contact, to being able to phone a consultant in secondary care services to discuss a patient. Some may question why nurses working in an advanced capacity required good medical support but the scenario below clearly outlined the way many of the rural nurses were working:

> I mean I remember quite vividly a few weeks back I had a chap who took an overdose of alcohol and drugs and went into VT and VF on the way in the ambulance and I had to ring the GP because I needed to know is there any benefit giving him such and such a drug ... so here I am, I can hardly stand up

in the back of an ambulance talking to a GP who was in Nelson for the weekend (Mary).

Organisations may see the value of having advanced nurses available, especially in areas where doctor recruitment and retention is problematic. However, without good medical backup nurses reported feeling vulnerable and unsupported and were left questioning why they were on the postgraduate pathway. Nurses also wanted to be treated like professionals and to be acknowledged for the work they did. Although they recognised their limitations they still wanted to be taken seriously for the role they performed. The lack of medical support in some sectors was very apparent and multiple examples such as the one below were given:

I don't know if you've ever had a pager beside you but there [is] no way you can ever sleep through them but the doctor ranted and raved on the phone about… these nurses think they can take on these roles and they only do half the job and leave us to mop it up … I had a really busy weekend and I said to him… I've seen six patients this weekend that I've not sent in your direction (Jackie).

This particular interaction left the nurse feeling demoralised and, in fact, that nurse no longer provided after-hours care to the community in which she worked. Although she gave numerous other reasons for giving up after-hours care examples of negative interactions with doctors, such as the one above, was a contributing factor.

Nurses working in an advanced capacity as a result of their postgraduate education reported challenges with trying to refer patients to secondary care services, citing an inconsistent response from doctors. Some secondary care departments were supportive and nurses could pick up the phone and discuss a particular patient case or fax through an electrocardiogram for a second opinion to the Registrar or Consultant. The ability to do this was dependent upon the relationship the nurse had with the doctor. Some nurses had come from secondary care services, or had links with secondary care, and where those links were established nurses reported the process of discussing patient cases and referring patients was much easier. Some of the nurses' experiences with secondary care services were negative with the nurses perceiving that they were not being taken seriously and they reported that some doctors had refused to accept referrals. This was despite the nurses undertaking a very comprehensive assessment before phoning secondary care and using appropriate terminology when

discussing patient cases. When doctors refused to accept referrals valuable time was wasted as the usual follow-on routine was for the nurse to contact the on-call GP, who could be anywhere in the country, who then listened to the nurse's assessment over the phone and passed on the same information to the secondary care service doctor who would most likely accept the referral from the GP. As Jackie explained:

> You ring up for advice, or you need somebody to be admitted, and you'll always get a doctor who'll say where's the doctor, I need to talk to the doctor, and you'll explain to them that you're the only one here or there's no doctor available but you've assessed the patient and they are still getting really cross and want to talk to a GP or another doctor and you need to ring your GP on-call and they have to talk to the doctor but it's usually secondary care...

In contrast many of the nurses gave examples of excellent medical support and in such situations appeared to have a lot of respect for their medical colleagues. Nurses valued positive relationships with their medical colleagues and many nurses were very complimentary about the support they had received from GPs. Some GPs were described as excellent teachers and mentors supporting some of the nurses through papers, such as advanced health assessment and prescribing practicum's, that required regular mentoring time. The nurses were very aware of the huge time commitment that GPs had put into their training and Jackie expressed this:

> I mean that was a big paper I spent every (Day of the week) morning at (Doctor's name) surgery for most of the year so that was supposed to be his day off so that was a huge undertaking for him.

It was clear from the interview that nurses valued working as part of a supportive team with GPs that showed interest in their knowledge development and who went out of their way to show them interesting or unusual patient presentations:

> He will get me to come in if he's got something that he wants me to see or maybe wants to ask me a question about, you know check my knowledge, or if he wants to seek my knowledge, you know it's quite a good relationship in that way(Sue).

Anna said she valued working with a doctor that took the time to check with her during the day saying: "he's … really good and usually stops and looks at you and you can see that he can help".

Some of the nurses interviewed considered the relationship and trust they had with their GPs influenced the way they practised. Positive relationship development seemed to take time but once doctors had confidence in the nurse and her ability then the opportunities for that nurse improved: "We've got a new GP and ...he's getting confidence in me I guess and vice versa about doing assessments and he's fine"(Anna). Nurses valued having good relationships with GP and as a consequence many had been long standing employees. One nurse said: "I could never go. I would find it hard working somewhere else because I would not necessarily have that liberty..." (Debbie).

Trusting individual nurses seemed to be an important aspect for doctors also and if that trust existed then nurses did not have any problems getting doctors to do what they needed in order to assist advancing their nursing practice. Jackie recalled a discussion she had with a GP: "He said … you should have a good enough relationship with a practice nurse with a doctor so that you know the doctor trusts your judgement and your skills so that if you do a script you know he will sign it for you". In contrast some nurses felt unsupported in their practice and worked with GPs who thought nurses should not be advancing their scope of practice or expanding their knowledge base. For these nurses it was difficult to gain and practise the clinical skills necessary for advanced practice. Nurses reported avoiding practising advanced assessment skills knowing that the GP would repeat it and the nurses did not want to subject patients to multiple assessments. Some GPs were very open about their lack of support for advanced nursing practice, as Anna clearly articulated: "One has told me that we shouldn't be listening to chests because even if we do an assessment they're still going to have to do it all again because they can't trust that we've listened properly..."

The nurse who experienced this response worked in two completely different practices, one rural and one urban. In the rural practice it was expected that she worked in an advanced capacity as sometimes there was no GP on site. In contrast, the urban practice was well covered by GPs and although the organisation might have supported advanced nursing practice, individual GPs did not support nurses. The ability for some nurses to be able to work in an advanced capacity utilising knowledge gained from postgraduate education could literally depend upon the day and who they were working with. Two nurses who worked for a community trust spoke about locum GPs who came to the practice pre-warned about the advanced nurse's role. However, despite this knowledge locums did not always support the usual processes and effectively undermined the nurses. Examples of this type of lack of support were not signing prescriptions or standing orders for patients that had been seen by

the nurses, or making comments about: "my nurses" (Liz) which the nurses perceived as patronising.

An inconsistent approach by GP's was common. A nurse in a different urban practice talked about the difference between GPs within the same practice. She said that with each doctor you needed to understand their character in order to know how you could practice and the associated boundaries. It was common for the participants to be employed by organisations that supported and encouraged advanced nursing practice in principle. However, within that organisation there were some personnel that did not support advanced nursing practice, often openly demonstrating unsupportive behaviour. The lack of clarity regarding the nurse's position caused issues both for the nurse and the employing organisation.

The control some doctors had over the way nurses worked limited some nurses' ability to utilise knowledge gained from postgraduate education in the general practice environment. Undertaking a cardiovascular risk assessment for most practice nurses would be considered routine, and not requiring postgraduate education. However, one nurse reported not having the support required to undertake a full cardiovascular risk assessment. The doctor in the practice where she worked did not trust her to complete the family history section appropriately so at that point the nurse had to stop and let the doctor complete the assessment. The nurse had previously suggested they sit down together, review the guidelines and come to an agreement about how to code family history. The doctor had refused, leading the nurse to attribute this type of behaviour to the doctor needing to maintain control. This nurse raised an interesting point about GPs and how they viewed patients as: "my patients" (Liz). She considered this to be a barrier to the way nurses worked both in general practice and as part of the wider health care team. A similar situation around power and control arose in another practice where a nurse and GP were discussing nurses' autonomy. The nurse was explaining to the doctor that it was the nurse's responsibility to be an advocate for the patient and if they didn't agree with what the doctor was doing the nurse was within her rights to question the treatment in the appropriate environment. The doctor said they felt that a nurse should never, ever question a doctor.

In summary, the nurses' experiences of interactions with doctors' impacted on their ability to utilise the knowledge gained from postgraduate education in the general practice environment. The lack of a consistent approach by doctors towards nurses who were expanding their practice was identified as a challenging and very important theme. It was a

challenge that spanned all levels of the health sector, from individual doctors to organisational views and philosophies that were then translated to practice level. Nurses valued and respected doctors who valued and respected them, and in areas where there were examples of positive interactions nurses reported that their practice functioned well.

5.10 CONCLUSION

This chapter presented the results of this inductive study. Thematic analysis clearly identified themes relevant to the practice nurses' experience of utilising knowledge from a postgraduate nursing qualification in the general practice environment. The results of the research show that nurses were able to utilise much of the knowledge gained from postgraduate nursing qualification in the general practice setting. Nurses were able to articulate many ways that their practice had advanced and expanded as a result of postgraduate nursing education and this was particularly evident for the nurses who worked in rural environments. The findings of this research were similar to some of the international and national research that was presented in the literature review. The following chapter will link and discuss the findings of this research with other relevant research on the topic.

6   CHAPTER SIX: DISCUSSION

6.5 INTRODUCTION

The results of this study are pertinent to the development of the practice nursing workforce, especially for the Southern Region of New Zealand. There was no published research evidence specifically about the experience or outcomes of practice nurses in New Zealand undertaking postgraduate education. Given the similarity in results to other national and international research on the outcomes of general postgraduate nursing education the findings could be relevant to the practice nurse community. This study demonstrated that practice nurses with postgraduate education were able to provide advanced nursing care to patients if they were supported by organisational structures, nursing leadership, practice models, and doctors who valued the potential and actual contribution advanced practice nurses made to the team.

Although the results of this study are relevant there are also a number of limitations that need to be considered. Firstly, as outlined in the background there were no Primary Health Care Nursing Leadership structures in the Southern Region. The location of this study was, therefore, considered a limitation as the results may well be different if the same study was conducted in an area that had strong Primary Health Care Nursing Leadership, or if there was an opportunity to compare the results between practice nurses who worked in regions with Primary Health Care Nurse Leadership.

Secondly, many of the participants in this study were challenged with cross crediting postgraduate papers between providers. The Southern Institute of Technology offered programmes to Postgraduate Diploma level and the Otago Polytechnic no longer provided a postgraduate programme. Participants who commenced postgraduate education with one of these providers had to seek postgraduate programmes from other institutes to complete a Masters Degree. For a small number of nurses the change in providers may have caused them to complete more papers than would usually be required as part of a Masters programme.

Finally, another significant limitation was the higher than anticipated number of rural nurse recruits. Although purposive sampling was used it was more difficult to recruit urban nurses into the study. The larger number of rural participants led to the study results being biased

toward the experiences of rural practice nurses. There were two obvious reasons for this. Firstly, rural practice nurses have historically embraced the concept of postgraduate nursing education and have been considered the leaders of advanced primary health care nursing practice in New Zealand (Ross, 2008). Secondly, a significant potential cohort of nurses with postgraduate education from a large urban Health Centre in Dunedin City was excluded from participation due to ethical issues described in the methods section.

Given that the research related to practice nurses and postgraduate education was almost non-existent this chapter linked the key findings of this research with the broad national and international research on the outcomes of postgraduate nurse education. Consideration and links to the relevant social and political influences on practice nursing development have also been made.

6.6 ADVANCED NURSING PRACTICE

Practice nurses embarked on postgraduate education initially to meet the immediate clinical needs of the workplace, often without consideration of a long-term career plan. In this study nurses indicated their desire to fill individual knowledge gaps in order to feel more confident in their clinical environment. To achieve this aim nurses often started with clinical papers such as Advanced Health Assessment, Pharmacology papers, or Long-Term Condition Management. However, in the early stages of postgraduate education there was more often than not dissociation between papers being taken to advance clinical practice and a clear career pathway.

As a result of postgraduate education gained, practice nurses (particularly those in rural areas) were able to apply the knowledge in the general practice setting. Many of the nurses described gaining skills and knowledge that corresponded with the Nurse Practitioner competencies, and subsequently performed a range of activities that fell within the Nurse Practitioner scope (Nursing Council of New Zealand, 2008) although all nurses remained within the registered nurse scope. Practice nurse participants reported they had gained skills in advanced health assessment, ordering of diagnostic tests, decision making based on critical thinking, clinical judgment, utilizing scientific evidence, leadership skills and managing health inequalities. Many nurses were also involved in policy development. The results of this study were similar to international and national findings where nurses with postgraduate education provided advanced nursing care through the application of critical thinking skills (Barnhill, 2010; Bennison, 2009; Carnwell & Daly, 2003; Clodagh Cooley, 2008; Drennan,

2010; Gerrish, et al., 2000; Hardwick & Jordan, 2002; Lofmark & Mamhidir, 2010; Spence, 2004b; Spencer, 2006; Van Wissen & McBride-Henry, 2010; Whyte, et al., 2000)

Through the development of advanced assessment skills postgraduate participants reported increased confidence and knowledge about making more complex triage decisions. Congruent with international research (Carnwell & Daly, 2003) participants in this study reported improved decision making skills as an outcome of postgraduate education and this resulted in nurses managing a larger cohort of patients more autonomously. Similar to nurses in other studies (Carnwell & Daly, 2003; Hardwick & Jordan, 2002; Whyte, et al., 2000) practice nurses in this study reported taking on more advanced roles in chronic disease management because of improved knowledge and skills resulting from postgraduate education. Practice nurse participants were providing comprehensive health assessments, planning care, titrating medications (under standing orders), encouraging patient self-management, and liaising with the medical team over more complex cases.

It is anticipated that advanced nursing roles in chronic care management will need to increase in the future because of the increased prevalence of chronic disease (District Health Board New Zealand, 2006). The management of chronic conditions requires a multifaceted approach from primary health care professionals including a greater focus on health promotion and disease prevention, facilitating patient self-management for the majority of patients and case co-ordination for patients with complex needs (National Health Committee, 2007). Evidence from this study, and others, demonstrated it was common for practice nurses to be performing more significant roles in chronic disease management (Finlayson, et al., 2009; Love, 2008; McKinlay, 2006). However, participants in this study identified that not all practice nurses working in chronic care roles had undertaken postgraduate education, with some nurses relying on undergraduate and short-course knowledge to provide care to patients with very complex needs. It was recognised that a multi-faceted approach to chronic disease management was going to require highly trained nurses who had developed expanded competencies in chronic disease management (District Health Board New Zealand, 2006). It was considered that more practice nurses needed to be encouraged to commence postgraduate nursing education in chronic disease management. However, in the absence of any nursing leadership or expectations from funders the number of nurses delivering care in chronic disease management, who are suitably qualified, is likely to remain unchanged. The development of a primary health care nursing workforce will remain dependent upon individual motivation.

It was clear that participants in this study were able to provide advanced nursing to a broader cohort of patients. Role development such as this has been found to reduce waiting times and improve access to GPs for some patients (Bonsall & Cheater, 2008; Carnwell & Daly, 2003). The results of this study demonstrated that nurses with postgraduate education could work in an advanced capacity to provide triage and stratification of care as well as improving access to primary health care services as required under the Integrated Family Health Centre Model (Midlands Health Network, 2011; Primary Health Care Advisory Council, 2009). Although postgraduate nurses might be able to deliver care to a larger cohort of patients at a more advanced level it is important that patient outcomes are not adversely affected. Nurses in this study reported a greater awareness of "what they didn't know" leading them to seek advice and support from colleagues and other services more readily. Research evidence to date indicates that advanced practice nurses can provide care to patients with acute minor injury or illness, and patients with long-term conditions, with short-term patient outcomes comparable to those achieved by doctors (Bonsall & Cheater, 2008).

Although nurses in this study generally embarked on postgraduate education with no clear career pathway, the opportunities for rural nurses were greater than for their urban counterparts. Rural participants were providing advanced nursing care to patients with more clearly defined roles and responsibilities in comparison to urban nurses. This finding was not surprising given that rural nurses were considered the "pioneers of advancing nursing practice" (Ross, 2008, p. 17). The rural practice nurses interviewed were very clear that they needed postgraduate nursing education to perform their roles and utilised their expanded knowledge and skills in everyday clinical practice.

Some rural nurses in this study were essentially providing GP services to rural communities. It was not uncommon for nurses to be taking on more traditional technical medical tasks and responsibilities in rural New Zealand. This had resulted from the expansion and development of the rural nurse's role out of necessity due to the difficulty recruiting GPs (Goodyear-Smith & Janes, 2008). Rural nurses in this study were often filling the gaps created by doctor shortages leaving the nurses feeling a burden of responsibility. Rural nurses reported practising at the very top of their scope creating concern about practice boundaries. The rural nurses in this study, like other rural nurses (Barber, 2007), often felt unsupported and did not have paid access to professional supervision. As O'Connell (2011) said "professional supervision effectively becomes a bridge between the continuing complexity of the health practice world and the need for individuals to have professional clarity about how to practice

safely and in the best interest of each client" (p. 2). In some circumstances isolation made individual supervision problematic with it being suggested that rural nurses found ways of supporting each other better by using group supervision (Barber, 2007). However, none of the rural participants in this study worked in areas that were so isolated that access to professional supervision could not be arranged. Professional supervision was considered important as it provided support to the rural nurses working in expanded roles helping them to clarify scope and boundary issues. Equally, professional supervision was likely to be beneficial in helping clarify the personal desire nurses felt to continue postgraduate education but which they were hesitant to do because of the professional demands they would face from employers and communities if they held a higher qualification.

Improving access to health care services in underserved communities appeared to be one of the main drivers for the development of advanced nursing roles (Ministry of Health, 2001, 2002) with numerous examples of nurses providing services to communities that otherwise would have had few resources available to them (Nelson, et al., 2009; Dillon, 2008). The shortage of GPs in some parts of rural New Zealand had been managed by a greater nursing ratio (Goodyear-Smith & Janes, 2008) with nurse-led services often the principle method of health service delivery in such areas (Maw, 2008). Nurses working in advanced roles in rural environments were key components in helping to meet the Government's aim of providing "Better, Sooner, More Convenient Health Care" to their communities (Ministry of Health, 2011/12). Without the input of advanced rural nurses, patients would have had to travel to the closest town or emergency department for health services causing disruption to work and family life as well as impacting on secondary care services. It was interesting that nurses with postgraduate education could develop more advanced roles in areas where doctors did not want to work but would possibly face insurmountable challenges performing the same roles in more desirable locations.

Urban nurses had gained the same skills and knowledge from postgraduate education as their rural counterparts but reported they found it more challenging to use the knowledge in the general practice setting. The results of this study suggested that some employers could not see a role for practice nurses with advanced nursing skills in the general practice setting, especially if it involved activities such as advanced assessment and diagnosis that were considered to fall more within traditional medical roles. International research has found that conflict arises between doctors and advanced nurses when nurses try to assume responsibility for traditional medical tasks (Carnwell & Daly, 2003; Finlayson, et al., 2009; Gerrish, et al.,

2003). The lack of clarity for doctors about the potential of advanced nursing roles in general practice was unsurprising given the range of changes that have occurred within nursing education and registered nurse scopes of practice. If the health workforce is going to adapt in order to meet the changing needs of the population then there needs to be improved opportunities for robust discussion and debate across disciplines about the evolution of roles in primary health care.

The challenge for urban nurses working in areas that may not be underserviced by GPs is to lead the way and forge more advanced nursing roles. Research has concluded that nurses with appropriate training and education can provide care for a large number of patients that traditionally would have been managed by the GP (Bonsall & Cheater, 2008). However, the advancement of nursing practice was not about nurses taking over doctors' roles but considering which health provider was the most appropriate to provide the care required. It is important to remember that to manage the changing demands of the health care environment all health professionals need to working to the "top of their license" (Davies & Hansen, 2011, p 12). For many patients the most appropriate health professional will still be the GP, but for others it may be a Nurse Practitioner, practice nurse, mental health nurse, occupational therapist, or health care assistant. Although the role for urban practice nurses with postgraduate education may not be immediately obvious to GPs, roles need to be considered in alignment with the changing demographics of both the health workforce (District Health Board New Zealand, 2006; Ministry of Health and District Health Boards New Zealand Workforce Group, 2007) and the ageing population. Small traditional general practices may see no reason to change the way they deliver care and for nurses employed under these arrangements the only viable option may be to seek employment elsewhere if they wish to develop their practice.

In the absence of a clear primary health care career pathway practice nurses in this study experienced frustration when they could not utilize their skills and knowledge. Bennison (2009) reported similar findings when emergency nurses reported that there was a lack of professional recognition or career progression opportunities as a result of completing postgraduate education. Nurses commencing postgraduate education anticipated career advancement and improved opportunities as a result of achieving their qualifications (Pullon & Fry, 2005). International research demonstrated that when this did not occur nurses sought promotion elsewhere in order to gain professional recognition and financial rewards (Hardwick & Jordan, 2002; Pelletier, et al., 2005; Spencer, 2006). Sometimes to achieve

career progression nurses moved from clinical roles into management positions (Hardwick & Jordan, 2002; Spencer, 2006). Given the lack of career pathway development and opportunities for practice nurses in this region the only real career advancement opportunities may well exist outside the practice nurse arena.

Considering that there is a long-term strategic vision for the Nursing Workforce (District Health Board New Zealand, 2006), with Health Workforce New Zealand funding postgraduate practice nurse education, it is important that a regional and national career pathway for practice nurses is developed, linking roles and education so that actual positions are developed. Otherwise, as the results of this study suggested, Health Workforce New Zealand funding may go into individual nurse development with no guarantee that their advanced knowledge will link to roles where they can utilise the knowledge and skills gained from postgraduate education. A career pathway or framework provides a tool for effective workforce and career planning through providing pathways for different occupation groups (Ministry of Health and District Health Boards New Zealand Workforce Group, 2007). Some of the practice nurses in this study opted to be part of the Primary Health Care Professional Development and Recognition Programme (PDRP) (New Zealand College of Primary Health Care Nurses, 2010) to gain recognition for their commitment to professional development. Although the Primary Health Care PDRP has a career pathway from beginning nurse to expert practitioner there is a crucial missing link between the career pathway and actual role development in primary health care for both the Southern Region and nationally (Workforce Taskforce, 2008). Although the focus has been on putting resources into developing the workforce it is important that as an outcome of postgraduate education nurses can transition into roles that fully utilise their skills and improve the care delivered to their client population.

When considering the importance of career pathways and development it is useful to remind readers that the youngest participant in this study was 28-years-old and that in the alignment national workforce data 44% of participants were 50 years or over. It is imperative that opportunities are available for new graduate nurses in primary health care who are starting on the Nurse Entry to Practice Programme and then continuing through to postgraduate education (Finlayson, et al., 2009). New graduates entering general practice in the Southern region were very limited.

The anticipated career pathway for a nurse with a clinical Masters Degree would be to become a Nurse Practitioner; however in this study only one nurse commenced postgraduate education with the intention of becoming a Nurse Practitioner. Although several could possibly graduate with academic qualifications sufficient to apply for Nurse Practitioner endorsement they stated they were unsure if they would pursue this option. The pathway to becoming a Nurse Practitioner may be viewed as too difficult (Love, 2008) and for participants in this study the personal and professional challenges, as well as Nursing Council processes, were making some participants hesitant. Given that Nurse Practitioner development for Primary Health Care was considered crucial in helping to deliver various Government Strategies, including the Primary Health Care Strategy (Finlayson, et al., 2009; District Health Board New Zealand, 2006; Ministry of Health, 2002), it was interesting that many practice nurses were not commencing postgraduate education with that intention. It is ten years since the Nurse Practitioner Scope was added to the Nursing Register yet New Zealand still only has a total of 98 Nurse Practitioners, of whom 32 are endorsed to work in Primary Health Care (Nursing Council of New Zealand, 2011).

The lack of primary health care Nurse Practitioners is probably not surprising considering the challenges practice nurses in this study experienced trying to advance their practice. Additionally, GPs who could not support nurses with advanced practice would not see a role for a generalist Nurse Practitioner within the general practice setting (Love, 2008). It has previously been suggested that District Health Boards and PHOs will have to actively support Nurse Practitioner role development in primary health care (Love, 2008). Accordingly the Southern District Health Board formed a Nurse Practitioner Steering Group to lead and support the development of Nurse Practitioners in the region. The group developed a framework differentiating between Nurse Practitioner roles and registered nurse (expanded scope) roles. The development of Nurse Practitioner positions in secondary care services, to date, have been in areas of defined need such as mental health and aged care. Business cases have been developed by nurse leaders (Forde & Casey, 2007), presented and, when funding was secured, positions were advertised and Nurse Practitioners recruited. However, in primary health care the potential roles were not as clearly defined and have been developed by individual organisations, generally as an alternative provider to GPs where recruitment problems existed.

Given the challenges associated with becoming a Nurse Practitioner, combined with a lack of support to develop the roles, it may be that in the future many practice nurses with

postgraduate qualifications will opt to work in an expanded scope with the possibility of incorporating prescribing rights (Nursing Council of New Zealand, 2012). However, when the interviews for this study were conducted the registered nurse expanded scope had not been released and there was interest from only one participant in following this pathway. Only time will tell if the registered nurse expanded scope pathway will be less onerous than the Nurse Practitioner pathway. For the successful implementation of the expanded scope, roles will need to be developed in primary and secondary care services that nurses can then apply for. The trial of expanded roles for diabetes nurse specialists has had promising results and provides a positive example of how roles could be developed in the future (Wilkinson, Carryer, Adam, & Chaning-Pearce, 2011).

6.7 INTERACTIONS WITH DOCTORS

Nurses in this study identified that their ability to fully utilise the knowledge gained from a postgraduate nursing qualification was influenced by day-to-day interactions with doctors. Nurses generally interacted with doctors on a daily basis in the general practice setting with nurses working in more advanced roles extending their interactions to doctors in secondary care services. This study demonstrated the presence of both very positive doctor interactions and very negative doctor interactions, often within the same practice setting or organisation. Similarly, inconsistent attitudes among doctors was a theme identified in the international research (Carnwell & Daly, 2003; Nicolson, et al., 2005) as a factor impacting on nurses' ability to advance nursing practice a result of postgraduate education. Nurses working in a supportive environment held their medical colleagues in high regard acknowledging the considerable time doctors spent mentoring and supporting them in their advancing roles. Nurses undertaking some postgraduate education courses such as advanced health assessment and prescribing practicum required a clinical mentor in the general practice environment. Clinical mentoring was often provided by a GP with positive examples given of GPs providing mentoring and support to nurses so they could advance their clinical practice. Examples of supportive clinical mentoring was an important outcome of this study as it has been found that learning in this way improved understanding of the individual health professional's competencies and knowledge and enhanced teamwork (Bridges, Davidson, Odegard, Maki, & Tomkowiak, 2011; Lait, Suter, Arthur, & Deutschlander, 2011; Pullon & Fry, 2005). However, in this study it was obvious that individual doctors developed confidence in individual nurse's skills and abilities through the mentoring relationship but it was not clear that this increased confidence was generalised to the wider nursing profession.

Gerrish, McManus & Ashworth (2003) when evaluating Masters level education contended that it was the "special competence of the person who holds the qualification" (p 107) rather than the qualification on its own that provided the nurse with credibility with other professionals. Without GPs having more generic confidence in the nursing profession as a whole it would be difficult for widespread advancement of the practice nurse role to occur. Instead development may be confined to individual practice nurses who gained individual doctor confidence.

Issues related to doctor confidence in nurses could be one of the reasons some rural nurses experienced challenges when seeking advice from secondary care doctors. Nurses working in advanced practice roles in rural areas were often managing patients with limited, or no, GP backup and required good support from secondary care services. All nurses were also required to practice within the legislative requirements set down by the Nursing Council of New Zealand (www.nursingcouncil.org.nz) and within the confines of written standing orders that provided nurses working in advance roles with limited treatment guidelines (New Zealand Government, 2011). Like GPs, nurses working in primary health care were generalists and, therefore, often needed to seek advice from secondary care services. It would have been expected that when nurses working in expanded roles sought advice from secondary care services what they received would have been professional and clinically helpful, however this did not always happen. When the response was obstructive GPs in this study, like those in the United Kingdom (Carnwell & Daly, 2003), often helped negotiate the interface between practice nurses and secondary care services. Participants in this study reported smoother interactions with secondary care services if the nurse knew the doctor in secondary care or had previous contact with them. The personal connection between doctor and nurse, or an understanding of the environment where the rural nurse worked, has been found to improve the ability of the nurse to seek advice or transfer patients to secondary care services (Armstrong, 2008). In order to improve doctors' understanding of the rural environment some trainee doctors have been given the opportunity to be involved in programs such as the Rural Medical Immersion Programme. This programme, run by the University Of Otago School Of Medicine, allowed medical students to spend some time working with patients in rural general practice, and in rural and tertiary hospitals (http://rmip.otago.ac.nz). Research conducted in Australia on rural medical student placements reported that students developed a greater awareness "of the personal and professional challenges that arise in rural health care" (Roberts et al., 2012, p 188). It would

be interesting to explore whether doctors who spent time training in rural environments were more supportive of rural nurses later on in their careers.

Conflict with doctors was relatively common for participants in this study and was found to occur when nurses had taken on roles that traditionally would have been undertaken by a doctor (Carnwell & Daly, 2003; Gerrish, et al., 2003; Nicolson, et al., 2005). Similar to other studies(Armstrong & Adam, 2002; Bennison, 2009; Carnwell & Daly, 2003; Clodagh Cooley, 2008; Spence, 2004b; Whyte, et al., 2000) practice nurses in this study reported that their confidence grew as a result of postgraduate education and that they became more questioning practitioners. Participants reported that some GPs did not expect to be questioned by a nurse and considered that they knew what was best for their patients. Although these GPs may have had the very best of intentions Ron Paterson, retired Health and Disability Commissioner, considered that there was no place for medical hierarchy and dominance in the health care environment today, advocating a more team-based approach to care (Paterson, 2010). Paterson said: "the days of [a] brilliant solo operator in medicine are gone" (p. 7). The challenge for the future is how to change entrenched views and ensure tradition does not impact on advancing nursing practice.

There may be a number of reasons for a doctor's resistance to advanced nursing practice. It has been found that conflict between a doctor and an advanced nurse may arise when a doctor perceives a threat to their professional identity. Research has demonstrated that when professionals feel threatened they become hostile toward other professions (Mitchell, et al., 2011). Although there were positive examples of inter-professional relationships reported by participants there were also numerous examples given of negative interactions. It is likely that the doctors who responded positively had a strong professional and team identity and demonstrated commitment to inter-professional openness (Mitchell, Parker, Giles, & White, 2010; Mitchell, et al., 2011). The nursing profession has a role to play in ensuring that the medical profession understands that advanced nursing practice is not a threat to the doctor role but rather strengthens the inter-professional team and, ultimately, the type of care that can be delivered to the patient.

The results of this study clearly demonstrated that nurses with postgraduate education were struggling to utilise the knowledge in direct patient care in settings where doctors did not practise a team-based approach to care or support nursing development. This was despite a growing body of evidence that showed that health care delivered by teams improved patients

care (Beasley, et al., 2007; Expert Advisory Group on Primary Health Care Nursing, 2003; Kent, et al., 2005; Smith, 2007) with multiple government documents (Ministry of Health, 2001, 2002;National Health Board, 2010; National Health Committee, 2007; Workforce Taskforce, 2008) and professional colleges (The Royal New Zealand College of GPs, 2011) advocating a team-based approach to primary health care. The Commonwealth Fund 2006 reported that the majority of general practices in New Zealand are failing to operate as a primary health care team (www.commonwealthfund.org/Surveys/2006).

The potential of practice nurses with postgraduate education will not be realised unless there is a change of culture in the general practice environment. The way health professionals are currently trained in silos is gaining increasing criticism and is considered a barrier to effective teamwork (Jakobsen, Baek Hansen, & Eika, 2011; The Carnegie Foundation for the advancement of teaching, 2010; Workforce Taskforce, 2008) The interest in inter-professional learning where health professionals from different disciplines come together to study at undergraduate and postgraduate level (Workforce Taskforce, 2008) has gained increased attention since the World Health Organisation found that: "after almost 50 years of inquiry, there is now significant evidence to indicate that interprofessional education enables effective collaborative practice, which in turn optimises health services, strengthens health, and improves health outcomes"(Health Professions Network Nursing and Midwifery Office within the Department of Human Resources for Health, 2010, p. 18)

It certainly seems that inter-professional learning may be one way to improve collaborative teamwork in primary health care (Interprofessional Education Collaborative Expert Panel, 2011; Thibault, 2011). There are some inter-professional modules or programmes available at undergraduate and postgraduate level in New Zealand (McKimm et al., 2010). However, the postgraduate programmes are not endorsed by the Nursing Council of New Zealand and do not attract Health Workforce New Zealand funding (District Health Board New Zealand, 2006). The introduction of an expanded inter-professional education model in New Zealand would be a significant step but there are a range of obstacles that would need to be overcome (McKimm, et al., 2010; Workforce Taskforce, 2008). On a smaller scale, inter-professional learning can occur through well planned professional development programmes (McKimm, et al., 2010) and it was observed in this study where there was a supportive mentoring relationship between the practice nurse and doctor.

There needs to be an improved understanding of professional competencies and knowledge and a better understanding of professional roles to enable more productive collaborative working relationships between practice nurses and GPs

6.7.2   EMPLOYMENT RELATIONSHIPS

The employment arrangements of some practice nurse participants in this study were identified as a barrier to them utilizing postgraduate knowledge in the general practice setting. Three nurses from three separate practices considered the biggest barrier for nurses utilizing knowledge and changing practice was the employment arrangement. Others (Finlayson, et al., 2009; Minto, 2006) have reported similar findings:"that power neutral teamwork is more difficult to implement when some team members are employees, although anecdotally there are plenty of good exceptions where individual good practice organization overcomes this barrier" (McKinlay, 2006, p. 166).The findings from this study were similar to other national literature (Finlayson, et al., 2009; Workforce Taskforce, 2008) that suggested that for some practice nurses being employed directly by GPs remained a barrier to practice nurse development 13 years after the Ministerial Taskforce on Nursing identified it as an issue that needed to be addressed (Ministerial Taskforce, 1998). As identified in this study it may not necessarily be the direct doctor/nurse employment arrangement that caused the underlying difficulty but rather GPs, as small business owners, working within the business without effective governance structures to consider strategic planning and organisational development (Workforce Taskforce, 2008).

The traditional private business model of general practice in New Zealand is changing and will probably continue to change as the population of GPs in New Zealand ages and subsequently retires (Medical Council of New Zealand, 2010b). Younger doctors prefer to be employed and it is likely that salaried models of general practice will become more popular (Chamberlain, 2010) and, therefore, practice nurses employment arrangements will also change over time. There are many examples where this has already occurred, including nurses in this study employed by Community Trusts.

The ability for practice nurses to fully utilise the knowledge gained from postgraduate education was influenced by interactions with medical colleagues. Some doctors were fully prepared to support advanced nursing practice and others were not, preferring instead to maintain full control over patient care. The ability for general practices to move forward, away from the traditional medical-dominated model that still exists in some areas, will be

dependent upon the GPs and practice nurse's ability to fully embrace the concept of teamwork. In some areas the change required may be generational while others may seek more transformational change in order to meet the impending health care challenges.

6.8 NURSING LEADERSHIP

Nursing leadership was identified as a key enabler for practice nurses utilising the knowledge gained from postgraduate education in the general practice setting. Leadership was often viewed as setting the direction of an organisation through innovative change, empowerment, and building teams that could transform an organisation (Whetton & Cameron, 2011). In contrast management could be viewed as maintaining order through monitoring, directing and co-ordinating workplaces (Jennings, Scalzi, Rodgers Iii, & Keane, 2007; Whetton & Cameron, 2011). It was difficult to differentiate between nursing leadership and nursing management as they were often interchangeable roles with many nurses in management roles having responsibility for nursing leadership and vice versa. Although in the past leadership and management may have been considered independently it was now acknowledged that: "effective management and leadership are inseparable" (Jennings, et al., 2007, p 17). A review of core competencies of nurse leaders and managers demonstrated considerable overlap (Jennings, et al., 2007).

When nursing leadership was discussed in the context of this study it was acknowledged that nurses could demonstrate leadership skills without having a formal position. However, for the vast majority of roles required to support primary health care nursing the roles would need nursing leadership and management skills. For the purpose of this discussion the author took the position that nursing leadership and management skills were interwoven.

Many of the other enablers for nurses expanding their practice as a result of postgraduate education were the result of systems that were potentially influenced by nursing leaders. For example; structured systems, regular meetings, nurse-led clinics that were booked in alignment with the nurse's level of expertise, a clear vision for the future, nurse representation at management or governance level, functional inter-professional relationships and practice structures where the nurse did not feel like an employee. Organisational barriers were the exact opposite and the lack of organisational support was more apparent for nurses working within settings that had no nursing leadership structure. The findings of this study were congruent with other research where a lack of management support had been found to be detrimental to nurses being able to utilise knowledge gained from postgraduate education

in clinical practice settings (Armstrong & Adam, 2002; Bennison, 2009; Clodagh Cooley, 2008; Gerrish, et al., 2000; Gerrish, et al., 2003; Hardwick & Jordan, 2002; Nicolson, et al., 2005). Spence (2004 b) has rightly questioned the: "costs of not having proactive and visionary managers and senior nurses" (p. 24).

In this study nurses identified those elements that enabled them to utilize the knowledge gained from postgraduate education in the general practice setting. Many of the organisational barriers that impinged on the practices nurses' ability to utilise the knowledge gained from the postgraduate nursing qualification could be removed, or managed, by effective nursing leadership structures. Although two of the study participants worked in, or were nurse leaders in, practices the remaining nurses worked without any formal nursing leadership structures. There was also no high level nursing leadership structure at Primary Health Care level within the Southern Region in contrast to other regions such as MidCentral where the District Health Board had committed to developing Primary Health Care Nurse Leadership structures (Davies & Hansen, 2011).

The majority of participants in this study worked in organisations with very flat management structures where nurses reported directly to the GP as their employer. Nurses employed by Community Trusts reported that that there was no nursing representation at governance level despite nurses being the largest part of the health workforce in these areas. Unfortunately, for many nurses working in general practice due to the business model or governance arrangement GPs were often in direct control of nursing practice. Practice nurses, unlike their secondary care colleagues, were often working in organisations without strong nursing leadership where: "it remains the case that structurally and functionally nurses activities' are generally shaped by the 'expert' hierarchical model of practice; wherein each level of practice is under the direct control of the practitioner at the next step above on the hierarchy" (McMurray, 2007, p 32). Several examples of the expert hierarchical model in action were given by nurses; including the nurse not being allowed to complete cardiovascular risk assessments and doctors refusing to sign nurses' standing orders. Nurses working in flat structure general practices were having difficulty making simple changes at practice level. For nurses to be supported in fully utilising their skills and knowledge in general practice the hierarchical model that existed in many settings needed to be replaced with a collaborative leadership model that embraced shared decisions. Some participants did work in organisations that had management/ leadership positions between themselves and the GP's and in these settings nurses found it easier to implement change. It is important that there are

more collaborative leadership structures developed in general practice so that nurses can expand their clinical roles (Finlayson, et al., 2009; Love, 2008; Nelson, et al., 2009). However, in many environments transformational change like this will be difficult to implement without support and encouragement from senior nursing and medical leaders in primary health care.

It is a Government priority to increase the capacity and capability of Primary Health Care to meet the growing demands on the health sector (Primary Health Care Advisory Council, 2009). The Government correspondingly has invested money in Primary Health Care Nursing Workforce Development (Ministry of Health, 2010). Practice Nurses are embracing this opportunity and partaking in postgraduate nursing education. However, for some their skills are not being fully utilised because of a range of challenges that could be addressed by effective regional nursing leadership to support their development. Some District Health Boards have supported the development of primary health care nursing leadership in their regions (Davies & Hansen, 2011) but others such as the Southern District Health Board have not, despite having a robust nursing leadership structure for secondary care services (P. Tippett, personal communication, November 24, 2011).

It is time that there was national consistency around primary health care nursing leadership and for the continued rhetoric to turn into action. The lack of primary health care nursing leadership has been identified as an issue for many years (Expert Advisory Group on Primary Health Care Nursing, 2003; Ministerial Taskforce, 1998) most recently with the Chief Nurse describing primary care nursing leadership structures as: "patchy" (O'Malley, 2011, p.4). O'Malley (2011) considered that: "formally established and supported leadership structures are required right across the primary health care sector, within and between regions, and nationally" (p.4).

The inequity in nursing leadership structures in the Southern Region should be cause for concern for the Ministry of Health given all that is known and proclaimed from the Ministry about the need for a highly qualified primary health care nursing workforce in the future (Ministerial Taskforce, 1998; Ministry of Health, 2001, 2010; Ministry of Health and District Health Boards New Zealand Workforce Group, 2007). Although the Southern District Health Board may have shown some disregard for primary health care in the past, (Schofield, 2009) continuing to do so is out of alignment with the Operational Framework that provides District Health Boards with a set of rules, policies and guiding principles for them to follow (Ministry

of Health, 2011/12). One of the requirements of the Operational Framework is that District Health Boards can demonstrate how clinical leadership is being fostered to involve the wider health sector including primary and community care (Ministry of Health 2011/12). District Health Boards are also required to work with primary health care to implement the Government's " Better, Sooner, More Convenient" strategy, which has many streams requiring primary health care nursing leadership. Examples include the development of nurse walk-in clinics and improved care for people with chronic conditions (Ministry of Health 2011/12) both of which will require nurses with advanced nursing knowledge to implement and manage them.

Primary health care nursing leadership will need to span all levels, from practice level to District Health Board and National level, in order to develop the workforce and nursing services to meet the changing needs of the sector (Expert Advisory Group on Primary Health Care Nursing, 2003; Finlayson, et al., 2009; District Health Board New Zealand, 2006; Mackay, 2008; McMurray, 2007). All the nurses in this study would have benefitted from having had nurse leaders at practice level. For this to occur individual leadership development should be supported through access to postgraduate leadership courses, (Mackay, 2008) such as the course one of the participants in this study completed, with immediate benefits to the practice. Nurse Leaders could then start by structuring nurses' appointment lists, providing advice for rural nurses on scope and boundary issues, advocating for professional supervision, leading co-ordinated collaborative supportive nursing teams, fulfilling governance roles on Community Trusts and PHO boards, working collaboratively with medical colleagues to facilitate support for advancing practice roles, linking postgraduate education with practice requirements and career pathways, and developing processes for succession planning, including supporting new graduates into the practice nurse workforce.

Practice nurses in the Southern region were struggling to fully utilise the knowledge they had gained from postgraduate education in clinical practice. The lack of primary health care nursing leadership was a significant barrier to practice nurse development in the region. It would be useful in future studies to compare Southern practice nurses to practice nurses from the MidCentral region who are supported by a Primary Health Care Nursing Development Team (Davies & Hansen, 2011) that provides dedicated support for education and career development.

6.9 SUMMARY

There are a number of similarities between the results of this study and other research on the outcomes of postgraduate nursing education. Participants in this study reported that the increased knowledge and skills gained from postgraduate education including reflection, critical thinking skills and evidence-based research skills all contributed to increased confidence that had transformed the way they practiced. Nurses were able to utilize the advanced knowledge and skills they had gained from postgraduate nursing education provided they worked in a supportive environment that could see the benefits of nurses working in a different way.

Rural New Zealand had gained from having nurses who were prepared to overcome the challenges of undertaking postgraduate education in order to provide health care services to their communities, often in the absence of GPs. Nurses taking on these roles were often practising without the support of a colleague in the next room or state-of-the-art equipment and, therefore, deserved the benefit of professional clinical advice and support when they requested it. Unprofessional behaviour should be condemned at the highest level.

Nursing leadership could help nurses with postgraduate education work through many of the barriers and challenges they faced in the practice setting and would contribute to building a sustainable productive primary health care nursing workforce in the future. Although some practice nurses with postgraduate nursing education might not feel like they are currently reaching their full potential, a range of opportunities may become available with changing models of practice where their skills may be better utilized in the future.

7   CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS

7.5   CONCLUSION

This research study explored the experiences of practice nurses utilising the knowledge from a postgraduate nursing qualification in the general practice setting in the Southern region of New Zealand. The research was approached from a constructionist epistemological position as it recognised that the meaning and experiences of research participants were constructed as they interacted with the world (Crotty, 1998). The constructionist approach clearly revealed that the experiences of nurses in this study were variable. The experiences and subsequent meanings that they developed from those experiences were closely linked to the settings where the nurses worked. The general inductive approach was used for the data analysis and was very useful for the formation of five important research themes. No other New Zealand studies have been conducted that have examined the outcome of postgraduate nurse education for practice nurses. The study was, therefore, important as it provided qualitative evidence that demonstrated practice nurses with postgraduate nursing qualifications could utilise their knowledge in general practice provided they worked in supportive environments that saw the opportunities and benefits of nurses working in a different way. Recent and current Governments have recognised that Primary Health Care is a priority area and in order to meet the growing demands on the health care sector there need to be more collaborative models of practice incorporating a range of health professionals. Health professionals would be required to work to the "top of their license" (Davies & Hansen, 2011), and for practice nurses to achieve this they would need to work in settings that were proactive and visionary.

There were three key results from this study. Firstly, the study demonstrated that practice nurses were gaining the necessary skills and knowledge from postgraduate education programmes to advance their clinical practice. However, the opportunity for nurses to develop advanced roles was dependent on the employment setting. Rural practice nurses had greater opportunities for advancement due to the lack of medical cover in their areas while urban nurses faced more challenges. Secondly, practice nurses were very dependent on medical colleagues for mentoring, clinical support, advice and for liaison with secondary health care professionals for acceptance of referrals. Without medical support the nurses' practice was restricted and they could be left in vulnerable unsupported positions. Nurses employed directly by GPs received variable support with postgraduate education and advanced nurse

practice development. Thirdly, the lack of nursing leadership at all levels of primary health care in the Southern region left practice nurses without a clear career pathway that linked postgraduate education to advanced professional roles. Lack of nursing leadership also meant that practice nurses essentially had to manage any role development in isolation with no professional support or advice.

The findings of this research has implications for practice nurses, GPs, the wider health care sector (both regionally and nationally) and education providers. The researcher recommended that all practice nurses, prior to commencing postgraduate education have a clear education plan ideally linked to a career pathway. Although Health Workforce New Zealand had processes for nurses applying for funding that included submission of an education plan, career plan, and employer sign-off, it was likely that this was done with very little guidance or understanding from the employer given the lack of nursing leadership structures in primary health care. Practice nurses needed to have a clear understanding of their employing organisation's views of advancing nursing practice and if there were opportunities for expanded roles.

The medical profession needs to read this research and reflect on the positive and negative effects they can have on practice nurse development. In addition, they should consider if their approach, individually and collectively, is appropriate given that all the evidence from current research suggested the way health care is delivered is going to need to change in the future. Patch protection and power issues need to be put aside given there is a predicted global shortage of all health professionals meaning no-one will be put out of work by advanced nursing practice roles. The factors identified that enhanced teamwork and professional understanding, such as clinical mentoring and interprofessional learning, need to be built on by doctors and nurses and supported through various undergraduate and postgraduate education programmes.

The Southern PHO as the organisation responsible for planning, co-ordinating and funding primary health care in the region need to have a greater role in supporting change in models of service delivery such as Integrated Family Health Centres that would meet the Government's objective of "Better Sooner More Convenient Health Care". The formation of more proactive models of primary health care delivery would provide greater opportunities for nurses. The Southern PHO need to take some responsibility for the total lack of primary health care nursing leadership along with a lack of career structure and education programmes for

practice nurses in this region. It could be viewed as short-sighted that the Southern PHO opted not to transition existing PHO nursing leadership structures and professional development programmes into its organisation. Although the Southern PHO was a new organisation, PHO's generally were not new entities. Therefore, it was unacceptable that the Southern Region was essentially no further ahead than it had been ten years ago in relation to Primary Health Care Nursing Leadership and development.

The Southern District Health Board need to ensure that processes are in place that support nurses working in advanced roles in the community so that when they telephoned secondary care services for support, advice or to refer patients they were met with a professional clinically helpful response. The Southern District Health Board also needs to act on the Primary Health Care Nursing Leadership issue for the Southern region by working with the Southern PHO regarding funding arrangements and locality of any leadership structure. Some DHB's have opted to locate leadership structures within the DHB (Davies & Hansen, 2011) while others are positioned in PHO's. There are probably advantages and disadvantages with both models but the options needed to be fully explored. The Southern District Health Board, through the Health Workforce New Zealand funding applications, need to ensure in the absence of any other form of nursing leadership that practice nurses have a sensible postgraduate education and career plan. The Southern District Health Board Nurse Practitioner Steering Group also needs to maintain an overview of potential Nurse Practitioner candidates for Primary Health Care along with any expanded scope roles.

The Ministry of Health should consider the results of this study in relation to their expectations and the subsequent performance of the Southern PHO and the Southern District Health Board. As outlined previously there were various Ministry documents and directives that if implemented might support practice nurses with postgraduate education to reach their full potential. The Chief Nurse also has a role to advocate on behalf of nurses to ensure that leadership models and career structures for practice nurses nationally are consistent. The Ministry might also be interested in this research as it helped define the types of supports and relationships that are important for developing practice nurses' skills which will ultimately be important for the future development of Integrated Family Health Centres around New Zealand.

The education sector should feel reassured by the results of this study. The education programmes were clearly meeting the expectations of practice nurses with both the clinical

and theoretical papers adding to the nurse's knowledge and skills. However, the education sector needs to remain mindful of the significant challenges nurses faced when they undertook postgraduate education and that for rural nurses those challenges were even greater.

The results of this study were specific to the Southern region but many of the themes will be important to wider New Zealand and possibly internationally. It would be useful to explore the experiences of practice nurses who worked in areas with strong primary health care leadership structures in order to understand if their experiences were different. It would also be very useful to gain a greater understanding of the experiences of doctors working with nurses with postgraduate qualifications and to find out what motivates doctors to support nurses. The results of this study would have been enhanced by having more urban nurse participants.

Practice nurses will be presented with a huge array of opportunities in future years and postgraduate nursing education will provide nurses with the skills and knowledge to meet these challenges and opportunities. It has been shown that practice nurses with postgraduate education have skills in advanced health assessment, critical thinking, clinical reasoning, pharmacology, managing health inequalities, chronic disease management and leadership and they can reach their potential in organisations that value and support advanced nursing practice.   .

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APPENDICES

APPENDIX ONE: INFORMATION SHEET

What is the experience of Practice Nurses translating the knowledge gained from a post graduate nursing qualification in the general practice setting

Research Information Sheet for Participants

You are invited to take part in a research project being undertaken as part of a University of Otago, Centre for Postgraduate Nursing Studies, Masters Thesis. The aim of the research is to explore the Practice Nurses' experience of translating the knowledge gained from a post graduate nursing qualification into practice in the general practice setting.

Who will conduct the research? Sally O'Connor, Masters Student, University of Otago Centre for Postgraduate Nursing Studies. Contact details: Home phone number (03) 489 1160 or cellphone 027 2158565. Email address: sallyconnor@slingshot.co.nz

Who will supervise the research?

Jenny Conder: Senior Lecturer, University of Otago, Centre for Postgraduate Nursing Studies. Email: jenny.conder@otago.ac.nz

Dr Lisa Whitehead: Senior Lecturer/ Director, University of Otago, University of Otago, Centre for Postgraduate Nursing Studies.

Email: lisa.whitehead@otago.ac.nz

WHAT IS THE AIM OF THE STUDY?
THE AIM OF THIS STUDY IS TO EXPLORE HOW THE PRACTICE NURSE IS TRANSLATING THE KNOWLEDGE GAINED FROM A POSTGRADUATE NURSING QUALIFICATION INTO PRACTICE IN THE GENERAL PRACTICE SETTING.

What would I be asked to do if I took part?

You will be invited to attend one individual interview that will take between 1 and 2 hours that will be conducted at a mutually agreeable time and location. The interview will be audio-taped. Participants will also be asked to supply some baseline data including, age, gender, ethnicity, years of practice nursing, current role, practice setting and type of

qualification obtained. To ensure what you have said is accurately interpreted by the researcher you will be given the opportunity to verify the final findings once the analysis is almost completed.

What are the benefits if I took part?

There are no clearly identified benefits to the individual participant. The benefits will be to the wider nursing profession possibly identifying a range of enablers or barriers that assist or hinder Practice Nurses to develop practice.

Risks

There are no significant risks to you as an individual participant. Due the nature of the study there is a minimal risk that you may be able to be identified. All possible steps will be taken to minimise this through the data cleaning process where identifiable features will be removed. If the researcher wants to use stories that have the potential to identify you further consent (Stage two consent- see consent form) will be obtained. The other risk is the researcher misinterpreting the data collected. To avoid this final descriptions and narratives will be returned to the participants so they can validate the interpretations. During the interview you may disclose sensitive or painful details of situations that may be emotionally distressing for example difficult employee / employer relationships. If this did occur the researcher will have referral pathways in place however any costs associated will not be met by the researcher. If you divulge information that the researcher considers is unsafe nursing practice then this will be discussed with you at the time and the researcher will seek advice from her supervisors.

What happens if I change my mind?

- Your participation is entirely voluntary (your choice). You do not have to take part in this study.
- If you do agree to take part in the study, you are free to withdraw from the study at any time, without having to give a reason.
- During the interview you do not have to answer all the questions, and you may stop the interview at any time.

Inclusion Criteria

You are eligible if you are a Practice Nurse working in either urban or rural general practice in Otago or Southland and have a postgraduate nursing qualification that is endorsed by the Nursing Council of New Zealand (see attached sheet of Postgraduate Nursing Programmes)

ranging from Postgraduate Certificate through to Masters. Recruitment of participants will commence in November 2010 and it is anticipated that the thesis will be completed in May 2012.

Exclusion Criteria

You are excluded if you are a Nurse Practitioner or if you are a registered nurse working in General Practice but not in a Practice Nurse role.

Will I be paid for participating in the research?

Costs associated with travel for participants will be reimbursed; however time involved in attending the interview time will not be reimbursed.

How is confidentiality maintained?

All data will be anonymised and individual participants will not be able to be identified in any reports. Further consent will be obtained if there is a risk personal stories could identify you. For the duration of the study the audio-tapes and transcripts will only be used by the researcher and the researcher's two supervisors. Data will be stored on a password protected computer and in a locked office. On completion of the study data will be stored in a secure archive at Otago University for 10 years following completion of the research after which time they will be destroyed by a University approved destruction service.

HOW WILL THE RESULTS BE DISSEMINATED?

It is anticipated that the outcome of the research will be published and presented in a variety of modes. A hard copy of the written thesis will be deposited as part of the University of Otago Library collections held in the Medical Library of the University of Otago, Christchurch. The results may also be presented at Primary Health Care Conferences and articles submitted for publication in peer reviewed journals. Findings may also be shared with the education sector. Each participant will be emailed a pdf copy of the final thesis. The researcher will also be available to discuss the outcomes with the participant on an individual basis by appointment.

GENERAL
- If you require more information about the study then you can contact the principal researcher. Contact details are supplied at the top of this document.
- An intermediary person is being used to help with recruitment to avoid any conflict of interest. If you do not want to participate in the study would you please send an email

indicating this to Barbara Bridger at **bbridger@mhc.co.nz**. If Barbara does not receive email contact within two weeks then she will make contact to see if you are interested in participating. Once you have agreed to participate your details will be passed on to Sally O'Connor.

- If you have any queries or concerns regarding your rights as a participant in this study, you may wish to contact an independent health and disability advocate: Free phone: 0800 555 050Free fax: 0800 2 SUPPORT (0800 2787 7678)Email: advocacy@hdc.org.nz'
- If you have any queries or concerns regarding your rights as a participant in this study, you may wish to contact your professional organisation.
-

Statement of approval: This study has received ethical approval from the Lower South Regional Ethics Committee Ethics Committee, ethics reference number LRS/10/EXP/043.

Please feel free to contact the researcher if you have any questions about this study.

Programmes Endorsed by the Nursing Council of New Zealand

Postgraduate Nursing Programmes

Auckland University of Technology
Master of health science in advanced nursing practice
School of Nursing or School of Midwifery
Division of Health Care Practice
Faculty of Health
Akoranga Drive
Private Bag 92 006
Victoria Street West
AUCKLAND 1142
www.aut.ac.nz
Tel: (09) 921 9732
Fax: (09) 921 9612

Christchurch School of Medicine, University of Otago
Master of health sciences (nursing - clinical)
Centre for Postgraduate Nursing Studies
Christchurch School of Medical and Health Sciences
University of Otago
PO Box 4345
CHRISTCHURCH 8140
www.chmeds.ac.nz
Tel: (03) 364 0530
Fax: (03) 364 0525

Eastern Institute of Technology
Master of nursing
Faculty of Health and Sport Science

Gloucester Street
Taradale
Private Bag 1201
NAPIER 4142
www.eit.ac.nz
Tel: (06) 844 8710
Fax: (06) 844 1910

Massey University
Master of nursing
School of Health Sciences
Private Bag 11 222
PALMERSTON NORTH 4442
www.massey.ac.nz
Tel: (06) 350 5799
Fax: (06) 350 5688

Otago Polytechnic
Not currently offering postgraduate programmes
School of Nursing or School of Midwifery
Forth Street
Private Bag 1910
DUNEDIN 9054
www.tekotago.ac.nz
Tel: (03) 479 6135
or (03) 477 3014
Fax: (03) 474 1957
or (03) 477 6032

Southern Institute of Technology
Postgraduate certificate in health science (named specialty)
Postgraduate diploma in health science (named specialty)
School of Nursing
Faculty of Health and Community Studies
Forth Street
Private Bag 90 114
INVERCARGILL 9840
www.sit.ac.nz
Tel: (03) 218 2599
Fax: (03) 214 4977

University of Auckland
Master of nursing
School of Nursing
Faculty of Medical and Health Sciences
Private Bag 92 019
Victoria Street West
AUCKLAND 1142
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Tel: (09) 373 7599

Victoria University of Wellington
Master of nursing (clinical)
The Graduate School of Nursing, Midwifery and Health
Level 7, Clinical Services Block
Wellington Hospital
PO Box 7625
Newtown
WELLINGTON 6242
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Tel: (04) 463 5363
Fax: (04) 463 5442

Waikato Institute of Technology
Master of nursing
School of Health
Tristram Street
Private Bag 3036
HAMILTON 3240
www.wintec.ac.nz
Tel: (07) 834 8888
Fax: (07) 838 0707

Whitireia Community Polytechnic
Postgraduate certificates in named specialties
School of Nursing and Health Studies
Wineera Road
Private Bag 50 910
PORIRUA 5240
www.whitireia.ac.nz
Tel: (04) 237 3100
Fax: (04) 237 3101
Updated May 2010

http://www.nursingcouncil.org.nz/index.cfm/1,63,0,0,html/Postgraduate.
Downloaded: 28th September 2010

APPENDIX TWO

CONSENT FORM: HOW DO PRACTICE NURSES TRANSLATE THE KNOWLEDGE GAINED FROM A POSTGRADUATE QUALIFICATION INTO PRACTICE

Stage One: Consent

REQUEST FOR INTERPRETER

English	I wish to have an interpreter	Yes	No
Deaf	I wish to have a NZ sign language interpreter	Yes	No
Māori	E hiahia ana ahau ki tetahi kaiwhaka Māori/kaiwhaka pakeha korero	Ae	Kao
Cook Island Māori	Ka inangaro au i tetai tangata uri reo	Ae	Kare
Fijian	Au gadreva me dua e vakadewa vosa vei au	Io	Sega
Niuean	Fia manako au ke fakaaoga e taha tagata fakahokohoko kupu	E	Nakai
Sāmoan	Ou te mana'o ia i ai se fa'amatala upu	Ioe	Leai
Tokelauan	Ko au e fofou ki he tino ke fakaliliu te gagana Peletania ki na gagana o na motu o te Pahefika	Ioe	Leai
Tongan	Oku ou fiema'u ha fakatonulea	Io	Ikai
	Other languages to be added following consultation with relevant communities.		

1. I have read and I understand the information sheet dated November 2010 for volunteers taking part in the study designed to explore the practice nurses experience translating the knowledge gained from the a postgraduate qualification into practice. I have had the opportunity to discuss this study. I am satisfied with the answers I have been given.

2. I have had the opportunity to use whānau support or a friend to help me ask questions and understand the study.

3. I understand that taking part in this study is voluntary (my choice), and that I may withdraw from the study at any time.

4. I understand that my participation in this study is confidential and that no material that could identify me will be used in any reports on this study.

5. I have had time to consider whether to take part in the study.

6. I know who to contact if I have any concerns regarding the study.

7. I consent to my interview being audiotaped.   Yes [   ] No [   ]

8. I wish to receive a copy of the results.   Yes ☐   No ☐
9. I understand that there will be significant delays between data collection and the final results.
10. To ensure that I have not been misrepresented and that all important data is included I will be given the final description and narratives to verify. I understand that if the researcher wants to use stories that have the potential to identify me further consent will be obtained (Stage two consent see below).
11. I consent for the results of this study to be included in the researchers Masters thesis and for the results to be presented at Primary Health Care Nurses Conferences and Forums. Articles may also be submitted for publication in peer reviewed journals and findings may also be shared with the education sector.
12. I understand that if I divulge any information that the researcher considers unsafe nursing practice then this will be discussed with me at the time and I understand the student will seek advice from her supervisors.

I _____ (*full name*) hereby consent to take part in this study.

Date:	
Signature:	
Full names of researchers:	Sally O'Connor- Thesis Student Jenny Conder- Research Supervisor Lisa Whitehead- Research Supervisor
Contact phone number for researchers:	Sally O'Connor (03) 489 1160 Jenny Conder (03) 479 2162 Lisa Whitehead (03) 364 3858
Project explained by:	
Project role:	
Signature:	
Date:	

Stage Two Consent

1. I _____ (*full name*) hereby consent to the researcher using a story/ stories from my transcript in reporting the findings of the research. I understand that the researcher will take all reasonable steps to protect my identity. I recognise that despite these steps there is the potential that I could be recognised and am fully aware of the risks associated with this.

Date:	
Signature:	
Full names of researchers:	Sally O'Connor- Thesis Student Jenny Conder- Research Supervisor Lisa Whitehead- Research Supervisor
Contact phone number for researchers:	Sally O'Connor (03) 489 1160 Jenny Conder (03) 479 2162 Lisa Whitehead (03) 364 3858
Project explained by:	
Project role:	
Signature:	
Date:	

APPENDIX THREE: ETHICS APPROVAL

**Health
and
Disability
Ethics
Committees**

27 October 2010

Ms Sally O'Connor
Rapid 73 Dukes Road
South Mosgiel RD2
Dunedin

Dear Sally

Re: Ethics ref: **LRS/10/EXP/043**   (please quote in all correspondence)
    Study title: What is the experience of practice nurses utilising the knowledge
                    gained from a post graduate nursing qualification in the general practice
                    setting?
    Investigators: Ms Sally O'Connor, Ms Jenny Conder, Dr Lisa Whitehead

This study was given ethical approval by the Chair of the Lower South Regional Ethics Committee
under delegated authority.

This approval is valid until 31 May 2012, provided that Annual Progress Reports are submitted (see
below).

Amendments and Protocol Deviations
All significant amendments to this proposal must receive prior approval from the Committee.
Significant amendments include (but are not limited to) changes to:
    — the researcher responsible for the conduct of the study at a study site
    — the addition of an extra study site
    — the design or duration of the study
    — the method of recruitment
    — information sheets and informed consent procedures.

Significant deviations from the approved protocol must be reported to the Committee as soon as
possible.

Annual Progress Reports and Final Reports
The first Annual Progress Report for this study is due to the Committee by 31 October 2011. The
Annual Report Form that should be used is available at www.ethicscommittees.health.govt.nz.
Please note that if you do not provide a progress report by this date, ethical approval may be
withdrawn.

A Final Report is also required at the conclusion of the study. The Final Report Form is also
available at www.ethicscommittees.health.govt.nz.

Requirements for the Reporting of Serious Adverse Events (SAEs)

For the purposes of the individual reporting of SAEs occurring in this study, the Committee is satisfied that the study's monitoring arrangements are appropriate.

SAEs occurring in this study must be individually reported to the Committee within 7-15 days only where they:

— are *unexpected* because they are not outlined in the investigator's brochure, and
— are not defined study end-points (e.g. death or hospitalisation), and
— occur in patients located in New Zealand, and
— if the study involves blinding, result in a decision to break the study code.

There is no requirement for the individual reporting to ethics committees of SAEs that do not meet all of these criteria. However, if your study is overseen by a data monitoring committee, copies of its letters of recommendation to the Principal Investigator should be forwarded to the Committee as soon as possible.

Please see www.ethicscommittees.health.govt.nz for more information on the reporting of SAEs, and to download the SAE Report Form.

We wish you all the best with your study.

Yours sincerely

**Anna Paris
Lower South Regional Ethics Committee Administrator**
dd (03) 474 8562
fax (03) 474 8090
Email: anna_paris@moh.govt.nz

APPENDIX FOUR: INTERVIEW GUIDE

Interview Schedule with Short Demographic Section

Study Title: What is the experience of practice nurses utilising the knowledge gained from a post graduate nursing qualification in the general practice setting.

Baseline data that will be collected

Participant _____

1. Age _____
2. Gender _____
3. Ethnicity _____
4. Type of postgraduate nursing qualification obtained
   - Postgraduate certificate   Postgraduate diploma   Masters Degree

5. If postgraduate certificate can you please specify _____
6. Institution qualification obtained _____
7. Year qualification obtained_____
8. Years practice nursing prior to postgraduate qualification _____
9. Years practice nursing since completing postgraduate qualification _____
10. Are you still studying at post graduate level _____
11. If so what will be the exit qualification_____
12. Practice setting _____
13. What is your current role _____
14. Do you have a speciality role or area of practice? If so please identify for example nursing leadership, chronic disease speciality.

   _____
   _____
   _____

15. Practice size- enrolled population _____
16. Number of General Practitioners working in the Practice _____
17. Number of Practice Nurses working in the Practice _____

Interview Questions

- Tell me how you have been able to utilise the knowledge gained from the post graduate qualification in the General Practice setting (asking for examples, situations and events).

- Is some knowledge more transferable than other types of knowledge?

- Is there any knowledge that you feel you cannot utilise in the general practice setting

- As you continue down the post grad journey has the experience of being able to utilise the knowledge changed

- What has motivated you to continue on your post grad journey

- What will be the desired outcome of your post graduate education

- Were there times that you considered stopping post grad education

- How has the experience of post graduate education changed you as a person

- Tell me about your postgraduate study and how it was for you

If the nurse was able to utilise the knowledge gained then other questions such as

- Tell me why you think you have been able to expand your practice (exploring enablers)

- Tell me what support you have had to enable you to expand your practice (support structures/ mentors etc)

- Tell me what difference you think you have made to the patients you care for

- Tell me about a patient case ensuring that no names or identifying features are disclosed that outlines how your practice has changed as a result of the postgraduate education.

- Do you think the postgraduate study has given you additional skills in addressing health inequalities experienced by high needs groups both in relation to deprivation and ethnicity. If so please explain or give examples.

If the nurse was not able to utilise the knowledge gained- this will be explored.

- Asking the participant to tell me why this has not happened

- What are the barriers for you in utilising the knowledge gained in the practice setting (exploring barriers, gaps in knowledge, confidence issues, and professional conflict issues for example)?

- Can you tell me what would enable you to be able to utilise the knowledge gained in the practice setting