

**THE CONTEMPORARY MILITARY NURSING
PRACTICE OF NURSING OFFICERS
IN THE NEW ZEALAND ARMY**

**A thesis presented in partial fulfilment of the requirements
for the degree of**

Master of Nursing

**At the
Eastern Institute of Technology
Hawkes Bay, New Zealand**

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2015

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Michelle Argyle

ABSTRACT

The aim of the research was to describe the contemporary military nursing practice of Nursing Officers (NO) in the New Zealand (NZ) Army. Approval to conduct the research was sought from the New Zealand Defence Force (NZDF) and the Eastern Institute of Technology (EIT). The literature review of contemporary international military nursing practice was conducted to inform the researcher of the existing descriptions of the range of skills and knowledge which underpin contemporary military nursing practice. The method chosen was a qualitative descriptive approach, in order to collect rich narrative data. A convenience sample was employed to gain participants from those NOs commissioned since 1995. Data were collected from 12 semi-structured interviews conducted by the researcher.

The findings showed that the contemporary military nursing practice of NOs in the NZ Army depended on the various roles the NOs were required to fulfil. There were many areas of nursing practice that the NOs were proficient in. The singular difference however that stood military nursing practice separate from civilian nursing practice was stated by one participant as being prepared to put oneself in harm's way.

Similar to the overseas military nurses, the NOs' roles included primary and secondary health care, leadership, health intelligence, and health logistics in the military's garrison setting, in NZ and overseas. The disparity was their induction into military nursing practice. The overseas military nurses were inducted via military health care facilities and military hospitals, this was not found to be the situation for the NZ NOs.

Furthermore it was apparent that the NOs received little or no induction training when they began their military nursing practice. Some NOs became despondent and others felt this contributed to resignations and to low "Esprit de Corps". It was concluded that there was currently no military nursing focussed curriculum on which to base induction or pathway planning, or nurses directed to develop and teach that curriculum within the NZ Army.

In recent years, as a group the NOs' appear to be more positive and clinically orientated than was noted earlier in the career of one longer serving participant. This position will potentially set the scene for an encouraging way forward for the development of military nursing practice of NOs in the NZ Army.

Three recommendations arose from the research, as follows.

1. It would be constructive to conduct a comparison with NOs' current areas of competence to the elements identified that make up the contemporary military practice in NZ, including the elements noted in the literature. Identification of training gaps could create individualised pathways to ensure safe practice and proficiently prepared NOs for military deployment.
2. Organisational support should be sought to designate senior clinically experienced NOs to develop and implement an induction and training pathway focussed on military nursing practice for the NOs.
3. Further investigation is required in regard to autonomous nurse-led roles, for example Nurse Practitioner (NP) and Clinical Nurse Specialists (CNS), and their utilisation in the military nursing practice setting.

ACKNOWLEDGEMENTS

I would like to take a moment to acknowledge those who have made this possible, supported and guided me through this work:

Firstly my mother and children for your generous support and patience, sacrificing family time but also valuing my study.

To my supervisors, Professor Bob Marshall and Clare Buckley, for the continuing support and encouragement. In particular Bob with your patience and always managing to help me believe in my ability to complete a thesis.

To my colleagues who participated as well as to those who chose not to, I hope you all gained insight to what makes your vocation what it is today.

Lastly, to acknowledge the nurses I have worked with throughout my career, for your camaraderie and sharing your careers with me. A special note to those nurses that have inspired me academically and as a professional – Rachel Sturgess who inspired me to be calm in the face of calamity, Judy Leader who taught me to answer every question by putting the patient first, Victoria Perry for striving for excellence for the benefit of our patients, Kathryn Fraser and Bettina Marenzi for sharing your academic journeys so much I wanted to follow, and LTCOL Maree Sheard for encouraging me to set a pathway of post graduate study.

I am grateful to my parents who inspired me to reach my potential. I know you will be proud Dad.

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Chapter One: Introduction

Introduction

Military nursing is a recognised area of specialty nursing practice and shares a rich history and unique mission: to care for those who serve. However consistency in definition and standardised training still eludes military nursing groups around the world.

The research seeks to describe the contemporary military nursing practice of Nursing Officers (NO) in the New Zealand (NZ) Army. As means of introduction, this section sets the scene and background to the research. The aim of the research is detailed and includes a description of thesis plan.

Background: Clinical Relevance

Because there is no clear definition of what makes up the contemporary military nursing practice of NOs in the NZ Army, a design for any induction and training for military nursing has been prevented. The researcher feels that this can potentially lead to high attrition rates, decreased level of job satisfaction, and post-traumatic stress syndrome. More importantly it can result in compromising the full potential for the delivery of nursing care to the soldier. Long term this could also leave lasting effects to the individual nurse's wellbeing or even personal safety.

In NZ the Army recruits NOs who are trained as Registered Nurses (RNs), holding the qualification from either comprehensive or general registered nurse training, neither of which have a military component. In the case of the researcher, on accepting the commission, the NO also accepted to attend the courses stated by the Military Secretary (MS) as part of the employment contract. These courses include military, but not nursing-related, components such as officer induction, policy overviews, provision of health support that includes non-nursing components (logistics, command and control), in the NZ Army, and the requirements for officer promotion. From the researcher's understanding, military nursing is not defined in the NZ Army, an introduction to the range of nursing skills and knowledge required

of a NO is not provided, and specific military nursing training is not included nor is there any generic nurse training pathway recommended.

In contrast, in the researcher's experience, in the civilian District Health Board (DHB) setting nurses generally work within one area of nursing specialty at one time for an ongoing period, with the exception of those with short term contracts or casually employed nurses. To support the nurse working within the specialty, there would be an initial induction and training process, followed by regular ongoing updates depending on the DHB requirements and specific unit's practices. For instance a new nurse to an operating theatre (OT) suite would have an induction period of several weeks. During this time the nurse would be supernumerary initially, provided with a mentor, progress through and complete workbooks, be introduced to the department and relevant networks, and have explained what their role and responsibilities were. In addition to this the nurse would be rotated through all sub-specialities within the department to ensure a full orientation had occurred, taking between six and eighteen months. This process would ensure the nurse had the opportunity to gain the skills and knowledge required of the role of an OT nurse.

In time if the nurse chooses to, the OT nurse may resign from the position in OT and apply for a position in another specialty area, for instance the emergency department (ED). Again the nurse new to ED would go through an initial induction and training period in order to gain the beginning skills and knowledge required of an ED nurse. Again this may take six to eighteen months.

In comparison a military nurse is seen as multi-talented (Wynd, 2006) rather than focussing on one specialty area. The researcher is aware that there are currently various opinions within the NZ Army regarding the specialty area(s) that should make up the practice of a military nurse but nothing to date has been formally adopted. The new military NO may or may not, have past relevant experience to call upon when put in the new context of a military nursing role. For instance where the nurse has only had limited exposure to various specialties, such as in the circumstance of recent completion of the new graduate programme or have being employed in only one specialty area. In these cases the new NO would require initial induction and training if they are to be a nurse in the military of a similar standard as they would have been, if they had stayed within the DHB environment. Likewise the

experienced nurse, having moved from one specialty area to another, being the NZ Army, would also require initial induction and training to be of similar standard of a nurse within a DHB. As a result if the nurse had not received induction and training specific to the nurse's new area of practice, the nurse is left to flounder, guess rightly or wrongly, and could take a less efficient pathway to discovering the roles and responsibilities or to know the skills and knowledge needed to do the job.

Consequently the NOs can find themselves in a position of not having the skills and knowledge expected of a nurse in the military. NZ does not have the large military hospitals to train in like their overseas counterparts, nor does NZ's training and education institutions provide any military nursing courses.

To clarify, in the researcher's experience, the role of a NO is dictated by the position that he or she is given for a period of two to three years – referred to as a posting cycle. Each posting cycle is intended to provide opportunity for the individual to develop their leadership abilities as an officer, and learn how to plan and provide health service support in the military environment. As a consequence each posting has the potential for a NO to be in another area of nursing practice to his or her last posting. In addition there is the expectation to advance somewhat in leadership ability while also taking on a new area of clinical practice. The posting cycles aim to advance a junior officer to become a more senior officer, Lieutenant to Captain, Captain to Major, and so on. The senior Captains and Majors roles are likely to be managerial positions, although they still require the NO to be current with clinical practice and soldiering skills such as riflanship and the fitness requirements for all other army personnel (Kennedy, Hill, Adams and Jennings, 1996). The requirement for military officer development is expected of the NOs in the NZ Army; which is the same expectation as in overseas militaries. As stated in Kennedy et al.'s (1996) conceptual model of army nursing practice, "Army Nursing Corps officers cultivate military leadership skills and teach junior officers" (p. 34).

Further, the research refers to a NO's career that encompasses the various areas of nursing practice he or she is required to work in during the course of his or her career, as military nursing practice. These areas of nursing practice are not only the various specialties also found in civilian practice but include a distinct difference due to the fact their patients are soldiers who go to war. From the researcher's

perspective, the nursing practice of a NO involves preparing soldiers to be deployed on military operations and care for them while on operations as a primary health care (PHC) nurse, or an emergency trauma nurse, or an intensive care nurse, or a recovery nurse and so on. Then on the soldiers return from the military operation, support their rehabilitation back into their everyday work and the family environment, and continue the cycle to yet again prepare them for the next deployment. The NO is also a soldier providing patient care to the soldiers they serve beside, wherever that might be.

Induction and training of NOs in the NZ Army can only be designed when there is a clear definition of their military nursing practice. Not knowing what the NOs military nursing practice consists of has impacted on the NZ Army's ability to provide induction and training. Once it has been established what makes up the contemporary practice of NOs in the NZ Army, this may be used as a base for future training. For the purpose of the thesis, the contemporary period was considered to be from the mid-1990s until the present day because it included the majority of currently serving NOs.

The Aim of the Research

The aim of this research is to establish what makes up the contemporary military nursing practice of NOs in the NZ Army. The method chosen for the research, qualitative descriptive approach, provided the capacity to accommodate the dynamic settings of military nursing.

Thesis Outline

Chapter One: Introduction. This chapter introduces the topic and provides background to the research. The clinical and organisational relevance has been stated along with the research aim.

Chapter Two: Literature Review. Both national and international literature has been reviewed, this chapter provides a summary in chronological order to inform the researcher of the existing descriptions of the range of knowledge which underpins contemporary military nursing practice.

Chapter Three: Methodology. The methodology chapter lays out the design of the research and details the processes of selecting participants, analysis of the raw data and ethical considerations.

Chapter Four: Findings. This chapter presents the findings taken from the themes identified in the analysis and provides initial interpretation of the themes.

Chapter Five: Discussion. Chapter five presents the discussion of the research and includes with comparisons with relevant elements from the literature review.

Chapter Six: Conclusions and Recommendations. The final chapter will reconsider the research aim, finishing with a summary of the findings. Recommendations for nursing practice, education and future research will be provided.

Chapter Two: Literature Review

Introduction

This chapter will cover the purpose of the literature review, how the review was conducted, summarise the themes of the literature, and identify gaps in the literature.

The purpose of this literature review is to compile a systematic summary of original research papers along with some selected military reports to provide a theoretical perspective and initial understanding of the research topic (Schneider, Whitehead, LoBiondo-Wood, & Haber, 2013). This will inform the researcher of the existing descriptions of the range of knowledge which underpins contemporary military nursing practice from international and national sources. This information will thus inform the design of the research and the researcher for the discussion later in this study.

Previous researchers have identified that experiences of contemporary military nurses has not been widely published (Biedermann et al., 2001). The few studies available raise two common issues. The first is the lack of preparation of military nurses for the role diversity expected of a military nurse. The second is that there is little evidence of the experiences being taken forward to develop processes to support military nurses in the future. The literature selected for this review covers a broad range of perspectives that endeavours to acknowledge the diversity that makes up clinical practice for military nurses today.

The literature search identified peer-reviewed articles based on original research into the nursing practice of military nurses. Articles were included if they were published between 1995 and 2015. Articles were excluded if they only focussed on the regimental military aspect of a nursing officer. The database search was performed on Google Scholar, CINAHL, Index NZ, Scopus, PubMed, ProQuest and Science Direct. The search thread and derivatives of it were utilised as follows: (experience*) AND (military OR army OR navy OR air force) AND (nurs*) AND (war*) AND (military nurs*). Lastly the references used in the literature review articles were searched for any further articles that had been cited in them.

Although a literature review is predominantly reliant on primary literature sources, secondary source material can add value by proposing the topic from another point of view (Schneider et al., 2013). In this instance a military document available for general release (Whitcomb and Newell, 2008) along with Wynd's (2006) proposal for a model for military disaster nursing, have been included as secondary source documents. These will provide summaries of lessons learned from a direct source, in the absence of available primary source literature from similar sources. The majority of military documents have security restrictions, are therefore frequently not for public viewing and this represents a limitation to the literature review due to the restricted access of some documents. Thus, there is a potential for an unknown array to literature exist, but to be inaccessible. Nevertheless the intention was to include a range of perspectives and thus provide a theoretical perspective and comprehension of the research topic.

It is also important to note that a military nurse in NZ, known as an NO, has two overarching influences: the professional body that defines nursing competence and scope of practice (the Nursing Council of NZ (NCNZ)); and the employer who dictates the role of employment (NZDF). A NO's competence in NZDF is demonstrated by the submission of the NZDF's Professional Development Recognition Programme (PDRP) which has been developed under the guidance and direction of the NCNZ to meet the requirements of the Health Practitioners' Competence Assurance Act 2003. The NO is required to submit a portfolio to demonstrate current competence every three years. To the NZDF, this means that sufficient opportunity for nursing practice is required to ensure the NO is able to maintain current competence. However the NZDF PDRP does not define military nursing practice or contain in this document any specific needs to demonstrate competence of the NZ military nurses other than what is very similar to any number of NZ District Health Board PDRPs.

The literature does not define military nursing although it was evident that nurses have been in a war environment since 1854 when Florence Nightingale sailed to the Crimea war taking 38 British nurses with her. The first six New Zealand nurses to be involved in a military campaign were sent to the Boer War in January 1900, although these were not uniformed military personnel, but as civilian nurses. This

was because provision within the military for the nurses to go with the troops had yet to be established. For the New Zealand nurses, the Nurse Registration Act was presented to Parliament “In 1901 NZ became the first country in the world to have a full Nurses Registration Act passed by Parliament” (Kendall and Corbett, 1990, p. 13), which meant that the training regulations and State examinations were set. Following this in 1906 the Defence Act 1886 was amended to include Regulation No.125 authorising the formation of the New Zealand Medical Corps Nursing Reserve. Subsequent to this amendment, the NZ Army Nursing Service was established in 1915.

Kendall and Corbet (1990) state that the principles first laid down by Nightingale “have been followed in military nursing since that time and were the basis of much of the teaching of the work of the Red Cross” (p. 2). The fundamental principle however was to alleviate the misery of the sick and wounded. This included improving the living conditions of the troops, providing for their welfare in the field of war as well as providing nursing care to the sick and wounded. Prior to this there had been greater losses of soldiers from sickness and disease than from the wounds received in the course of battle. According to Kendall and Corbet (1990) Nightingale’s aim to attend to the misery of the sick and wounded included: infection control (prevention of cross contamination), environmental health (for example food hygiene handling, and supply of clean water); and medical (sickness and disease) and surgical (wounds) nursing.

Having acknowledged the components of nursing care that was provided for the soldiers in these earlier conflicts such as the Crimean war, and looking forward to the contemporary period, the review of literature can be divided in three broad areas:

1. Before Deployment: education and training; and individual readiness of military nurses;
2. On Deployment: the lived experiences of military nurses; and
3. Professional Issues of Military Nursing Practice.

Before Deployment

This section of the review will consider literature which relates to: the education and training of military nurses. This will include preparing for a disaster be it natural or manmade, deciding on skill mix, and does practice with low acuity equal success with high acuity. Also included will be individual readiness as well as clinical nurse competence, operation competence, survival skills, personal, psychosocial, physical readiness, leadership, administrative support, group integration and identification, plus readiness as a conceptual model for army nursing practice.

Education and Training of Military Nurses. NOs join the military service at various stages of their nursing careers and consequently have different levels of nursing experience at that point. For Australian NOs join the Army following their initial qualification and begin their military nursing careers working in military healthcare facilities as well as military hospitals (Australian Army, 2014). It was apparent from the United States (US) and English based literature that nurses either follow on from their initial nursing study directly to military hospitals or are able to join the military at a later time. This initial portion of the NOs career was not detailed in most of the literature sourced for this review (Johansson & Johansson, 2007, Ebbs & Timmons, 2007, Wynd, 2006, and Harper, Ersser & Gobbi, 2007), however Finnegan, Finnegan, Bates, Ritsperis, McCourt and Thomas (2015) provide some insights for consideration. Given the nurses had different levels of nursing experience prior to commencement of their military nursing careers, it follows to consider what their needs would be different for their education and training.

Johansson and Johansson's (2007) study sought to establish a curriculum content and identify how military nurses are best taught given that nurses will have different levels of education upon entering the military service – some with post graduate education and some with the initial nursing qualification. Using a comparative descriptive methodology, Johansson and Johansson randomly sampled 130 military nurses in Sweden. Then two stratified samples were constructed consisting of one group that had an undergraduate qualification (general nursing level) and the second group that had an undergraduate qualification as well as six to twelve months full-time study in a specialist area of nursing. Data were collected by way of a 90-item questionnaire based on trauma scenarios.

Johansson and Johansson (2007) acknowledged Benner's (1984) use of Dreyfus and Dreyfus's (1980) model which described the development of a nurse's decision making abilities through the stages of novice, advanced, beginner, competent, proficient to expert. Briefly these stages are:

1. The novice endeavours to identify "objective facts, role and other features that are typical of their actions" (Johansson & Johansson, p. 1047) and acts independently of the situation;
2. The advanced beginner shows an ability to perform their nursing duties, notices frequent occurrences and begins to act dependent on the situation;
3. The competent person with 2-3 years of experience notices the frequent occurrences, begins to act dependent on the situation but is yet to make decisions about what is important;
4. The proficient person "understands the situation as a whole, understands the meaning in terms of future goals" (Johansson & Johansson, p. 1047); and
5. The expert acts from practical experience, not from rules and recommendations, with "intuitive perception of the situation" (p. 1047).

This model was described as a process of skill attainment and career development that both Benner (1982), and Dreyfus and Dreyfus (1980) claim can be generalised to nursing. In order to substantiate Benner's, and Dreyfus and Dreyfus's claim, further literature was sought and found to state that "the incremental development is dependent on a combination of depth and range of clinical experience, which is positively correlated with the length of time spent nursing" (English, 1993, p. 387).

It can be concluded that with greater nursing experience comes an increased ability in critical thinking and decision making (Johansson and Johansson, 2007; Benner, 1984; Dreyfus and Dreyfus, 1980; and English, 1993). Further to this, nursing experience as described by Patel and Groen (as cited in Johansson and Johansson), is a continuum "ranging from the concrete, context-free, rule-driven decisions of the novice to the context-bound, pattern-matching behaviour of the expert" (p. 1046). By knowing how the nurses' development occurs, this provides insight to what and how education and training could be aligned to the level of nurses' experience.

Johansson and Johansson (2007) focussed on how different educational backgrounds affected the clinical practice and decision making of the two nursing groups. The

general trained nurses placed higher importance on training in the examination of vital functions, preparation of injectable drugs as well as the full body examination, suction of airways and mechanical ventilation. In comparison, those military nurses with additional education, placed higher importance on training relating to the technical skills that were more highly specialised; and in the scenario based training, requested the simulated patients' symptoms to be relevant and correct. The first group requested that they be taught only by military nurses and they use concrete examples of military nursing when being taught. In contrast, the second group tended to accept their teachers as long as they were qualified in their area of expertise; and were able to easily relate to the scenarios. For the thesis it was valuable to know what the needs are of nurses with different levels of education, as this can guide the development of a curriculum for future education programmes.

From Johansson and Johansson's (2007) study it was evident that the skills that were deemed to be required for the military nurses included:

1. Training Technique: suction of airways, preparing drugs, auscultation/percussion of abdomen, cut downs, pulse rate, blood pressure, injection, full-body examination, auscultation/percussion of lungs, periphery venous catheter, dressings, fixation of extremities, thoracentesis, and ventilation.
2. Assessment: neurological injuries, fractures, infection disease, traumatic shock, abdomen and thorax injuries, frostbite, hypothermia, consciousness, spinal cord, hygiene, pain.
3. Treatment: multiple injuries, infectious diseases, frostbite, unconsciousness, pain, neurological, skull, burn, thorax, abdomen, extremity injuries, fractures, traumatic shock, hypothermia. (Johansson and Johansson, p. 1010).

Finnegan et al. (2015) further examine the preparation of military nurses for deployment and acknowledged that nurses are utilised from the point of injury throughout the continuum of care which included the rehabilitative pathway. This study assessed the impact and effectiveness of pre-deployment education preparation and clinical placements provided for British military nurses based in 2013 at Camp Bastion Hospital, Afghanistan, with the exclusion of mental health care.

A constructivist grounded theory approach was used to conduct 59 interviews with military nurses who had been in Camp Bastion for a 10 week period. Of this group

11% had a master's degree, their ages ranged from 29 to 50 years, 14 years was the mean length of time as a registered nurse, with an average of 11 years military service. Finnegan et al. (2015) stated that what makes military nursing practice different to that of civilian nursing are the challenge to be an autonomous practitioner, to work in hostile and unpredictable environments that require flexibility, to expect poly-trauma and paediatric patients, to be proficient in a wide range of clinical competencies including wound care and pain management, to understand trauma injury severity scores, and the need to attain post registration education for specialty practice as deemed appropriate .

To support the expected development of the military nurse, The British Armed Forces nurses are recruited as students at Birmingham City University. This was followed by a preceptorship using workplace booklets and graded levels 2, 3, and 4 based on Benner' (1984) Novice to Expert continuum for professional advancement, proof of competence and credentialing along with selection for specialist advance practice. Clinical placements for a period of 2-3 years were in secondary care facilities of which the majority are military hospitals. Military nurses in non-clinical roles were directed to attain appropriate clinical placement for 10 days every 6 months, along with 450 hours of registered practice and 35 hours of continuous professional development (CPD) over three years (Finnegan et al., 2015).

Finnegan et al.'s (2015) findings included several recommendations. It was recommended that newly qualified nurses not allowed onto specialist training until a minimum of 3-5 years post-registration. However the study also recognised that there needed to be a sufficient number of nurses from various specialties to provide the correct level of support to troops. Military nursing education was to include patient assessment skills, pain management, and burns and wound care. Evaluation of individuals' curriculum vitae and profiles should be conducted in order to identify deficits. For operational deployments it was important to ensure there was an appropriate skill mix. Clinical placements needed to provide the correct exposure to benefit military nurses' training. The placements should have a similar demographic to hospitals in war zones, including young adult males, poly trauma, high dependency units, high patient turnover areas of elective surgery, medical assessment, paediatrics, obstetrics, gynaecology and outreach teams for example burns and pain management; be on a rotational basis; and be supported by an

appropriately qualified practice development nurse or educator. Clinical placement opportunities should also extend to autonomous nurse-led practice. Finnegan et al. (2015) concluded that if the study was translated into guidelines, the consequence could be improved patient care and the enhancement of the operational capability of the British Armed Forces.

Nursing in a Disaster (Natural or Manmade). A disaster, as defined by the World Health Organisation (WHO), is a “situation where the normal means of support and dignity for people have failed as a result of natural or manmade catastrophe” (World Health Organisation, 2002). Whether a disaster is natural or manmade, the military nursing response is typically independent and autonomous of a health care facility. Wynd (2006) suggests that in a disaster the military nurses frequently find themselves to be the leaders of groups of personnel providing care in teams that have formed formally or informally in response to the situation, because they have general knowledge of management and the organisation of patient care as well as finely tuned clinical skills.

Military nurses, Wynd (2006) stated, need to be multitalented with cross-training for skills in trauma and resuscitative care, and some degree of experience in paediatrics, obstetrics, and non-battle disease processes. This description may align to today’s emergency department nurse. Like Reineck (1999), Wynd mentions the requirement for flexibility and “tolerance for the main changes involved in coordinating dozens of units and troops in a theatre of operations” (The Unique Military Nursing Environment, para. 1), and an expert level of decision making and communication skills. This study further suggests that in a disaster nurses need to be utilised “in accordance with their acknowledged clinical skills ... administration/management of critical care, trauma and burn care, surgery, or recovery” (Disaster Phase 2: Response/Implementation, para. 8). It is important to note for future nurses in a disaster be it natural or manmade that “equipment used during routine and daily nursing care, such as intracranial monitors, central venous and arterial lines, and intravenous pumps are unavailable in the field and nurses need to fall back on their basic assessment skills” (Disaster Phase 2: Response/Implementation, para. 8).

Wynd (2006) reviewed literature about disaster nursing and disaster responses in military nursing; aiming to describe the uniqueness of the military environment for

the purpose of proposing a model for military disaster nursing. The proposed framework was a three-phase response with phase one specifically dedicated to preparedness and readiness. The priority actions recommended for phase one are more relevant for the purpose of this literature review in comparison to phase two and three which relate to nursing management and command type actions. Phase two related to the implementation of the response, and phase three looked at the long term recovery and reconstruction along with an evaluation of the response (see Appendix 2).

To summarise, Wynd's (2006) proposed model's phase one consists of three tiers:

1. Individual readiness – physical fitness, emotional expectations and familiarity of the mission, soldier skills, and family support;
2. Clinical Skills – trauma, triage, evacuation, standardised operating procedures, clinical assessment, familiarity of equipment; and
3. Unit or collective – operational competency, knowledge of the mission, leadership, administration, integration and identification.

Agazio (2010) also sought to describe nursing in a disaster situation and asked what challenges did the army nurses face in their practice when deployed to missions other than in a war zone (humanitarian aid and disaster relief (HADR)). Agazio conducted a descriptive exploratory study, using focus groups, with 75 active duty Army Nurse Corps (ANC) officers ranging in age from 25 to 56 years, their length of service was two to 24 years, with their nursing practice spanning one to 33 years. Notably 42% had master's degrees and 1.3% had doctorates, leaving 56.6% with the minimum level required for nursing registration. Twenty-five percent of the participant group had deployed to both wartime and HADR missions.

When military nurses are deployed to a HADR mission, Agazio (2010) suggested that the nursing care needed to bridge two realms: the traditional realm of military nursing care provided to troops injured or ill while deployed, and the humanitarian realm of care provided to a civilian population as they rebuild after a disaster. The latter according to Agazio, was the realm that military nurses are likely to be less prepared for – refugees, greater numbers of elderly, women and children, infectious diseases, starvations and or dehydration, and chronic conditions.

Agazio's (2010) study demonstrated the diversity required of the ANC. Compared to HADR, it was noted that in war the number and brutality of the casualties were greater and had a more constant flow, and there was more immediate danger with an increased level of threat.

The results demonstrated many similarities of the nursing care practice between the two realms. Agazio (2010) concluded that in both settings, nurses needed strong assessment and basic clinical skills, along with advanced trauma and critical care skill sets. The recommendation was to conduct further study to validate training and the competencies identified for the ANC in order to provide leadership in the preparation and training of nurses to successfully function and provide nursing care to patients in these settings.

Deciding on Skill Mix. Whitcomb and Newell (2008) described the training of US nursing, medical and auxiliary staff, along with the facilities and resources that are required for managing casualties, and noted commonly found injuries and conditions in Camp Coyote, Kuwait in 2003. This facility provided patient stabilisation so the patient could be moved in a short time frame, or if required due to security, weather or patient condition, retained for one to two days. In this study the deployed nurses were assessed in order to recognise those nurses with advanced skills and knowledge, and to provide those that did not have the skills and knowledge with further training. This provided the opportunity to decide how best to utilise staff, disperse experience amongst the teams to ensure a safe skill mix, and determine training requirements.

Whitcomb and Newell (2008) outlined the structure of the Camp Coyote nursing cohort and note that the nursing teams were led by a director of nursing care who managed the clinical aspects while the administrative nursing functions were managed by another senior nurse. In addition, each team had a leader who orientated, trained and managed his/her colleagues in patient care. Assessment and training of the nurses took place in the first few days of establishing the health care facility as a military trauma receiving station, in preparation for imminent warzone casualties. The training given to the nursing care teams involved the Trauma Nursing Care Course (TNCC) curriculum (Emergency Nurses Association, 2007). As a group the teams tested medical equipment and talked through plans of action

for possible threats such as air or ground attacks, the use of chemical or biologic agents, and how the field environment compounded these threats. Reassessment several months later was conducted in order to evaluate the effectiveness of the process and plan further training.

A large number of staff had not seen military trauma before or been in a war zone. To tackle this, anticipatory guidance was presented via discussing possible scenarios. Whitcomb and Newall (2007) stated that this approach was recognised as valuable as preparatory training among those health care workers who treat patients with combat trauma because it was thought to assist in the prevention of Post-Traumatic Stress Syndrome (PTSD) (discussed further later in this chapter). In conclusion the authors stated that the lessons learned from Camp Coyote in 2003 provided an example of how a systematic approach to staff training can provide suitably prepared staff in a facility for the treatment of casualties whilst utilising various levels of skills and experience.

Does Practice with Low Acuity Equal Success with High Acuity? It was noted by Whitcomb and Newall (2007) that this particular military health care facility only received low acuity patients at the time assessed by the authors and they do not go on to say how these lessons may or may not be transferrable to a facility receiving high acuity patients. It would be reasonable to assume that due to the low level of acuity, the findings are only transferrable to facilities of similar acuity. If the facility did receive higher acuity patients, the reassessments may have reported symptoms of high stress levels and PTSD given that many staff had not seen military trauma injuries before. Nevertheless, the systematic approach demonstrated was successful for this particular facility and mission. However, as noted, the findings from this study, would seem to have limited generalisability because the facility was not tested by receiving high acuity patients.

Individual Readiness. Reineck (1999) used a qualitative methodology to attempt to define individual readiness of US military nurses following the war in Bosnia which ended in December 1995. The data were collected during 1996 and 1997 by conducting focus groups with 30 US military nurses who had been deployed in Bosnia. In the data analysis Reineck identified that individual readiness consisted of six concepts and could see the changeable nature of individual readiness, and that

these concepts were interrelated with dimensions at the individual, group, and systems levels. These concepts were: clinical nursing competence; operational competence; survival skills; personal, psychosocial, and physical readiness; leadership and administrative support; and group integration and identification. Reineck argued that together these six concepts influenced the NO's ability to provide nursing services to the soldiers with the context of the military mission they had been deployed for.

Clinical Nursing Competence. Reineck's (1999) findings stated that clinical nursing competence included "technical proficiency, ability to use nursing skills with field equipment, physical assessment skills, clinical decision making acumen, and trauma/triage skills" (p. 253). It also included the ability to cross train in more than one clinical area and care of chemical and biological warfare (CBW) casualties.

Operational Competency. Taking clinical competence further and into the operational environment means to move from shift work to working until the work was done and improvising nursing practice in an austere environment such as the military field setting (Reineck, 1999). Reineck stated the contrast "between nursing care in fixed facilities and that delivered when deployed ... includes specialised versus generalist nursing roles, high versus low technology, automated versus manual equipment, and moderate versus high diversity in clinical nursing scenarios" (p. 251). Reineck also noted that nurses who are operationally competent know the fundamental principles that underpin their nursing practice and therefore are able to adapt and re-contextualise nursing care to be able to deliver nursing services across the spectrum from a low intensity conflict to a full scale war zone.

Survival Skills. This refers to the more military-centric skills. For example, being familiar with weapon use and care, an understanding of tactics, how to live in the field, communication flow, protection and security of personnel, and chemical and biological warfare (CBW) from the soldier's perspective (Reineck, 1999).

Personal, Psychosocial, and Physical Readiness. Personal readiness relates to sufficient supplies of personal medications and stress relievers (for example, something to read, physical activity), family support plans as well as courage, commitment, ethics and integrity to achieve the mission in the unpredictability of the deployment setting. For instance, for some it may be that although they wanted to be

in the services, actually being deployed requires a higher level of commitment than they had previously considered (Reineck, 1999). The level of commitment required by the deploying military nurse was also noted by Scannell-Desch and Doherty (2009) whose findings stated that deployment can bring more than was bargained for and acknowledged that nurses potentially are put in harm's way. Without the consideration of the possible consequences of a military deployment, the military nurse's individual readiness may be insufficient to deploy.

The psychosocial aspects included: "the importance of a healthy mind-set" (Reineck, 1999, p. 254), peer support, tolerance for ambiguity and confusion, managing loneliness and separation, a flexible attitude, being adaptable and willing to do new things in changing situations, coping with a lack of privacy and close living conditions. Lastly optimal physical readiness encompasses physical and mental fitness, endurance and stamina (Reineck, 1999).

Leadership and Administrative Support. Leadership from those in command that gives confidence and takes responsibility to make sure the administrative support was in place was deemed essential by the participants in Reineck's study (1999). This included family care plans, explaining how the command structure and support systems work, clear definition of the mission and mentoring. It was also suggested that the administrative support could be comprised of a standardised individual readiness database including licence renewals and certification verification, support for legal action and family support communication.

Group Integration and Identification. Integral to success of the mission as well as to a more constructive environment, Reineck (1999) discussed the emergence of the positive aspect that came from group integration and identification. This concept will be included later in this chapter.

Readiness. As a concept readiness was referred to not only by Reineck (1999) but also Agazio (2010) and Kennedy, Hill, Adams and Jennings (1996) because from a military perspective, readiness is "the yardstick by which everything is measured (Kennedy et al., 1996, p. 33). Kennedy et al. (1996) detailed a conceptual model of army nursing practice noting it was distinctive due to its ability to sustain the health and wellbeing of soldiers so they can deploy while also ensuring that the nurses are

prepared to provide the necessary nursing care wherever the patient care setting might be (Kennedy et al., 1996).

The two principal components identified in the conceptual model (Kennedy, 2010) are therefore:

1. The ability of sustain the health and wellbeing of soldiers. This involves the independent and dependent nursing measures used to resolve patient care problems (cure and care) and provide the physiological and psychosocial measures to relieve suffering (comfort); and

2. To ensure nurses are prepared to provide the necessary nursing care to the soldier regardless of the setting through education, research and administration. Agazio (2010) and Kennedy et al. (1996) noted the level of ANC that hold master's degrees and consequently deemed to have the acumen to provide expert clinical nursing care, conducts research and provide the administrative support to develop and implement the components of the model.

The model focussed on a clinical practice pyramid depicting the nursing care requirements to meet patient care. This included traditional nursing care at the base of the pyramid; advanced practice nursing care (APN) in the middle; and individual clinical case management at the top. The levels are not mutually exclusive and have the goal of a seamless continuum of inpatient and outpatient care. The pyramid was surrounded by education, research and administration, meaning that each level is responsible for the delivery of high quality and cost-effective care, resulting in positive patient outcomes. The aim was for collaborative health care provision within a healthcare facility which also includes external health care and organisational systems for effective rehabilitation of the patient (Kennedy et al., 1996).

The conceptual model of army nursing practice can be easily translated to the field environment where the nurses work in warzones or in a HADR setting. The majority of injured or ill soldiers in this environment need the complexity patient care described at the base of the pyramid. This may include some APNs providing traditional care while also supporting less experienced nurses. Kennedy et al. (1996) stated that APNs remain in their specialty for all deployments however also stated

“role adaptation will be essential for Army nurses to maximize specialty skills while meeting the needs of the Army in the field” (p. 36). The conclusion in this article was that a conceptual model provides guidance for professional practice, and that readiness was fundamental to the success of a military nurse’s deployment and the future of military health care.

Deployment

It was evident from the literature that military deployments can range from one or two months to more than a year. It was therefore relevant to review literature that relates to the military nurse on deployment including: lack of preparation; the army becomes family; and an increased potential for PTSD.

Lack of Preparation. Biedermann, Usher, Williams and Hayes’ study (2001) recorded and analysed the oral history of mainly Australian nurses, to increase awareness and understanding of nurses’ experiences in the war for the benefit of future education and training in the nursing profession in general. The authors found that the majority of Australian nurses had up to two years military experience prior to being deployed and most reported being clinically unprepared. The study does not state, however, whether the nurses considered themselves to be militarily prepared. This level of nursing experience and sense of being unprepared was similar to the American veteran nurses reported by Schnaier, Paul, Norman and Scannell-Desch (as cited by Biedermann et al., 2001). Biedermann et al. (2001) noted that all the nurses were women, and commented:

They found themselves in a traditionally male domain and despite inadequate preparation, clinical inexperience, fatigue, and periods of emotional trauma, were quickly working in an environment that lent itself to a situation in which they were forced readily to adapt. (p.548)

Biedermann et al. (2001) states that on their arrival at the hospital the nurses who were also military officers, told of how many male soldiers seemed hostile and resentful of them until they had “proved themselves to the men” (p.545). Given that the nurses had not received any information regarding their military or nursing roles (Biedermann et al., 2001) it may have been that the male soldiers had also not been

given any information to pre-empt the nurses' arrival or explain their military and nursing roles.

The main findings from Biedermann et al. (2001) included: nurses' experience of expanding their practice; and stressors such as sleep deprivation, the images of war, shift work, being on-call, and limited facility/living conditions. These are discussed in more detail further on in this chapter.

The Army Becomes Family. Ormsby and Harrington's (2003) study stated that "family and a sense of belonging are the core concepts to an understanding of spirituality in RAAF nursing practice" (p. 324). Using a mixed methodology study Ormsby and Harrington aimed to gain insight into the spiritual care provided by Australian military nurses to their patients and how the military environment impacts on the delivery of spiritual nursing care. A sample of 23 RNs from the Royal Australian Air Force (RAAF) completed a questionnaire and then five of this group were interviewed. The study defined spirituality to include religion "as one form of spiritual expression, but broaden the understanding to include those aspects that bring mean, purpose and fulfilment to a person's life" (Ormsby & Harrington, 2003, p. 322). In this study the authors stated that the Australian Defence Force (ADF) "are expected to follow accepted national and international nursing guidelines and incorporate spirituality into their military nursing practice" (p. 322).

On deployment in the absence of family, a surrogate family provides this support. This was where the military unit fits in, nurturing the surrogate role, instilling a common sense of purpose, comradeship and Esprit-de-Corps (spirit of the unit). Separation from one's unit could lead to feelings of alienation, isolation or hopelessness. Ormsby and Harrington's (2003) findings stated that if the soldier was separated from her/his unit due to injury or illness and were transported to a military health care facility, the military nurses then "takes over the role of spiritual care provider for an individual" (p. 325). Through listening, the provision of a non-judgemental environment, the ability to refer the patient to clergy, and showing kindness, the nurse was in fact caring for the patient's spiritual needs (Ormsby and Harrington, 2003).

Reineck (1999) also stated the positive factors that come from group integration and identification. A sense of collegiality begins with understanding the skills of the

unit members and having an opportunity to train collectively before deploying. This builds trust, communication and consequently effective working relationships as well as a willingness to support others, and constructs a new sense of family for both training and living. Overall the establishment of group integration and identification results in unit cohesion.

Scannell-Desch and Doherty's (2010) study reported themes that also included kinship and bonding, and my military family, amongst seven themes from their data. Other themes included: deploying to war; remembrance of war; most chaotic scene; nurses in harm's way; and 'more than I bargained for'. Scannell-Desch and Doherty used Colaizzi's (1978) phenomenological method to analyse texts to explore the lived experience of 37 US military nurses from the Army, Navy and Air Force. Using face-to-face interviews where possible the data were generated by asking open-ended questions, followed with clarifying questions to gain deeper understanding of thoughts, feelings, and meanings of what was expressed. Further findings from this study will be later in this chapter.

Increased Potential for PTSD. It has been acknowledged by a number of authors included in this review that exposure to disaster areas and warzones increase the incidents of mental health problems in military personnel. This section of the literature review will examine articles relating to: exposure to the sights, sounds, and smells of military injuries; and further stressors experienced by the deployed military nurses.

Exposure to the Sights, Sounds, and Smells of Military Injuries. A notable aspect of studies from these recent conflicts; was the reporting of the severity of injuries that patients present with to the medical facilities. In earlier conflicts such as the Crimean War, the severely injured soldier would be more likely to perish at the point of injury on the battlefield. Given the greater number of presentations of severely injured patients at the military medical facilities, more health service personnel were exposed to the stressors that accompanied dealing with significant injuries and death.

Scannell-Desch and Doherty (2009) suggest the nurses' recollections of scenes of injured soldiers, children as patients, caring for the enemy and host nation patients, all contribute to the overriding theme of potential for PTSD amongst personnel in

military medical facilities. The potential for PTSD also exists for those involved in the transporting of the military casualties: clinicians; auxiliary staff; drivers; stretcher carriers; and so on.

PTSD, also known as critical incident stress (CIS) is “the development of specific symptoms following a psychologically traumatic event not generally encountered in human experience” (Corneil, 1989, p. 24). More specifically, stress comes from three different aspects of life: environmental – what happens around an individual, noise, temperature, smell, sights, sensations; psychosocial – inter-personal and inter-professional relationships; and personality stressors – for example feeling guilty about not doing something well, and a response to criticism or ones inability to say no. These stressors accumulate and can be emotionally destructive for an individual depending on the individual’s tolerance level of what they can cope with (Sanford, 2003). Harris (1989, p. 16) states in relation to the reasons why some people experience PTSD or CIS, that “such events as line-of-duty deaths, serious line-of-duty injuries, suicide of a co-worker, mass casualties or serious injury to children, calls involving relatives or known victims.” Corneil (p. 24) states “... such events as large-scale disasters ... with considerable numbers of victims, or loss of colleagues have been determined as traumatic” and therefore exposure to such trauma, can contribute to the development of PTSD.

Scannell-Desch and Doherty’s (2010) findings indicate the existence of PTSD symptoms and compassion fatigue in caregivers, and recommend tailored interventions to assist with warzone stresses and memories. However the study does not elaborate on the interventions.

Referring back to Whitcomb and Newall’s (2007) study that includes recommendations for prevention of PTSD, it was stated that a large number of staff had not seen military trauma before or been in a war zone. To tackle this, anticipatory guidance was presented via discussing possible scenarios. This approach was recognised as valuable as preparatory training, in relieving stress and anxiety through staff talking with each other and offering support, and in preventing PTSD among those health carer workers who treat patients with combat trauma.

The following are some quotes from Scannell-Desch, and Doherty’s (2010) participants.

War injuries are terrible. People with their legs blown off, bloody flesh that looks like chunks of meat hanging off missing legs or feet, blood splattering every, people crying (p. 8).

He was panic stricken, sat up on the gurney and looked down where his legs used to be and screamed bloody murder. He threw himself back on the gurney and just continued screaming at the top of his lungs (p. 8).

I took care of so many burned children. Some ended up 70% burned. I'll remember them for the rest of my life (p. 9)

For the military nurse, he or she not only experienced the potential impact on their own mental health but also as part of their nursing care, were required to attend to the psychological needs of wounded service members (Hagerty, Williams, Bingham and Richard, 2010). Hagerty et al., (2010) used a phenomenological design to conduct focus groups with 20 US military nurses (Army, Navy and Air Force) and eight combat-wounded patients from major military treatment facilities in the US. The aim of this research was to explore the lived experience of military nurses caring for the psychological needs of wounded service members; and explore the lived experience of wounded service members with respect to nursing care of their psychological needs.

Along with physical nursing care Hagerty et al. (2010) stated the military nurses provided emotional support to their patients by talking, sympathising with them about their injuries, having distracting conversations, and being nice and smiling. Hagerty et al.'s military patient participants stated that even though they did not receive psychological treatment from a psychologist, they viewed the military nurses care as "important in their survival and recovery and directly helpful to them emotionally" (p. 87). Among the finding it was this quote:

Providing care to patients in difficult situations is intense work and generates personal anguish that can be traumatic for nurses. Interventions are needed that help nurses process their personal care experiences and guide them in coping and responding in powerful, difficult situations. (Hagerty et al., 2010, p. 91).

Hagerty et al. (2011) acknowledged that “nursing can be stressful and exhausting, working in highly emotional environments” (P. 91) and recommends nursing curricula to include discussions regarding the importance of “personal meaning, connection with others, and reframing experiences” (p. 91) in order to promote one’s own coping and resilience to better prepare nursing under stressful conditions.

Further Stressors. Whitcomb and Newall (2008) also stated that the intense and never-ending sandstorms added to a heightened sense of anxiety for the deployed nurses. Biedermann et al. (2001) reported further stressors within the military nurses’ environment as noted below.

- a. The potential for sleep deprivation throughout the deployment related to limited staffing and frequent arrival of patients.
- b. Frequently constant exposure to horrific battle injuries and critically ill patients.
- c. Not all nursing areas worked an eight-hour shift. Due to the nature of the wounds, the operating theatre would continue until the surgeon was too tired to continue that day.
- d. Air conditioning, hot and cold running water, and toilets cannot always be relied on.

Biedermann et al. (2001) also mention how rank relates to nursing positions and stated that this impacted on the nurses reported experiences. In this study the highest of the ranks mentioned is Major and the lowest was Lieutenant. The Lieutenants worked primarily in clinical roles, such as surgical or intensive care and were involved with the daily running of the ward. Ranks of Captain and Major performed less of clinical and more of administrative roles. It was also stated that those working in the operating theatre reported vastly different experiences to those in the medical or surgical ward but these differences were not elaborated.

Professional Issues of Nursing Practice

This section of the literature review incorporates studies that involve professional issues of nursing practice. The professional issues included are: an ethnographical perspective; expanded practice, ethics; cultural considerations.

An Ethnographic Perspective. Harper et al. (2007) noted the nurses’ actions, behaviours and decision making was influenced by being a military nurse. This was

a qualitative study which identified the military nurses' assumptions and cultural knowledge in regard to postoperative pain assessment. Twenty-nine military nurses who worked in the post-operative surgical environment and were involved in post-operative pain assessment, were interviewed. The authors attempted to identify how the military as a cultural background, influenced the military nurses' actions, behaviours and decision making in regard to postoperative pain assessment, particularly when these did not correlate to the patient self-reported pain. From an ethnographical perspective the researchers considered nursing as a profession, to be the initial cultural group that the military nurse belonged to and which therefore would have the greatest influence. The secondary cultural group would be the military which then further shaped their actions, behaviours and decision making.

The conclusion of this study was that nurses have the potential to respond to patients in a pre-programmed way, can pre-judge the patient and treat them routinely, rather than assess them as an individual with unique nursing care requirements. The study identified that military nurses need to be aware of their cultural influences, how their socialisation into the nursing culture may impact on this, and the complexity of post-operative pain assessment. Harper, Ersser, and Gobbi (2007) stated that these findings may be transferrable to civilian nurses. It was relevant to acknowledge that cultural influences shape our actions, behaviours and decision making, and that both nursing and the military as separate entities, have the potential to influence the practice of a military nurse.

Expanded Practice. Expanded practice refers to those skills and functions that are beyond the norm for a nurse. Nurses found that battlefield health care required them to extend their practice in a number of ways (Biedermann, 2002). The situation appeared to demand more of the nurses than what would be deemed to be within their scope of practice as a registered nurse. The nurses were, however, deemed by their medical colleagues to be capable of these extended skills, necessitated at the time by the needs of the environment.

a. Assisting in decision making in triage (classifying casualties in terms of relative urgency). The implementation of helicopters used for patient evacuation meaning that casualties would arrive at the point of injury in field within minutes of being wounded. Consequently casualties would receive treatment before their

condition could worsen and larger numbers of clinicians were needed to receive and triage the mass of casualties arriving at one time;

b. The development of a resuscitation team leader to conduct the full head to toe assessment and commencement of life saving measures including airway, respiratory; and circulatory support; and

c. Nurses were trained to intubate and ventilate patients for general anaesthetics.

Biedermann (2002) conducted a further study on a sub-group which consisted of five Australian military theatre nurses who worked in the two functioning operating theatres of the same Australian military hospital as the sample from the 2001 study. Biedermann's (2002) study investigated the nature of nursing work in the Vietnam War. Oral history was used as the primary data collection tool. The criteria for the sample selection was not stated.

Biedermann (2002) found that the theatre nurses' role included expanded nursing practice involving administration of general anaesthetics and also performing surgical procedures while the surgeon performed another surgery on the same patient. The surgical procedures ranged from very simple to very complex and specialised and included microsurgery to save limbs as well as trialling new techniques, such as delayed closure technique. The theatre nurse was responsible for coordinating all surgical staff, being part of the triage teams, and transition of casualties to the theatre and into recovery. There was no shift work for theatre staff as in the wards, as the high intensity work pushed the theatre to continue until the work was done. The theatre duties also involved sterilising the surgical equipment, using a WWII steriliser that ran on kerosene.

Ethics. Military nurses' mental distress can potentially be compounded by the anguish and complexity of caring for host nation patients (Goodman, Edge, Agazio & Prue-Owens, 2013), who may be enemy military staff, or civilian patients from the country where the warzone is occurring. Given that these patients have been living in a war zone, their health needs may have developed more complex needs than a patient not from a war zone. Nurses as individuals sought out additional knowledge and skills in order to feel more competent to provide care to patients with multiple,

complex, and traumatic health conditions. This included new-born to elderly, and birthing labour to amputations (Goodman, et al., 2013).

The nurse was bound by the nursing profession not to discriminate in the delivery of nursing care “by age, skin colour, creed, culture, disability or illness, gender, sexual orientation, nationality, politics, race or social status” (Dobrowska, Wronska, Fidecki & Wysokinski, 2007, p. 174). Consequently, the delivery of nursing care in a warzone was potentially complicated for the military nurse. This was because the nurse on one hand was bound by their professional code of conduct to respect their patients as individuals and respect their human rights. On the other hand, the nurse was in a war and may be on one side of that war and their patient, on the other. The nurse must separate the fact that he/she was a military person and deliver equitable nursing care regardless of the patients’ military loyalties and also advocate for equitable follow up care for both the enemy and host nation patient. This can potentially be difficult and can bring about a conflict in the nurses moral decision making.

Goodman et al.’s (2013) qualitative phenomenological study aimed to understand US military nurses’ experience of care of Iraqi patients during the 2003-2009 conflict in Iraq. Open-ended questions guided the facilitation process in focus groups, consisting of a sample of army nurse officers who had been deployed to Iraq for 6-12 months in a hospital that provided trauma and emergency services. They identified three themes: expanding practice; ethical dilemmas; and the cultural divide.

Goodman, Edge, Agazio, and Prue-Owens (2013) stated that the nurses realised that they held biases against providing care for Iraqi patients, which made them confront their personal beliefs. It was evident that within their facility there was a difference in the care available to an Iraqi patient compared to service members. Iraqi patients were discharged or transferred back to the local health care system which may have been inadequate for the patients’ requirements but was all that was available to Iraqi nationals. This level of care for the Iraqi patients was not equitable to the services provided for the US patients who were evacuated to facilities in Germany or Britain. For the nurses this brought on feelings of guilt because of the minimal services

available for the Iraqi patients. Although guilt was a normal response and Goodman et al. (2013) recommended it be acknowledged and recognised, they also state –

... feelings of guilt, despair, devastation, fear, and self-blame at the inability to ensure the safety and continued well-being of the patient, particularly in reference to children, need to be addressed (p. 1014).

The research in regard to providing nursing care to personnel who have been detained, was very limited. Scannell-Desch and Doherty (2010) include a very brief section which refers to detainees as the enemy, although detainees can also be civilians that may or may not be the enemy. The nurses interviewed for this study, state that they were afraid of the detainees, that no one wanted to volunteer for nursing them, and that it was very difficult situation to be put in – potentially having to provide nursing care to soldiers who were in the same battle but from opposing sides. The nursing care itself, included not only the trauma and burns care but also medical conditions such as heart attacks and renal failure.

Cultural Consideration. According to Goodman et al. (2013) there was a huge difference between the nurses' culture and that of the Iraqi patients including language, attitude to gender and diet.

Language. The biggest barrier to communication was language, preventing accurate and complete information for diagnosis and intervention. Although this was overcome in the main by interpreters and most nurses considered them an asset, others nurses expressed their concern about the accuracy of what was passed on to the patients as the nurses were unable to verify that the information was translated accurately. Consequently the information given to the patients was considered by the nurses as suboptimal and compromised due to the modifications that they thought may frequently occur based on the interpreters' own values and beliefs. The nurses thought this worked both ways – from patient to nurse but also nurse to patient. The interpreter would only pass on what he considered the patient needed to know. In one instance, a poor prognosis was not be passed on to the patient at all because it was considered by the interpreter as “Allah's wish” (p. 1013). Goodman et al.'s (2013) participants stated they were frequently frustrated because the exact meaning and intent would lost between themselves and their patients.

Gender. It was best for females to be nursed by female nurses and males by male nurses but this was not always possible. Patients would be uncompliant, for instance male patients not complying with a female nurse's instruction or a female patient not letting a male nurse complete a procedure, such as an electrocardiograph (ECG).

Diet. Dietary needs were particularly problematic. The Iraqi patients would not eat food "even if it's something that they are used to eating, if it's not prepared the same or looks the same, they will not eat it" (Goodman et al., 2013, p. 1013), particularly the children. The nurses were concerned with the potential issues of malnutrition, weight loss and compromised wound healing, that may result from poor nutritional intake.

Goodman et al. (2013) concluded by recommending that clinical training scenarios should include information on patients from different cultures and have:

Knowledge of key cultural determinants of health and the complex socioeconomic realities affecting the health of the host nation patients and test nurses' competence in communication with patients and families regarding wellness, promoting and sustaining health, and addressing the effect of cultural customs and tradition on health outcomes. (p. 1014).

Summary - Learning from History as a Means Forward

The majority of articles referred to in this literature review can be collectively described as descriptive research. Schneider et al. (2013) stated that historical research may not directly impact on practice although this was dependent on the practice setting and its relevance may be more obvious in an indirect fashion. For instance, Schneider et al. referred to the example of Biedermann, et al.'s (2001) work which used descriptive research to explore the lived experience of Australian Army nurses serving in the Vietnam War (1967-71). This research leads to the conclusion that this work was directly valuable to a military nurse preparing to deploy to a war zone and thus indirectly affects patient outcomes by better supporting the nurse to be situationally ready and thus able to provide effective nursing care to the soldier-patient. Harper et al.'s (2007) study directly impacts on nursing practice by challenging nurses to examine and exclude any pre-formed stereo-typing practices

they may have inadvertently adopted in order to deliver pain relief in accordance with an individualised pain assessment. These articles attempt to record the valuable stories of military nursing for the sake of recording history but also for the future preparation of military nurses for the oddities that war may bring.

The array of topics covered by research studies goes a long way to incorporate a holistic approach to nursing care. The inclusion of studies with topics such as examining spirituality, stereotypic behaviour as well as caring for host nation patients, incorporating nursing care and family, encompasses the humanness of the nurses.

The concepts pertinent to contemporary military nursing practice in the literature relate to education and training, war and HADR missions, readiness, the potential for high levels of stress and PTSD, and professional practice issues. Benner's Novice to Expert continuum of professional advancement was utilised by military nurses in Sweden (Johansson and Johansson, 2007) as well as in the British Armed Forces (Finnegan, et al., 2015) and New Zealand (HPCA Act, 2007). Johansson and Johansson (2007) stated that the education and training needed to be the right fit for the military nurses' levels of experience. Finnegan et al. (2015) agreed with Johansson and Johansson, and stated that appropriate educators were needed to support and facilitate learning along with suitable clinical placements. Kennedy et al.'s (1996) conceptual model demonstrated that nursing as a collective had the means to enable and support the education and training that would best prepare army nursing practice. The model also clarified where specialist, generalist, advanced nursing education, and autonomous nurse-led roles fit in to professional advancement and the provision of patient care (Kennedy et al., 1996).

Agazio (2010) and Wynd (2006) acknowledged the challenges for military nursing practice in the war and HADR settings. The concept of readiness was referred to by a number of authors and encompasses the requirement for the military nurses' clinical skills to be ready but also an individual readiness from the perspective of physical, psychological, administrative and family preparation (Wynd, 2006, Reineck, 1999, Agazio, 2010 and Kennedy et al., 1996). The potential for the deployed military nurses to experience stress and PTSD was evident in a number of articles, Hagerty et al. (2010), Scannell and Doherty (2010), Whitcomb and Newall

(2008), and Biedermann et al. (2001). The military nurses also faced complicated professional issues in regard to ethical practice and duty of care when providing care to host nation patients and captured personnel, along with the cultural considerations of for example, language and dietary needs (Dobrowolska et al., 2007). Lastly, the demand for expanded practice was clearly expected of the military nurses on deployment (Biedermann, 2002).

In summary this literature has highlighted the knowledge and skills that have been required of military nurses during contemporary conflicts. More specifically the value of this literature review has been in identifying the various components that make up the military nursing role; that builds the personal fundamental elements that will support him or her to succeed on their assigned mission.

For NZ military nurses ...

The benefit of the literature review was that this collection of studies assisted to identify what areas of nursing practice were relevant for military nursing while highlighting the issue of potential PTSD for military health personnel. Importantly for the NZ Army NO it demonstrated that there was an absence of published NZ military nursing research available for review. Additionally it has not established what the NOs' practice consists of as there is no guiding NZ research for the speciality practice of military nursing.

Chapter Three: Methodology

Introduction

As predominantly a social science, nursing research frequently aligns to descriptive exploratory research: descriptive – to describe how the social phenomenon occurs; and exploratory - to discover whether something exists (Tolich and Davidson, 2011). This approach to the research is supported by the observation that the majority of the literature identified in the literature review was of a descriptive, exploratory design and it was therefore felt that this methodology was appropriate for research involving military nursing. The thesis aimed to identify what makes up the contemporary military nursing practice of NOs in the NZ Army. This chapter will detail the methodology used for determining the sample and selection criteria, data collection, describe the data analysis process, and provide an outline of the ethics approval.

A Qualitative Approach

Schneider et al. (2013) state that the descriptive exploratory approach to qualitative research “is now the most common form of inquiry in nursing and midwifery studies” (p. 105). Although described as a generalised approach the two components, descriptive and exploratory, are individually applied in order to collect rich narrative data from a small sample population. Since little was known about contemporary military nursing practice, a descriptive exploratory approach was a useful initial step.

Methods

Sample and Inclusion/Exclusion Criteria. A convenience sample was employed to gain participants from the NO population. A convenience sample was chosen because there are too few NOs to have a purposive sample by rank or experience. The convenience sample selection would be conducted by inviting potential participants who were currently or recently withdrawn NZ Army NOs. To be included in the study, participants needed to be contactable at the time of the study (either by internet, telephone or in person), have been in full-time service as a NO, and be willing to participate. With the NOs numbering fewer than 30, all of the potential participants were known to the researcher and were contactable by either internal or external internet means.

It was anticipated that at least nine interviews would need to be conducted to achieve saturation plus one. Saturation refers to the point where the researcher is aware that no new information is forthcoming from the interviews. As the interviews were conducted the researcher noted information that related to areas and settings of nursing practice. When the interviews were no longer producing a different area or setting of nursing practice, the researcher deemed that saturation had been reached. Once at that point, the researcher conducted one more interview, to confirm that no more new information could be collected by conducting any more interviews (Tolich and Davidson, 2011). The researcher planned therefore, to invite 12 potential participants at first, conduct the interviews and assess if saturation plus one had been achieved. If necessary a further seven would then be invited and as many interviews as necessary conducted in order to reach data saturation plus one.

NOs serving prior to 1995 were to be excluded as the study's aim was to capture the experience of contemporary military nursing. New graduate (NG) NO were excluded because the NO cadets did not exist in 2014 and the only NG NO in 2015 was unavailable. A period of 20 years was decided on because the findings would then be relevant to contemporary military practice, and therefore more likely to be transferable to today's practice.

An invitation package was either hand delivered, posted or emailed to potential participants and this included: a covering letter addressed to the individual; the Participant Information Sheet; Indicative Interview Questions; and Consent Form (Appendix 1). These documents were developed as part of the research proposal submitted first to the NZDF for approval to conduct personnel research, and then to the Eastern Institute of Technology Research Ethics and Approvals Committee.

NOs were excluded from the potential participant group if it was known at the intended time of the interviews, that they would be overseas or involved in an extended training period. This gave a potential participant pool of 22 NOs. Their names were listed on a page and 12 names were randomly selected. Once it had been deemed that more interviews were required, a further seven names were selected in a similar way. This gave a total of 19 invitation packages sent to the potential participants for consideration.

Data Collection. Data were collected from semi-structured interviews conducted by the researcher. Open-ended questioning guided by a set of indicative questions, ensured the research question was answered whilst also giving the freedom to seek clarification or follow a line of thought (Schneider et al., 2013). The indicative questions were developed from the literature and discussions with the research supervisors. This approach aimed to ensure that there were adequate data that explored the speciality practice of military nurses as well as data that described what the contemporary NOs' practice consisted of.

With the permission of the participants, the interviews were audio recorded. Two interviews were conducted by telephone via speaker phone in a closed office. Data were then transcribed by the researcher. The transcription was checked by listening to the audio again as the transcription was reread in order to confirm the accuracy of the transcript.

Rigour. In regard to rigour or trustworthiness, amongst qualitative researchers there continues to be debate around a clear description of what criteria are required to demonstrate this. The researcher decided that it was most appropriate to adopt "Position 6 - no criteria is necessary" (Harding and Whitehead, 2013, as cited in Schneider et al., 2013, p. 155). This decision came about to acknowledge the researcher's inevitable and inadvertent bias as an 'insider'.

Harding and Whitehead (2013) (as cited in as cited in Schneider et al., 2013) stated that "no criteria is necessary" (p. 155) is a post-modern position in which the need for criteria to guarantee trustworthiness is rejected because of the inadvertent and unavoidable influence of the researcher. This arises because from the researcher's perspective, it is undeniable that the findings are a "subjective construction in which the knowledge, beliefs and activities of the researcher play a significant role" (p. 155).

Harding and Whitehead's (2013) (as cited in as cited in Schneider et al., 2013) Position 5 with peer analysis checking, had initially been proposed. However during the course of the research proposal it became apparent that this process may not have been constructive in this instance. The advantage of the chosen position for the thesis was that by not seeking feedback from a participant, a potential opportunity

for outside influence was avoided. The disadvantage of this position was that the findings may appear to lack rigour and credibility.

Ethical and Legal Considerations

Once the transcripts were completed they then needed to be anonymised. It was important to not confuse anonymity with confidentiality – confidentiality is when the researcher guarantees not to make information public; whereas anonymity is when the researcher cannot identify which participant gave the responses. Anonymity and confidentiality are the cornerstones of the ethical and legal considerations when conducting research along with respect for autonomy and individual responsibility; privacy; and respect for justice, beneficence, human vulnerability and personal integrity.

For this research confidentiality was ensured by treating the research material as ‘staff-in-confidence’ (a NZDF phrase which means strictly confidential, accessed only for staff management). Anonymity was ensured by removing all references in the data to the participant, including place names, nursing education institutions, gender, dates, and colleagues. For both confidentiality and anonymity advice was sought from the researcher’s academic supervisors for guidance in regard to the use of participants’ quotes in the findings and it was decided not to use any identifiers in reporting of the quotes.

Legal. To ensure autonomy, the research methodology acknowledged the potential participants’ right to make a choice free from coercion or any outside influence when deciding whether or not to participate. Furthermore the researcher ensured, via the Participant Information Sheet, that the potential participant was sufficiently informed about the research and had the opportunity to ask questions prior to deciding whether to participate or not. This in turn offered individual responsibility for the potential participant to make an informed choice.

Schneider et al. (2013) recognise that participants from hierarchical organisations such as Service men and women have not always been regarded as a potentially vulnerable group. For this thesis, given that the researcher holds the rank of Captain and a number of the potential participants held a lower rank, the researcher’s rank was omitted in correspondence and during the interviews in an attempt to minimise the issue of military rank. Accordingly the researcher was cognisant of this

vulnerability throughout the invitation and consent process, and during interviews ensured there was no pressure to participate. This was done by not approaching the potential participants if they did not reply to the invitations, the use of first names in the interview, encouraging the participant to set the interview time and place, and ensuring the researcher was seated in the same way as the participant. Interview participants were reminded that they could decline to answer questions or cease the interview at any time without offering a reason.

Respect for the participants' privacy in research is both a legal and an ethical requirement. Schneider et al. (2013) state that in NZ the Privacy Act 1993 and the Health Information Privacy Code 1994 both maintain that personal information collected as part of a research project must be kept confidential and in a secure place. These standards are iterated in the NZDF's policies relating to staff-in-confidence material and was therefore reflected in the researcher's application to conduct research on personnel (Appendix 2). Thus the interviews were to be conducted in private, and the recordings were to be promptly downloaded to a laptop dedicated solely for the use the researcher and the work relating to the thesis. Once downloaded, the audio recordings were to be immediately deleted from the voice recorder, and then transcribed verbatim by the researcher before anonymising. After the completion of the thesis the transcripts will be saved on a computer disk and stored for ten years in a locked cabinet only accessible to the researcher.

Initially, to anonymise the transcripts, the participants' names were removed along with any place names referring to where they studied or worked prior to joining the NZ Army. It was anticipated that this would only ensure anonymity for the researcher's supervisors, and that further work would be required for anonymity from the researcher's and future readers' perspectives. More specifically because the researcher knew the participants, it was likely that the researcher and future readers connected with the NZDF would be able to deduce who the quotes referred to even without the participants' names and place names. Anonymity would be achieved by minimal use of participants' quotes, with these only being utilised to demonstrate accuracy of the identified themes and subthemes to a level deemed essential by the academic supervisors.

Confidentiality relates to the secure storage of data collected as part of the research, but primarily means to ensure that the identity of the research participant cannot be linked directly to the information from the interviews (Schneider et al., 2013). For the thesis, this intent was detailed in the invitation package. This informed the participants about the process of data collection, storage of information, transcribing of interviews, subsequent viewing of transcripts and findings; and noted that all attempts would be made to ensure that statements taken from their interviews could not be linked to them.

Ethical. The researcher also needed to be cognisant of the other protective ethical principles: justice, beneficence, and personal integrity (Schneider et al., 2013).

Justice. As the sample was selected by availability and willingness to participate in the study, this meant that the participants themselves, decided if there were any risks or benefits in being involved in the research. To ensure fairness the potential participants were selected because they matched the inclusion criteria not because they were a group that could be “easily exploited” (Schneider et al., 2013, p. 88). All participants were equally entitled to the same conditions around the interview process. That is, all the participants were given the same Participant Information Sheet, and the same considerations and timeframe to choose the time and place of the interviews. In regard to equality for the interview, the participants were invited to bring a support person and could choose to conduct the interview either face to face or over the telephone. Other considerations to ensure equality could include: to offer costs for transport, financial reimbursement of lost wages for the time of the interview, or availability of an interpreter, however these measures were deemed by the researcher not to be required for this participant group.

Beneficence. In order to fulfil the ethical principles of beneficence, “doing good, as well as preventing and removing potential harms” (Schneider et al., 2013, p. 88) the researcher needed to consider how it could be ensured that no “psychological distress, social disadvantage, invasion of privacy or infringement of rights” (p. 88) occurred as a result of participating in the research. The researcher critically examined the research methodology to identify potential harm or risks and also listened to comments from the participants and considered if any detrimental effects

were occurring. In particular, if the researcher was to become aware that the research interviews were being discussed in a negative way or detected a sense of an invasion of privacy or infringement of the rights of a participant, this would result in the researcher discontinuing the research process with that individual immediately.

Personal Integrity. Similar to respect for human vulnerability is personal integrity, which is the acknowledgement of an individual and treatment of them in a way that recognises who they are and treats them well. This is to ensure their human rights are upheld as a potential participant. In the thesis it would be demonstrated by acceptance from the researcher, when potential participants declined to be involved or did not reply, and to continue to maintain a positive inter-professional relationship with any NO who opted not to be part of the research.

Consideration of Māori. The guidelines for all research with indigenous people, not only requires respect for culture but also increased mindfulness of values (spirit and integrity), reciprocity, equality, survival and protection, and responsibility (Schneider et al., 2013). In relation to this research (being conducted in NZ), the principles of the Treaty of Waitangi (TOW) (partnership, participation and protection) were used as guidance when formulating the documents for the invitation package, completion of the application to the NZDF to conduct personnel research and the application for research approval for the Research Ethics and Approvals Committee at the Eastern Institute of Technology.

Partnership. Consultation with Māori was undertaken as part of the process of drafting of the documents included in the invitation package. The Māori representatives were the NZDF senior Māori Chaplain who was the point of contact (POC) for consultation for academic studies in regard to Māori, and the second was the POC for Māori literature at the NZ National Library.

The principle of partnership relates to the recognition of Māori and Pākehā as full partners and that all cultures are valued for the contributions they bring (The New Zealand Curriculum Update, 2012). The consultation gave the researcher better insight into the meaning Māori ascribe to research data. These conversations also broadened the researcher's understanding and increased awareness that during the analysis, consideration would need to be given to potential themes that might seem to the researcher as peripheral or insignificant but be pertinent to Māori. For

instance the NO being separated from their family for long periods of time when on a military deployment, or the effect on the NO of not having the opportunity or significant people from the community with them on a deployment to conduct cultural practices and customs. From the researcher's perspective it was beneficial to discuss the research processes with Māori representatives as it helped the researcher understand the different cultural perspectives of how a question may be interpreted and answered, or not answered. The outcome of the discussions was to not make any alterations to the documents but to educate the researcher and create a more informed perspective.

Participation. It was necessary to ensure Māori would be given equal opportunity to participate in the research. As the invitation packages were to be sent to a randomly selected sample of all available NOs and this included Māori and non-Māori, this would safeguard equal opportunity to Māori. Further, it was not obvious the researcher which NOs identified as Māori and which were of Māori descent and did not.

Protection. The principle of protection means to actively protect the cultural concepts, values and practices of Māori and non-Māori, and ensure Māori health is at least the same level as non-Māori health. In terms of the thesis, the researcher needed ensure that the research methodology provided the safeguard required by this principle.

Protection also includes the right to informed consent that those invited would not be coerced in any way, the maintenance of confidentiality and privacy, security of information, and anonymity of participants as described previously. It appeared to the researcher that there would be challenges in finding the balance between what would include meaningful data from the Māori perspective and that which needs to be excluded for reasons of anonymity. However anonymity would be the overriding principle and where possible data from the Māori perspective would be included. However, it was also important to note that the purpose of this work was not to study or analyse the data in such a way that drew comparisons with Māori.

Data Analysis

There are numerous data analysis strategies applicable to qualitative research. Although a researcher can choose to use a set of processes from a particular method,

Harding and Whitehead (2013) (as cited in Schneider et al., 2013), suggest a “free form” (p. 149) style of data analysis for descriptive exploratory research so it “does not limit a study to using one strategy or another” (p. 149). Harding and Whitehead also stated that research provided themes which increased understanding about participants’ experiences. For the thesis, the researcher acknowledged Harding and Whitehead’s guidance and would identify groups of themes using narratives to be further examined for subthemes.

In regard to the ethical considerations mentioned, the transcripts would be anonymised as previously stated. The transcripts would then be viewed by the academic supervisors, prior to further anonymising as this was foreseen to be all that would be necessary at this point. From this, the data would be grouped into themes. If necessary, further anonymising would occur during the writing of the thesis and any further documents.

A themed approach to the data analysis was also adopted by Hagerty et al. (2010). Hagerty et al. extended the themed approach with Colaizzi’s (1978) (as cited in Hagerty et al., 2010) descriptive phenomenological method which provided steps to the data analysis. The researcher also adopted these steps as follows:

1. Reading the transcripts and highlighting statements relevant to answering the research question;
2. Organising the highlighted statements into similar groupings and logical order;
3. Identify and record the themes and subthemes within each grouping.
4. Re-assess the order of the groupings in logical sequence in answer to the research question.

To validate the final themes and check for context, the themes would include confirmatory participants’ quotes to demonstrate the accuracy of the themes in relation to the content of the transcripts.

This chapter has provided an overview of the research method used to obtain and analyse the data in order to describe the contemporary military nursing practice of NOs in the NZ Army. The following chapter will lay out the findings from the data analysis.

Chapter Four: Findings

Introduction

This chapter presents the findings of the study relative to the research question – what makes up military nursing practice for NOs in today’s NZ Army? Using the methodology described in Chapter 3, the descriptive exploratory approach (Scheider et al., 2013), the findings were grouped in a way that provided a description of what the nursing practice consists of for NOs in the NZ Army.

Firstly the participant recruitment will be reported on; followed by the four main themes apparent in the analysis: nursing in the garrison setting; nursing on military exercises in NZ and the South Pacific; nursing on military deployments; and dissatisfaction with the induction of NOs to the NZ Army. Lastly as a means of looking forward, military nursing - a list of the participants’ views of what makes up the contemporary military nursing practice of NOs will be provided and recommendations for nursing practice and education.

The themes and subthemes that were derived from the data analysis guided by Colaizzi’s (1978) phenomenological method to analyse texts, are as follows.

Nursing in the Garrison Setting.

Primary Health Care.

Role 1.

Role 2.

Leadership.

Training: Advanced Nursing Education; and Mentorship.

Nursing on Military Exercise in NZ and the South Pacific.

Nursing on Military deployments.

PHC.

Role 1 – Trauma.

Role 2.

Equipment, Resources and Environment Health.

Leadership.

Humanitarian Aid and Disaster Relief.

Dissatisfaction.

The Garrison Setting: Induction and Training; Competency and Currency;
Medical or Nursing Model; and Transition.

Deployed Roles.

Military Nursing.

The Military Nurse.

Generalist vs Specialist.

Looking Forward: Aim; Plan; Structure and Delivery (Modular – Theory
and Practical, Mutual Sharing or Knowledge and Learning); Content; First
Tier (New Graduates, Investigate a Military Nursing Course); Second Tier
(Advanced Nursing Education; and Transition.

Invitees but not Participants

Nineteen invitation packages in total were sent out, resulting in the researcher conducting twelve interviews in order to reach saturation plus one additional interview to ensure no new data was found. Initially twelve responses were received and information packages were sent, yielding nine NOs who consented to participate, one declined on the grounds of privacy, and two who did not reply. After the nine interviews were transcribed and considered for the purpose of saturation, another seven invitations were sent. This produced three additional NO participants which provided enough data to confidently ensure that saturation plus one was reached.

Experience Levels Prior to Commissioning

This portion of the findings provided information about the various stages of their career when the NOs entered the NZ Army. The NOs have been divided into three levels of experience. In view of the guidance found in the literature review and to put into perspective the NOs' varying experience levels prior to commissioning, the

participants were grouped into three levels of nursing experience. The three groups were:

- Those having five or less years of nursing experience – 42% of the participants;
- Those having more than five and no greater than ten years nursing experience – 25 % of the participants; and
- Those having more than ten years nursing experience – 33% of the participants.

Military Nursing Experience of the NOs

The experience levels of the participants as military nurses ranged from less than five years or more than 30 years. The level of military nursing experience of the participants was almost evenly spread across the range as noted above.

Nursing Skills in the Garrison Setting

Themes amongst the findings for nursing in the garrison setting included: primary health care (PHC); pre-hospital emergency care; secondary care nursing; and leadership roles for nursing including non-nursing roles; and training.

Primary Health Care. The theme of PHC was referred to throughout all participant interviews. Within this theme it was found that: some participants had experience in this area of practice prior to becoming a NO and others had not; the induction to the skills sets of PHC required education (detailed later in this chapter); and the nursing practice in PHC covered a variety of practice nurse type roles and responsibilities. The PHC facilities in the garrison setting were referred to by the participants as medical treatment centres or MTCs.

It was stated by almost all of the participants to be an essential area of practice for them as NOs, although only three of the participants came into the NZ Army with any experience in PHC. Of the three NOs that came into the NZ Army with PHC experience, two were represented in the experience level of having five or less years of military nursing experience. The majority of participants therefore joined the NZ Army without any experience in PHC.

Nursing in PHC involved a variety of nursing skills and knowledge along with patient administration, supply of stores, and training of other personnel. As described by one participant, as an MTC practice nurse you were -

A jack of all trades: primary health, vaccinating, information sharing, sexual health, smoking cessation, education – deploying, how they stay safe while they're overseas, with the medics – med training, administrative stuff, a lot of stores, how to order stores, sport med is incorporated, wound care, quite a broad range of things.

The nursing practice in the PHC garrison also included using the NZDF standing orders known as the Diagnostic Medical Treatment Protocols (DMTPs).

Role 1. This refers to pre-hospital PHC and emergency care in the military setting. Prior to commissioning only two of the participants had emergency nursing care experience yet five described themselves to be involved in emergency nursing practice as NOs.

Role 2. Secondary nursing care roles referred to the provision of patient care in the field surgical facility as well within the garrison in-patient health care facilities. For the NOs in the field surgical facility, roles included theatre, recovery, ICU, post op surgical, and critical care nursing along with some PHC. In regard to garrison in-patient care, a participant described this patient group as a -

... a variety of patients, 90% low acuity but also high risk patients 10%.

For clarification, health service support in the military is referred to by the role it provides within the patient care continuum. Role 1 being the care provided closest to where the patient is, whether that care is PHC or trauma; Role 2 is a mobile life and limb resuscitative surgical facility; Role 3 is the non-mobile hospital facility able to conduct further surgery, this may be definitive surgery and is generally inside the country where the injury occurred; and Role 4 is where the patient receives specialised definitive treatment or surgery.

Leadership. The majority of participants stated that they were either currently in or had previously been in senior nurse roles. These roles included: Principal Nursing Officer, Senior Nursing Officer, health education, nurse management, clinical management, officer in charge at platoon or company levels, and for a smaller minority, positions much higher in the ranks of military management. There were also some positions that were split between management of health assets (an in-patient ward, a MTC, a Role 1 or Role 2 capability) and clinical, and others even

though in roles not directly related to nursing, who were able to continue with clinical training in the area of nursing practice they had previously focussed on.

Leadership roles can be diverse and have included nurse management, being the officer in charge, clinical management, working in a ward and treatment centre setting. However the specific skills and knowledge required for the nurse management and officer in charge roles were not elaborated on by the participants. The skills and knowledge for working on the ward and treatment centre are detailed later in this chapter. Another participant described a role previously held that exemplified a non-nursing role away from the home unit that was responsible to provide health support services within the NZ Army. These roles however may well rely on the individual's nursing experience.

Health logistics and health intelligence roles although termed 'out of corps posting' however, utilises nursing background.

Training. A number of participants talked about various clinical training activities. Some courses like the advanced cardiac life support (ACLS) are required on a regular basis, others appeared not to have compulsory re-certification courses, and others required continual training throughout the year. The training included aeromedical evacuation (AME) training, ACLS, and smear taking which required regular re-certification; post graduate nursing study was ongoing; recovery nursing and intensive care nursing was ongoing throughout the year. Whereas the participants that attended the applying strapping for sports, and a field nursing course had only attended on one occasion.

One participant stated 80% of the role was management with only 20% clinical. Another participant in a senior role described how the role placed her/him in a position to develop an orientation and provide ongoing guidance to new nurses.

Guidance to junior nurses who were starting [some time ago] ... I put together the orientation packages for new nurses. Went over 4 weeks. I was involved mainly in the first two weeks, to ensure they had a good starting point.

The relevance of the two-yearly qualification, ACLS Level 6, as part of the NOs' role requirement, was explained by one participant.

... so that if something happens and we're the only person there, we can initiate and get on with it until higher help arrives - being a nurse in an emergency.

Another describes the clinical benefit of the AME training.

... gave theory behind the impact of altitude and flight might have on the patient's conditions, this was the only flight nursing course in those days.

This participant stated further that the training was delivered -

Mainly from a medic's perspective rather than a nursing perspective. Nurses were just learning what the medics did.

Several participants stated that the medics had provided training in this area for NOs as demonstrated by the following quote.

The medics taught me a lot - how to do emergency care and I began to become quite proficient at that because people would get hurt, sick, and cold, and nearly dead, and dead, and the medics would show you how to do those emergency skills.

Advanced Nursing Education. For the purpose of this study all formal education received post registration will be referred to advanced nursing education (ANE). It was apparent from the participants that although involvement by the NOs with ANE was common now, this was not always the case. This was identified as positive progress by one participant because it provided autonomy to choose and influence your nursing practice development pathway entwined with what the NZ Army wanted from a regimental military perspective, from their NOs -

You can identify as a professional nurse what you need to do to meet that specialty area of practice.

In contrast to this, another participant stated concern that the NZ Army may not have contemplated the implications of a group of NOs that had approval for and commenced study with the intention to become Nurse Practitioners (NP).

... how the organisation is going to employ NPs and yet with people on this study pathway ... and that concerns me ... need to firm that up before

someone starts on a five year learning journey ... relatively unclear what's going to happen.

Mentorship. Some participants talked about mentorship. A few mentioned that they had received mentorship when they commenced previous nursing positions and saw it as an essential element to their employment. Another stated that he/she found her/his own mentor. A further two participants suggested mentorship was a necessary element of a training pathway and could utilise senior and specialised nursing staff within the NO group. It was apparent that the participants thought that this type of support was required on a long term basis and should include providing guidance through the overall induction process, specific to each clinical area, progressing with military organisational fit, along with the administration processes.

I think if you have a mentor or a coach they might in your specialty area of practice ... someone to guide you in how you would use CPD [continuing professional development].

Mentorship was seen by these two participants as an essential element to their employment to support a training pathway and that senior and or specialised nursing staff within the NO group could provide this role.

I had to seek out my own mentor – that took me a year.

Nursing on military exercises in NZ and in the South Pacific

Although only two participants mentioned that they were involved in military exercises in NZ or in the South Pacific, in retrospect it was known to the researcher that eleven out of the twelve participants had been involved in exercises. It was deduced that two reasons may have contributed to this lack of reporting: the researcher's beginning level of interview techniques; or that this experience was not the forefront of mind of the participant at the time of the interview. One participant stated involvement on the exercises was with the both pre-hospital, Role 1, and field surgical facilities, Role 2. The other participant had been on one exercise overseas with the Role 1. Although some exercises are overseas, for the purpose of the thesis, they will not be referred to as a military deployment.

Nursing on Military Deployments

All of the participants had been involved in an overseas military role. These included: tours of duty (TODs) (a period of time spent performing operational duties as part of a rotation); responses to humanitarian aid and disaster relief (HADR); exchanges with overseas militaries known as Long Look; and support to the Department of Veterans Affairs (DVA) commemorative tours during 2013 and 2014.

A majority of the participants had deployed for the TODs only once, with a minority having had four deployments in their military career. Two participants had taken part in HADR deployments; and one participant had been involved in the Long Look exchange programme. However, the majority of participants had been involved in the DVA commemorative tours.

The role of the deployed NO was stated by the participants to be mainly PHC along with pre-hospital trauma, although it was evident that there were also opportunities for NOs to deploy in secondary care nursing roles. Demands on the deployed NO within these roles included: adaptability and flexibility; knowledge and skills relating to equipment and resources, environmental health and leadership; and HADR.

The deployed NOs were involved with a variety of patient populations. As one participant stated the patients consisted of not only their own military colleagues but also of -

Locals ... other militaries ... militia ... Australians there, Pakistanis, Nepalese, and Irish.

PHC. The patients commonly presented with a variety of disease and injury types, including burns, and musculoskeletal injuries.

Essentially it was the PHC ... sporting injuries, normal upper respiratory tract infections ... some locals came in with burns but most of the trauma went through the resus part of the FST [Role 2 in tents]. A lot of musculoskeletal, respiratory.

Role 1 – Trauma. The deployed NOs talked about the need for them to provide trauma care, the emotional impact of dealing with trauma patients, as well as having to manage trauma patients.

So there was a little bit of trauma care associated with that role [the role of the NO] ... still a risk I guess of trauma, having to manage trauma.

For one participant the trauma aspect of this role generated some anxiety because of the military conflict and not knowing how severe it could be. Although the participant had worked very hard to address this, the feeling of being unprepared and unsafe remained. This anxiety was compounded by the nature of trauma communication which the participant stated could frequently lack accuracy.

The priority they tell you and the presenting condition is never what they tell you, how can I be ready for what I'm going to look at?

The emotional impact on this individual was further evident as he/she continued to describe the senses that are involved when dealing with a trauma patient.

You've got all the noise of the helicopter, the smell. I never felt prepared.

Role 2. Only one participant mentioned deploying to a secondary care or Role 2 facility. This work included providing nursing care, as well as nursing leadership, and again suggests the NO's requirement for flexibility and adaptability of their nursing skills and knowledge to enable utilisation in different roles.

... worked in resus bay and was in charge of the medium dependency unit.

Equipment Resources, and Environmental Health. Several participants stated that the deployed NO role included being responsible for the equipment and resources relating to the delivery of patient care along with the provision of PHC to their military colleagues. One participant further stated that the role also included sharing the responsibility of preventative medicine measures within the camp with the doctor.

I had a shared responsibility with the doctor in terms of preventative medicine type issues, water treatment, and health and hygiene type stuff.

Leadership. Similar to the NO role in the garrison setting, the deployed NO role was diverse and utilised not only nursing practice but also health planning, and leadership.

PHC but also ... involved in the planning and organising of some med support, getting out and seeing ... providing support to them.

Humanitarian Aid and Disaster Relief. From the participants comments the types of patient presentation in an HADR setting can come about from two circumstances. One is manmade and the second a natural occurrence. Manmade refers to the aftermath of a warzone when the battle has de-escalated, the environment becomes more stable and settled, allowing the local people to present with their injuries or illnesses. One NO described this scenario on her/his deployment while another described the variety of the nursing practice required in the naturally occurring disaster of a tsunami. Both types of disasters included trauma, infection, delivery of babies, displaced people, and delayed medical treatment.

Practice involved infection, post trauma issues, medical/infectious, surgical, be adaptive to what was required. Paeds ... babies keep being born ...

... we got told to look after a room which had about 20 people in ... and then realised that there were two others rooms full of patients that nobody knew about so we were still diagnosing people with fractured femurs, one patient had an undiagnosed fractured pelvis who was walking around and we saw to that.

Military Nursing

All of the participants attempted to define and or describe military nursing practice. Likewise all of the participants had numerous suggestions of how their own military nursing experiences could have been different and also what would improve the induction training and preparation of future NOs in military nursing practice. This section will note the elements the participants used describe a military nurse; acknowledge the dissatisfaction and need for improvement amongst the participants; and then detail recommendations participants suggested.

The Military Nurse. It appeared from the participants' statements that to offer a definition of a military nurse was as yet out of the groups' grasp. Some thought it was to do with the clinical outputs, whereas another considered it to be the way in which a nurse is.

The fundamentals of what makes a military nurse ... the preparedness to put themselves in harm's way, a want to serve their country, their colleagues, the ability to be a little more open minded ...

Even though these participants had been NOs for several years, from these quotes it was evident that they have not managed to define what they specifically do as a military nurse.

I struggle to get my head [around the definition of a military nurse], because the roles of a military nurse can be so diverse ... what a military nurse actually is.

The army has employed you to be a nurse but you're not actually just being a nurse ... I didn't even realise that I couldn't define it properly.

There was great pride when they attempted to detail what made a military nurse. This participant summed up military nursing as -

Is more around attitude or ethos of that person, the preparedness to put themselves in harm's way, a want to serve their country, their colleagues, their patients, the ability to be a little more open minded to giving other areas a crack because you may need to.

Generalist vs Specialist. One participant explained their view in regard to generalisation versus specialisation of nursing practice and stated that military nursing practice included skills and knowledge all-encompassing of aspects involved in the provision of health. This would include delivery of PHC and critical care, as well as being skilled in the administrative and management side of health provision. The participant suggested that this approach may be that the NO was not deemed to have one specific area of great expertise and instead had sufficient competence to suffice in all these areas.

Jack of all trades master of none, which has PHC, emergency/critical care, health planning leadership, logistics, audit, command, a cross pollination of their skills.

The majority of the participants were perplexed with what made them different now as military nurses in comparison to what they were in their civilian roles. It was apparent from their statements that the NOs were unclear what they were to prepare for; and any specific training in military nursing still eluded them. They also suggested that a foundation in military nursing was needed to prepare the NOs for the variety of roles that may be ahead of them. The questions one participant asked were very pertinent. These related to how the military environment impacted on nursing practice and consequently what training was required to prepare for this.

Dissatisfaction

The participants expressed dissatisfaction in aspects of their work. These included when the NOs role was in the garrison setting, on exercises, and military deployments. Of the participants, all twelve stated that they were dissatisfied with the training they had received in their military nursing roles.

The Garrison Setting. Given the garrison setting was where the NO's were first introduced to their role, it follows that this was where the critique and comments mainly occurred.

Induction and Training. It was evident from all of the participants that they were dissatisfied with the induction and training they received to prepare them for their various roles as NOs. This brought about responses of frustration and disappointment. Some were proactive paving their own way, while others grew concerned about their colleagues becoming despondent and resigning. When the NOs worked at the MTCs, the findings show that although some may have received tuition in this area of nursing practice, many did not. However, it was stated by one participant that this was not in alignment with other PHC providers, those being the medics, who worked in this area.

When you compare to a medics training we really don't get anywhere near their training, they go through a whole process, pathway, before they're expected to diagnose and treat where we don't get any.

There needs to be a proper induction into primary health care, not sure why there isn't.

Participants reported this throughout their levels of experience as a NO, which suggests that this may have been the norm for at least the past 20 years. Frustration was evident in their comments.

I could've gone with the job and run with it a lot quicker ... had there been a programme in the beginning as a military nurse in the army. I felt like I was on the back foot.

Eight dissatisfied participants made statements similar to this one.

I actually thought the army was very poor at new nurse orientation within the army.

Three other participants realised there was a gap in their induction and took the initiative to manage without being provided the resources they would have hoped for from a formal induction. This included writing their own job description, and one participant stated.

You don't get taught how to do, you kind of just pick it up, your gut, work out how to fit in round their jobs.

Two participants voiced their concerns for the wellbeing of colleagues, and suggested there was an effect on staff retention and even reputation of NOs within the NZ Army.

To be put into that situation without any training ... I think is setting nurses up for failure.

They've [a military nurse new to the NZ Army] continued to look inadequate without enough knowledge ... failing miserably and then it spirals into self-doubt, self-esteem issues and not good enough.

One participant suggested that an effect of not having NOs well inducted, contributed to NOs being regarded with indifference from others within the organisation.

... nursing within the army is generally not well thought of ... not preparing our nurses for certain roles is just feeding that thing ... “don’t worry about it, they’re a nurse”.

The effect on individuals from inadequate NO induction was reported by one participant as isolating.

It can be easy to get despondent.

Another made an observation of his/her new colleagues when he/she first joined it was noticeable that the NOs were not actively involved in regularly clinical nursing or in fact have much to do. Disappointed, the participant stated that he/she decided to be proactive and seek out opportunities rather than copy the example around her/him.

When I arrived at the unit, I felt most of the nurses didn’t want to nurse.

Dissatisfaction in regard to the area of PHC related mainly to what appeared to be a general assumption within the NZ Army, that a NO would automatically have PHC experience. The participants described the generalisations in regard to nursing by non-nurses that once qualified as a nurse it would follow that the nurse can fulfil any nursing role. Similar to this generalisation, other health staff within the NZ Army, appear to make assumptions in regard to the NOs’ skill sets and take it for granted that the NOs will have PHC experience.

One participant summed up these two points.

The main gap for our nurses is PHC because I still see it as the foundation of what we do on deployments [overseas] and here in NZ [on exercises] ... there’s an expectation from people within the army, they don’t see us as a OT [operating theatre] nurse, or a recovery nurse, they see us as a nurse and therefore everyone to be able to do primary health.

Competency and Currency. For clinical practice to be relevant as clinical training and preparation for future practice, the NOs were required to meet a standard of competency and currency. This was in accordance with the HPCA Act, 2003, that requires nurses to demonstrate their competent practice within the last three year period (Ministry of Health, 2014).

One NO specifically mentioned that the standard of competence that was expected of her/him as a NO, was different to what he/she was accustomed. This participant did not consider him/herself as competent as he/she would hope to be in PHC however continued with what he/she had been directed to do even though he/she did not feel as confident as he/she would have in her/his primary nursing care role (which he/she was very experienced in).

I think I have a different view on what competency means. Competency to me is something you are confident at doing. So I think it doesn't mean that you've done it a few times ... I rarely do PHC and I haven't even really done PHC ... I don't like the feeling of not doing things well.

Another participant who has had a more lengthy career as a NO, commented on what initial teaching had been included but now lacked clinical practice in that area because of the time that had elapsed. The participant was disappointed to have been originally given the opportunity to do the training but had not since had the opportunity to maintain currency. Furthermore, the participant stated that to use that knowledge now he/she would need to revisit the relevant learning.

I did this some time ago and have done nothing since then ... I would have to go back and almost redo the course again because unless I am doing it on a regular basis, I forget what to do.

Similar to the last participant, another talked about their disappointment in not adequately maintaining currency, suggesting the effects of a lack of currency in an area of clinical practice.

... if you're in PHC and you haven't done PHC for 2-3 years then your currency is diminished or you're not going to do as good a job or may make errors ... you certainly need the clinical preparedness point of view.

One participant's impression of the current group of NOs was that they were more focussed on the maintenance of clinical competence and currency than what he/she had previously seen. This was quite different to the impression he/she had when this participant first commissioned as a NO.

Medical or Nursing Model. A few of the participants reported they were taught by the medics and stated that what they were taught and were to practice in

PHC, revolved around a medical model of care more so than a nursing model of care. One participant was used in the absence of a medic to provide education to the medics rather than focussing on the education and training of NOs. This quote demonstrates the participants' perspective.

... was medic related not nursing. It wasn't a nursing position [role] ...

One participant summed this up stating that before joining her/his nursing practice was -

... very much under the nursing model focus. Whereas we come into a medical treatment centre or a deployment and we are working very much in a medical model.

A large number of the participants included the topic of the DMTPs as an area needing attention on entry to the NZ Army, two included it when talking about PHC in the garrison setting.

... down at the treatment centre learning the DMTPs. We come into a medical treatment centre and a deployment and we are working very much in a medical model.

The focus on the medics' needs was evident from several other participants as a small number of participants found themselves in formal health education roles providing education for medics, not NOs. Furthermore another participant stated when he/she did receive aero-medical evacuation (AME) training it was not specific to nursing -

... nurses were just learning what the medics did.

Esprit de Corps. This means to have a sense of pride and honour shared by the members of a group. It is usually used to refer to the moral of a group. Only one participant mentioned a lack of *Esprit de Corps* within the NOs. The participant statement inferred a NOs will exhaust who they may perceive as their competition rather than respect and embrace them as an equal.

Whether it's a corps or whether it's a nursing thing ... I think nurses will eat their young ... we should be banding together and supporting one another rather than having nudges at one another ...

Transition. About half of the participant were dissatisfied with the transition period when changing from one role to another and considered that there were insufficient handovers. Their statements suggested that there were two possible components to the handover: person to person; and access to an internet version of a position description which included access to relevant files. Two participants stated that the person to person handover, if it did occur at all, was too brief and did not provide any time to teach how to perform and develop in the role. For one participant when there was a description of the position, it was found to be tailored to the last NO in that position rather than being generic. The lack of handover and transition period made the participants feel that their potential was compromised in the new role, and one even stated that it compromised leadership potential. Four of the participants' quotes are represented by the following -

... there was no one that understood the role to handover.

There was no desk file that said this is what you do on a day to day basis so that made it more difficult to settle.

The participants reported the dissatisfaction in their nursing preparation when deploying, stating that the approach to the preparation and training for the nursing practice was reactionary; and medically focussed assumptions were often made in regard to the NOs -

... we only really address that [what nursing skills set was required] before we deploy people on PDT [pre-deployment training], we go "Right you're a part of this resus team or you're a part of preventative medicine or class 8 stores responsibilities". It's not 'til we hit those times that we start preparation.

Similar to the garrison setting, several participants reported that their deployed PHC role was in part medically focussed and two participants reported that it was assumed that the NO would have the same skills and knowledge as the medics, and also know about the equipment and supplies. The following was one participant's statement after receiving the medic kit for the first time.

We get issued this kit but you don't want the first time to use in that trauma environment.

Deployed Roles. In relation to the NO deploying overseas, here too there was dissatisfaction around the preparation and training. The comments in regard to this dissatisfaction included: the reactionary approach to preparation and training and that medically focussed assumptions were made in regard to the deployed NOs.

These participants' statements demonstrated the NO's desire to be better informed as to what their nursing practice was to consist of -

It's hard to train for military trauma when you don't see military trauma, bringing up experiential skills and knowledge ... need to review what nurses do now.

Looking Forward. This section will summarise the participants' suggestions and topics relating to future training. The themes within this section will be grouped to include the aim, plan, induction to military nursing, the structure and delivery of education, content, advanced nursing education, mentorship, and transition. The participants' recommendations included: the aim of the training; planning pathway; proposals for the induction of NOs; ADE and options for delivery of education.

Aim. From the participants' comments the aim of the preparation for the NOs was to: introduce NOs to topics relevant to military nursing practice; prepare NOs for deployment within an initial two year period; coordinate training needs with daily outputs; and seek direction for the establishment of nursing goals.

These aims reflect the participants' suggestions of the need to prepare a new NO within a succinct two year time frame to enable them to be safe and proficient with the skills and knowledge needed for a deployment. Within this period the NO would receive preparation at a foundation level introducing health care associated to the military demographic and conduct appropriate clinical training. This period would also need to be managed in such a way to coordinate the requirements of the NO's primary nursing role as well as their military regimental duties.

If we can get that down to the two year mark, people would be deployable after two years of being in the organisation that's great but make sure in that two years we're making them [prepared for deployment], giving them the skill set to deploy.

Two participants talked about the requirement for direction for the training outputs. The first looked for this direction external to the NO group stating that the NZDF could clarify what deployments NOs need to be prepared for. Whereas the second participant suggested looking inward to the NOs for what internal direction might be found.

We have to plan about what we want nurses to do rather than what nurses have always done, what do we need military nurses to do ...

Plan. The findings indicated that the preference from the participants was to have a structured pathway to enable a smoother and more streamlined approach to their military nursing induction training as well as ongoing development in military nursing. It was suggested to bring the NOs in the NZ Army together in a group for induction and provide them with the whole picture of the military and military nursing. The benefits according to the participants, of being inducted as a group of NOs was that it would provide a peer group for new staff members; the course could be planned around other initial officer training; and it would maximise teaching resources.

A pathway would be really helpful, I've seen so many nurses fail because they've not been given the adequate training for the position they've been posted into.

These are the other areas we would expect you to be involved in as a nurse and having that kind of detail would be really helpful putting that into a whole package, a big worldly picture of the military and then they'll be able to steer their career path.

We need to concentrate on bringing them in at the start of the year with the initial training course and then come back to the unit and have 3 or 4 of you together and then you've got a peer group and you're all learning the same thing.

There was also mention from the participants that individuals had been left to trial a pathway themselves. One participant further stated that limited guidance or mentorship, had meant that the NOs had been hindered in the achievement of their potential as a military nurse.

Two participants provided further detail to a pathway, and stated that one element be attained at a time and the plan already be in place without the need to submit a request to attend a course or a study day. One participant suggested that some recommended courses could be a pre-requisite tailored for each NO role to pre-arm the NO with the skills and knowledge to perform the role with greater success.

Nurse led, quite structured ...it would be ideal if we could access these without having to ask, like it's a requirement ...

Structure and Delivery. The participants talked about a variety of ways to structure and deliver the education. These included: a modular approach consisting of a theory component along with an associated practical component; distance education from either tertiary institutes and or internal online courses; and via mutual sharing of knowledge and learning. Formal education rather than on-the-job training was preferred by one participant, to ensure thoroughness and consistency of the content.

The thing about coursing [courses] compared to on the job training is you've got individual bias that you could miss chunks of compliance requirements.

Modular – Theory and Practical. The majority of the participants proposed a modular education system made up of theory and practical learning opportunities. One participant was wary of the current online education utilised within the NZDF and inferred there was a lack of depth in this way of learning. However, its value was to have the information for future reference.

Have an online module and a couple of questions to confirm knowledge.
... some internal and external ...open and visible list of the courses that can be endorsed ...

This last participant outlined a proposed pathway -

Begin with intro then modules: beginning course, re-familiarisation, update, and then test. Most important thing getting that experiential learning, keep current with clinical practice.

Formal Distance Education – tertiary, and or internal online. Online teaching was reported by the majority of the participants to provide suitable access for the NOs' proposed modular coursing. Several participants added that both tertiary and internal programmes could be appropriate.

Definitely formal education, to have the opportunities that are available now would have been much better ... you can identify as a professional nurse what you need to do to meet that specialty area of practice that you want to work in and what Defence wants you to work in.

Mutual Sharing of Knowledge and Learning. One participant reported that there was no regular forum for the NO to exchange their ideas and learning for professional development. The participant suggested examples of this would be journal club, presentation of case studies, and reports following a military exercise, nursing conference or study day. This approach was reported to potentially be of value to gain insight into other NOs' experiences as military nurses.

... people who write interesting PDRP exemplars and case studies ...
what it is to be a military nurse.

Content. The participants' contributions have been grouped into two tiers to propose an induction and training pathway for NOs. From the findings it was not apparent whether the military nursing pathway(s) was best to be generalist or specialist orientated. A two-tier system can provide for both generalist and specialist training opportunities. The first tier are the skills and knowledge that all NOs need to be introduced in order to initiate their military nursing practice, in accordance with the participants' statements. The second tier are the specific areas of nursing practice deemed by the participants to be found within military nursing, for the NO to advance into.

The findings suggested that an induction component was required on commissioning and the courses in the first tier be completed in approximately two years to maximise the pool of NOs prepared for deployment. The participants suggested there be a unique pathway for new graduate NOs, courses for all NOs to include a military nursing course (with a coalition partner), and the inclusion of advanced nursing education options in nursing care relating to PHC, Role 1, Role 2, and military health knowledge (leadership, logistics, and health intelligence).

The First Tier. The participants suggested that during the entrant phase along with other military regimental courses required of the NOs, the NOs receive a minimum standard of clinical competency across a vast range of topics that they consider make up the knowledge and skills the practice of a military nurse. These elements have been arranged into the following thirteen groups.

1. Primary Health Care

- a. Primary Health Nursing in the Military for the Military Demographic: sexual health; STIs; vaccinations; checking soldiers medical readiness for deployments; medical grading system; men's health; women's health; smoking cessation; routine blood tests; occupational health; preventative healthcare; and the documentation and IT programme associated with MTCs.
- b. Standing Orders in PHC: the assessment and diagnosis of a range of common medical conditions, and treatment of these using established standing orders; assessment of common MTC presentations.
- c. Pre-Hospital Trauma and Military Field Trauma Response: emergency response algorithms (MARCHH), trauma standing orders (DMTPs), and burns treatment and management.
- d. AME.
- e. Humanitarian Aid and Disaster Relief.
- f. The Austere Environment: wilderness medicine, tropical infectious diseases, travel medicine, and the effects of extreme climates on patients.
- g. Environmental Health: food handling hygiene and supply of clean water.

2. Secondary Health Care

- h. Emergency Care.
- i. Pre and post-surgical, and medical care.
- j. Perioperative Nursing: theatre, recovery, and sterile supply of surgical equipment.
- k. Intensive Care Nursing.
- l. Infection Control

3. Military Health Knowledge

- m. Health planning: the supply of expendable items for the provision of health care, patient tracking, maintenance of patient documentation, staff management.

New Graduates. Two participants acknowledged the very recent introduction of new graduate NOs and recommended a specific pathway tailored to meet their needs. One participant suggested this incorporated a specialised new graduate academic course. Both participants suggested the new graduates' learning process should include mentorship, learning goals, associated clinical training, and the need for them to demonstrate competence with a variety of knowledge and skills along with a variety of patient settings.

... certain things that you had to pass ... had a mentor ... competent with their patient care [in a new patient setting].

Investigate a Military Nursing Course. Several participants talked about two military nursing courses: one that the NZ NOs had attended in the past in Australia – Introduction to Field Nursing; and a second that was conducted in NZ by a senior NO.

One participant was fortunate enough to attend the Introduction to Field Nursing and indicated that it was beneficial in providing an introduction to how to deliver nursing care in the field, was based on PHC and also included: tropical, medical and emergency nursing; and resus teams, roles, responsibilities and skills. One participant stated that the negative aspect with the Australian course was that in return for attending there was a substantial conditional return of service (bonded period of service in return). –

... would recommend it ...it's a good course to go on ...

The attendance of NOs at either course came to an end a number of years ago because of negative feedback about the Australian course and the fact that the NO who delivered the NZ course moved on and the next NO decided not to continue with it. One participant suggested that this decision may not have been well thought through.

The New Zealand course was running prior to 2000 as an introduction to military nursing. Although this was some time ago it was relevant to consider the content of the course and that the NOs had the support and ability to deliver it. The participant who attended this course described it as very broad and included emergency nursing, PHC, basic surgical nursing, how to scrub, and a further range of nursing areas that were to be expected of a NO if they deploy.

... that course ran for about 5 years ... It was an excellent course - mainly for garrison and operations.

The Second Tier. The majority of the participants emphasised the existence of specialist nursing care roles within the NZ Army, mainly in secondary care nursing practice. However, a few participants considered PHC and trauma nursing also as areas of speciality nursing practice and therefore these have been placed in this tier. This grouping reflects the participants' desire for an established pathway(s). The options in tier two acknowledges two aspects. Firstly, the large portion of the participants who had commissioned with an established area of speciality nursing practice. Tier two acknowledges the desired option for the NOs to advance in an area of nursing practice, and then at a later time focus on another, if the individual chooses to or if the NZ Army requires this of the NO.

Advanced Nursing Education. Further to the Tier One list of elements, the participants recommendations for a NO pathway(s) to also include:

1. PHC.
2. Role 2: emergency care, ICU, OT and CSSD, recovery, pre and post-surgical.
3. Military Health Knowledge: Leadership, Logistics, Health Intelligence.

The majority of the participants mentioned the need for training opportunities in these areas. Two participants discussed having more than one speciality area to enable NOs the capacity to move into an additional nursing care area as the demand required and to increase the contexts into which they could be deployed. Several of the participants stated that a combination of academic and practical training would be desirable. For the military health knowledge elements, one participant suggested that academic management study would be helpful.

...then leaning towards at least one specialty area beyond that ... whether that – ED, theatre or ICU ... so an additional specialisation of nurses to be even more deployable.

Transition. The purpose of support to the NO during transition from one role to another would include not only an introduction to the job but also identify key personnel in relation to the role. A component of the introduction could include

recommended pre-requisite nursing training specific to the role. The NO new to the role would understand who the key stakeholders were, establish a degree of competency with the role, and who to go to for assistance. As the following participant stated -

Get them interlinked with other people in the job and getting them to do the job together...

In Conclusion

This chapter has detailed the participants' findings and presented them out in a way to demonstrate the themes and sub-themes from the data analysis. It was found that the contemporary role of the NO was in a variety of settings that included an office, a ward, a clinic, behind a curtain, or merely a space in a military medical health care facility, a civilian hospital, or the tented field health platforms of the Role 1 and Role 2 capabilities, in NZ and overseas. Military nursing practice for the NOs involved a comprehensive list of skills and knowledge. However, the findings show that the NOs were dissatisfied with their military nursing induction training. Collectively the participants' suggestions proposed a pathway that commenced with induction training to provide the skills and knowledge deemed to match what makes up the contemporary military nursing practice of NOs in the NZ Army.

Chapter Five: Discussion

Introduction

This chapter discusses the findings in relation to the literature review and the research question. The contemporary military nursing practice of NOs in the NZ Army in accordance with the participants' statement, consisted of the skills and knowledge that all NOs need to be introduced to as stated in Chapter 4. This included primary and secondary health care, military health knowledge in the garrison setting, in NZ and overseas. The NOs were sent on military exercises in New Zealand or in the South Pacific that delivered primary health care or provided care to in-patients. Their deployments took them overseas in response to natural disasters for humanitarian aid and disaster relief, and provided health support on military operations. However, from the findings it was also apparent that there was little or no induction training when the NOs began their military nursing practice. It was concluded that there was either currently no military nursing focussed curriculum on which to base induction or pathway planning, or nurses directed to develop and teach that curriculum within the NZ Army. The final component of the discussion will acknowledge the research strengths and limitations.

Experience Levels Prior to Commission

The NZ Army NO of today was commissioned as either a RF or Territorial Force (TF) NO. The point in the nurses' career at which they enter the NZ Army ranged from new graduate level to twenty plus years of nursing experience coming from a variety of nursing practice areas. In the author's experience, a few NOs may have come from other professions within the NZDF, retrained as a RN then commissioned as a NO, a very small number are recruited from other countries' militaries, whereas the majority of NOs are recruited from the civilian District Health Board sector within NZ.

From the literature the range of experience levels of US and English based military nurses was found to be very similar to that of the NZ NO (Johannsson & Johannsson, 2007; Ebbs & Timmons, 2007; Wynd, 2006; and Harper, Ersser & Gobbi, 2007). It was not evident from the literature where their military nurses were recruited from.

The literature did however note that experience in specific nursing practice areas included accident and emergency nursing, operating theatre, midwifery and general nursing (Biedermann 2002).

The contemporary practice of a NO has different components that make up the skills and knowledge of their military nursing practice. The components of contemporary practice were: nursing skills in the garrison setting; nursing on military exercises in NZ and in the South Pacific, and nursing on military deployments. The contemporary practice outlined was based upon the participants' responses and to the themes that arose from the interviews. This chapter will discuss the themes relative to the literature.

As noted earlier, participants found it difficult to define the contemporary military nursing practice of NOs in the NZ Army. They did however make extensive comments on aspects which were not present in their practice. As a result this discussion tends toward considering aspects of their practice which the participants suggested should exist.

Nursing Skills in the Garrison Setting

The contemporary practice for the NO in the garrison setting included patient care as well as clinical training. The patient care could be PHC in the MTC or secondary care for in-patients on the post-operative or medical wards. The clinical training areas included PHC, Role 1 and Role 2. The participants noted they were required to have sufficient competence and currency to practice in these areas as part of the specific role to which they had been assigned, as well as at any given time they might be called upon to fulfil another role. In regard to Role 2, competence and currency was expected in one area of speciality practice. However these findings suggest some participants would like and see benefit for future training to enable competence in other areas of nursing practice as well.

In comparison, the contemporary practice for overseas military nurses in the garrison setting involved working and training in military healthcare facilities and hospitals. In Australia the NOs entered the military after completing their initial nursing qualification (Australian Army, 2014). It was apparent that the overseas nurses had developed advanced skills and knowledge over and above a military nursing foundation. For the English and the US military nurses it was not detailed in the

literature when or how the military nursing foundation was attained. Further requirement for the military nurse to become a military intensive care nurse or a military AME nurse only developed from around the time of the Vietnam War (Biedermann et al., 2001). The literature inferred that the ICU and AME military nurses had been developed as military nurses in some way besides their ICU and AME training. However their foundation was the skills and knowledge of military nursing practice (Whitcomb & Newell, 2008).

The difference for the contemporary practice of the NZ NO in the garrison setting was that secondary care nursing was conducted in a civilian hospital. In comparison the overseas military nurses were embedded in military hospitals.

Training. The induction which the contemporary NZ NOs received in the garrison setting was described as non-existent, limited, ad hoc, on-the-job and not specific to military nursing practice. The participants voiced their concern regarding this approach, that it left the participants to draw from whatever nursing experience they commissioned with relevant for their new role, to use their initiative, and to make their own way, rightly or wrongly, with the help of colleagues or what information they could find. Some participants thought the lack of military nursing training set NOs up to fail which had contributed to staff retention and a poor reputation for the NOs within the NZ Army. In comparison, for the overseas military nurses, the garrison setting was for the majority in a military hospital, they would work amongst other military nurses and within the hierarchy of medical military personnel.

As stated at the beginning of the thesis military nursing practice was poorly defined in the literature. However, the literature did acknowledge military nursing practice as a specific area of nursing practice and that clinical competence was required as a component of the military nurse being prepared for deployment (Wynd, 2006; Reineck, 1999; Whitcomb and Newell, 2007). Along with this, the professional development process for nursing practice recognised the advancement from novice to expert (Finnegan et al., 2015), however the NCNZ PDRP process for the contemporary practice of NOs did not require specific nursing practice areas to distinguish or differentiate any specific requirements – the competencies were generic. For the contemporary NO therefore, the NZDF PDRP was not reliant on the

definition of what constituted military nursing practice and hence retains the ambiguity for NOs.

There appeared to be a gap in the literature in regard to military nursing induction and training for those overseas military nurses who did not complete their initial nursing qualification in a military hospital. This was a possible limitation of the thesis because the inaccessible/classified literature may have offered guidance regarding the induction and training for military nursing practice.

However, the literature did emphasise clinical nursing competence (Reineck, 1999) as one of three components that make up the preparedness training for the contemporary military nurse in Phase 1 of the Military Disaster Nursing Model (Wynd, 2007). The three components of Phase 1 then permeate through to Phases 2 and 3 to maximise the support to the military nurse and potentially increase positive patient outcomes.

Competence and Currency. For the contemporary NO it was evident from the findings there were no defining standards to be met that demonstrate what constituted competence or currency within their clinical nursing practice areas. Self-declaration was particularly evident in PHC and Emergency Department nursing care. It could however be argued that the attainment of permission to utilise the medical standing orders (DMTPs) demonstrated competence and currency in PHC. On the contrary the findings concluded that DMTPs did not demonstrate nursing competence in the PHC or trauma nursing practice, just that the NO knew how to apply the standings orders to a clinical scenario. It was also difficult to determine from the literature what constituted competence and currency for military nursing practice for the overseas NO.

Furthermore because the NZDF PDRP document was generic and since any of a nurse's experiences within the last three years can be used to support this, the PDRP document did not define the requirements for competence and currency in a specific area of nursing practice. Also because of the generic nature of the document, it did not mean that a NO with an expert PDRP was necessarily an expert in military nursing practice nor necessarily that they were clinically more experienced than a NO with a proficient PDRP. What was apparent from the PDRP process was that competence and currency refers to a set of requirements.

The PDRP process required the NO to submit a document which included material from nursing experiences over the last three years, this demonstrated currency. Competence was established by submitting examples of nursing practice that included, for instance, case studies and written reflections. It was also required of the nurse to have been involved in formal and informal education as well as a minimum number of clinical practice hours. Competence and currency was therefore demonstrated by the nurse acknowledging what clinical practice and education had contributed to the professional development of her/his nursing practice within the last three years. As mentioned by Finnegan et al. (2015) military nurses in non-clinical roles also had a requirement to maintain clinical and professionally related currency. It was inconclusive however from the literature and the NOs' involvement with the NZDF PDRP as to what makes up the contemporary practice specifically of a military nurse in the NZ Army.

Medical or Nursing Model. In the contemporary period for the NO, the findings concluded the training that was available to the NO in support of their development as military nurse, was not based on a nursing model of care. It was obvious from the participants that it would be professionally appropriate and more specific for the NOs, if training for the NOs was nurse led, included a foundation in military nursing practice, and how the military setting impacted on nursing care and patient outcomes.

This recommendation aligned with Whitcomb and Newell's (2008) study for the contemporary environment where senior nurses assessed other nurses in order to recognise those with advanced skills and knowledge, and to provide those that did not have the skills and knowledge with further training. Also the senior nurses were recognised as senior nurses because of their greater levels of clinical experience than that of their juniors. It was evident from Wynd's (2006) proposed model for disaster nursing that the US senior nurses formulated what and how their military nurses are trained and prepared clinically for deployment.

The contemporary training for the overseas nurses and its compilation was led by senior clinically experienced nurses. However, the NZ Army did not have NOs designated to compile the training for military nursing practice.

Advanced Nursing Education (ANE). For the NOs, their contemporary practice as a military nurse could also be supported with the option to be involved in formal civilian nursing education at a postgraduate level. A large number of the participants were currently enrolled in ANE. The option also existed for NOs to continue their ANE and advance their nursing practice to NP level, although a smaller number of NOs were engaged with the NP pathway and the prospects within the NZ Army were not definite. There were two perspectives of ANE for the NOs. One perspective was that ANE meets the education component that contributed to nursing competence, through the gain of a formally recognised qualification. The second perspective was in regard to the NOs who had continued with their studies in order to advance their nursing practice to NP level, which takes round five years. Once the NO was recognised by the NCNZ as a NP, there would need to be a role that supported the NO to maintain the clinical requirements to meet the NCNZ NP standard of nursing practice. Within the contemporary practice of military nursing in the NZ Army there are no NP roles currently established.

Literature however stated that clinical placement opportunities should extend to autonomous nurse-led practice roles (Finnegan et al., 2015). Kennedy et al.'s (1996) conceptual model of army nursing is reliant on the progression of nurses to extend themselves in order to fulfil the roles within advanced nursing practice and further to have the skills and knowledge for clinical case management. These latter two roles acknowledge the army nurses' patient can potentially be too complex to follow the usual care pathways and require collaborative practice both inside and outside of the healthcare facility and organisation.

In regard to ANE in general terms, it was evident from the literature that for the contemporary practice of overseas military nurses like the NZ NOs, also included postgraduate education which could extend to doctorate level (Wynd, 2006). Although Finnegan et al. (2015) was adamant that advancement into a specialty area should not occur until the individual has 3-5 years nursing experience. In the researcher's experience, new-graduate nurses in NZ's DHBs, have directly entered into specialty areas of nursing practice for over 20 years due to of staffing requirements needs in these areas. This would entail the individual to enter into training within the unit but not necessarily involve post-graduate study. A balance

therefore between the two stages of career development, may be the optimal time to enter post-graduate specialty education.

General versus Specialist. The findings are also inconclusive as to whether what makes up the contemporary military nursing practice of NOs had a specialist or generalist focus. The literature suggested that contemporary military nursing was a generalist approach to nursing skills whereas civilian nursing utilised specialist nursing skills (Reineck, 1999). In addition to this generalist foundation for contemporary military nurses, it was evident that deployed military facilities also utilised secondary care skill sets (Biedermann et al., 2001; Biedermann, 2002; Wynd, 2006). It would therefore appear that the optimum training of a contemporary NO would be to provide foundation training that included the elements which make up the contemporary military nursing practice of NOs in the NZ Army in the first instance, and then continued to provide training opportunities for the maintenance and further development of secondary care nursing roles.

This would maximise the pool of NO prepared for a contemporary military nursing deployment either with the NZ Army or a military that NZ would be working in partnership with (coalition partner).

Kennedy et al.'s (1996) conceptual model deals with this issue in another way. The clinical practice pyramid illustrates the quantifiably extent to which traditional nursing care is needed in comparison with advanced nursing practice nursing care and clinical case management. Traditional nursing care covers the full spectrum of health problems as seen in inpatient settings and ambulatory care settings. Most patients would have contact at this level of the pyramid. In the researcher's mind this equates to generalist practice and could also include nurses working a speciality areas with unit-level training.

Although the participants and literature refer to specialist nursing roles, these roles could be in fact roles for those with advanced nursing education practicing in advance practice nursing care roles, as in Kennedy et al.'s (1996) conceptual model. These roles according to Kennedy et al. (1996) include "NPs, clinical nurse specialists (CNS), nurse midwives, community health nurses and nurse anaesthetists and are experiences in a designated clinical practice specialty" (p. 34). These roles work across units and go beyond the inpatient and outpatient boundaries. It would

appear therefore, that military nursing need the majority of their nurses to have the skills and knowledge to work in both general and specialty inpatient and ambulatory care settings. Then as suggested by Finnegan et al. (2015) at the 3-5 point in their career, extend themselves to an advanced practice nursing care role.

Mentorship. The participants considered that mentorship was an essential component of contemporary military nursing practice. Mentoring would support the success of the induction and training of NOs. This component was found to be mainly absent and thought to negatively contribute to the NOs assimilation into the NZ Army military nursing environment. On the other hand the literature indicated that for overseas military nurses their contemporary practice was supported with nursing mentorship. Like the participants, the overseas military nurses recognised this positively contributed to military nursing training. Furthermore for the overseas military nurses, it was the senior military nurses who were involved in providing direction and guidance with their induction and training (Whitcomb and Newell, 2008).

Transition. The contemporary military nursing practice of a NO involved transitioning from one role to another. It was evident from the findings that this process was inadequate. Firstly because the new role could involve a different area of nursing practice for the NO, and with only a brief handover, there would not be sufficient time for the new NO to reach a competent level of nursing practice. Likewise, if the NO was new to the NZ Army and there was no one to teach the NO their nursing role, how would the NO perform her/his duties within the policies of the NZ Army? This highlights a deficiency in preparation. Literature was not able to be found that referred to processes that might be in place for the transition of a military nurse from one role to another or if the contemporary military nurse also transitions in roles. The findings therefore concluded that the contemporary military nursing practice of NOs included a variety of roles that all demanded a level of nursing competence and currency possibly from different areas of nursing practice. Also that the transitions between these roles were not supported by an adequate process.

Nursing on Military Exercises in NZ and in the South Pacific, and Nursing on Military Deployments

The participants reported that their roles as contemporary military nurses on military exercises and deployments comprised of nursing practice in PHC, Role 1, Role 2, HADR, equipment and resources, and Environmental Health (EH). The contemporary NO was required to have the flexibility to adapt their nursing knowledge and skills to the demands of the role. However even with the ability to be adaptable, the participants still reported dissatisfaction here, with the lack of specific military nursing preparedness and training.

Likewise Biedermann et al.'s (2001) study reported a feeling of a lack of preparedness among deployed military nurses within this contemporary period. It was of value therefore to consider the way in which this could be dealt with. Whitcomb and Newell's (2008) approach to this was to maximise the utilisation of experienced nurses and minimise the risk of less experience nurses feeling ill-prepared. The groups that provided health care included both levels of experienced personnel and this approach subsequently maximised the potential for positive patient outcomes. This was quite different for the contemporary NO's deployed team. Because only one medical team was required to deploy, the skill mix was therefore determined prior to the deployment.

The findings also suggested that in the contemporary environment for military nursing practice in the NZ Army, a NO with the background of medic training or emergency nursing care would be considered for a deployment over a NO in a similar position but without the background of medic training or emergency nursing. This indicated that the skills required for a contemporary military nursing role for deployments in the main require those of a medic or emergency nursing care. This may be the result of a current lack of military nursing focussed education to aid the NOs to acquire the knowledge and skills required for a contemporary military nursing deployment.

The emphasis on medic and or emergency care training also may indicate that the nursing practice for contemporary military nursing deployments consisted of knowledge and skills that can be utilised in the pre-hospital arena. Emergency care nursing was secondary care and involved resuscitative trauma care as well as PHC

presentations but could also be provided in the pre-hospital arena. Emergency nursing care was obviously not necessarily bound to a hospital. Whereas for instance, recovery nursing care was post-surgical and although can be mobilised outside of a hospital, the skills and knowledge of a recovery nurse was not necessarily that of an emergency care nurse. Furthermore the contemporary practice of NOs was supported by training in civilian hospitals rather than in military hospital like their overseas counterparts. The civilian trained recovery nurse's skills and knowledge may not therefore transfer as readily as the emergency care nurse's, to the military pre-hospital arena.

The pool of NOs in the NZ Army who were clinically prepared for the majority of contemporary deployments was therefore limited because not all NOs had the required military nursing practice. The remaining NOs who had skills from within secondary care nursing practice, would therefore only be appropriate for a deployment if the skills required for a particular deployment, were specific to secondary care nursing. Only a very few of the participants had been deployed in a secondary care nursing role. As the opportunities for NOs with secondary care skills to deploy occur infrequently, usually only once or twice each decade, the consequence was that a group of NOs had not been eligible in the contemporary period for the majority of military nursing deployments. This was quite different to the contemporary practice of US military nurses. Referring back to Whitcomb and Newell (2008) earlier in this chapter, the US military nurses had a foundation in military nursing practice as a basis for deployment whereas NZ NOs did not have an established requirement for contemporary military nursing practice for a military deployment.

Esprit de Corps

It was apparent from the findings that within the contemporary period NOs had been utilised in place of senior medics to teach medics. It would appear from the findings that the medics' training was perceived to be given priority over the NOs. This could also indicate that it was deemed for the contemporary military nursing practice that additional education to that of their initial RN qualification was not required. As a consequence, there was no specific training pathway developed for the new NOs to develop their military nursing practice. With the exception of one participant, this

was confirmed by the findings that the contemporary military nursing practice for a NO had not involved military focussed nursing education.

This absence of any military focussed nursing education may be a contributing factor to the low level of Esprit de Corps evident in the findings. Scannell-Desch and Doherty (2009) and Ormsby and Harrington (2003) acknowledged that a common sense of purpose and, comradeship along with a high level of Esprit de Corps can occur by being involved in education and training together. This creates ideas and experience in common to identify with and may prevent feelings of alienation, isolation and hopelessness, and that separation from colleagues can lead to these feelings.

Another possible contributing factor therefore to the low level of Esprit de Corps, was separation. Within the contemporary period because of the roles the NOs fulfilled, they were fragmented as a group and dispersed among the medics. Furthermore given the organisational focus on the medics, this could give the impression, that military nursing practice was not considered a priority for resources such as training and development. From an ethnographic perspective, Harper et al. (2007) would suggest that in this instance the initial cultural or social group the NO belonged to was that of the medics rather than the NOs. It was therefore the medics' group that had the greatest cultural influence on these NOs actions, behaviours and decisions. Considering this in regard to Esprit de Corps and comradeship it became evident that the NO group would consequently be the secondary cultural influence on the NOs' actions, behaviours and decisions. For the contemporary military nurses this in turn left the NO group with a potentially lower Esprit-de-Corps than if the initial social group that influenced the NOs, was the NO group.

Looking forward

It was obvious from the literature that overseas, contemporary military nursing practice of military nurses was highly influenced and supported by the fact that the larger militaries around the world had military hospitals for their military nurses to induct into and gain experience in for the development of their military nursing practice. In contrast the NZ NOs only had access to NZ civilian hospitals and the contemporary environment did not support induction to military nursing practice.

The participants made suggestions for improved induction and training to support the NOs' contemporary military nursing practice in the NZ Army. The proposed course of action would maximise the number of NOs who were prepared with the skills and knowledge of a contemporary military nurse in the NZ Army for deployment. This would also ensure NOs had attained a pre-requisite base of skills and knowledge for the roles in which they had been expected to have nursing competence and currency. The elements found to constitute the contemporary military nursing practice of NOs in the NZ Army can be grouped into two tiers. The first tier consists of the common elements from the findings that the participants suggest are what the contemporary NOs should have competence and currency in for a deployment and include additional elements from the literature, detailed below. The second tier includes the areas of military nursing practice that constituted part of the contemporary practice of NO in addition to the first tier.

The First Tier. This would consist of training that would be modular, have theoretical and clinical components and be predetermined. Mentoring would be provided by clinically experienced senior NOs. Consideration needs to be given to the value of NOs attending a short military course with a coalition partner.

The Second Tier. Here the NO can choose their ANE option in order to focus one particular area of nursing practice or health leadership at a time. The contemporary practice of a NO included transitioning between roles, by focussing on one area within the second tier at a time, this would support the development of senior clinically experienced nurses who could in turn provide support to the induction and pathway of military nursing practice for NOs.

Given that the foundation training would be at an introductory level, this would align to a military nursing PDRP at the first level of competence, and as experience was attained along with ANE, the proficient and expert levels could also well align.

Other Potential Training Components

The literature review informed the researcher of the elements that had been relevant to what makes the contemporary military nursing practice from international sources. According to the findings the majority of these had been recognised in the list of the elements that constituted the contemporary military nursing practice of NOs in the NZ Army (Chapter 4). However, there were several aspects relevant to contemporary

military nursing practice from the literature review which were missing from this list. The elements that make up the contemporary practice of overseas military nurses also included the following and therefore should be considered for inclusion in a NZ NO induction:

- a. The potential of PTSD for the NO and their patients.
- b. Stressors involved in living and working in a disaster area or warzone.
- c. Preparation for providing patient care to those affected by chemical and biological warfare (CBW).
- d. Acknowledgement of the different levels of nursing experience.
- e. Advanced nursing education included: the situational demand for expanded practice nursing roles, and professional issues of military nursing practice.

On reflection the author made the assumption that the line of questioning during the interview did not lead towards these matters. The interviews were brief and the researcher had kept close to the indicative questions. However in regard to CBW, this type of warfare had not been incorporated into any conflicts that the NZDF had been involved in during the contemporary period.

Strengths and Limitations

The strengths of the research demonstrate the benefit to utilising a qualitative research method. The research was able to examine the research question in detail and in depth because the questions were not restricted by specific questions. This meant that the researcher was able to question further as the interview was being conducted. Anderson (2010) noted that qualitative research is based on human experience and therefore provides powerful and compelling data.

Anderson (2010) acknowledged that qualitative research has been criticised for the overuse of interviews because this leads to dependency on the researcher's skills and "influenced by the researcher's personal biases and idiosyncrasies" (p. 7). In regard to the research, it is valid to note that it can be difficult to demonstrate rigour because it was the researcher conducting the interviews, this can affect the participants' responses. There were also challenges to maintaining anonymity and confidentiality which prevented explicit detailing of the findings, such as crediting the quotes and using several quotes for one concept.

Chapter Six: Conclusion and Recommendations

Introduction

This chapter offers a conclusion and summary of the research findings, implications for nursing practice and recommendations for future research. The research sought to describe what makes up the contemporary military nursing practice of NOs in the NZ Army. The aim was to capture the experience of contemporary military nursing practice in NZ. Analysis of accounts of today's NOs have ascertained the knowledge and skills of a NZ military nurse. Approval to conduct the research was sought from the NZDF and the Eastern Institute of Technology.

The literature review of contemporary international military nursing practice was conducted to inform the researcher of the existing descriptions of the range of skills and knowledge which underpins contemporary military nursing practice. The method chosen was qualitative descriptive approach, to collect rich narrative data from a small sample population. A convenience sample was employed to gain participants from those NOs since 1995. Data were collected from semi-structured interviews conducted by the researcher.

The findings, in essence, were that the contemporary military nursing practice of NOs in the NZ Army was made up by the various roles they are required to adapt to. This was similar to overseas military nurses. However the vast difference was that overseas military nurses were inducted into their military nursing practice via military health care facilities and military hospitals, whereas the NZ NOs were not. Similarly contemporary overseas military nursing practice training was led by senior clinically experienced nurses, whereas this was not necessarily the case in for the NZ NO.

Summary of Findings

The contemporary military nursing practice of NOs in the NZ Army consisted of primary and secondary health care, leadership, health intelligence, and health logistics in the military's garrison setting, in NZ and overseas. The difference between their civilian and military nursing was found in the characteristics of their military nursing practice by a demonstration enhanced initiative and preparedness.

The NOs were sent on military exercises in New Zealand or in the South Pacific that delivered primary health care or provided care to in-patients. Their deployments took them overseas in response to natural disasters for humanitarian aid and disaster relief, and provided health support on military operations. However from the findings it was apparent that there was little or no induction training when the NOs began their military nursing practice. Some NO became despondent and others felt this contributed to resignations and to low Esprit de Corps. It was concluded that there was either currently no military nursing focussed curriculum on which to base induction or pathway planning, or no nurses directed to develop and teach that curriculum within the NZ Army.

The contemporary practice of a NO has different components that make up the skills and knowledge of their military nursing practice. The components of contemporary practice were: nursing in the garrison setting; nursing on military exercises in NZ and in the South Pacific, and nursing on military deployments. The contemporary practice outlined was based upon the participants' responses and to the themes that arose from the interviews.

Conclusion

The thesis set out to describe contemporary military nursing practice in NZ. This was completed by interviewing NOs about their nursing practice as a military nurse. The military nurses' practice was found to include an array of roles that required competence in the skills and knowledge associated to those roles. Some of the skills and knowledge from one role can be transferrable to another whereas for some NOs the new role came with the requirement to attain an almost completely new range of nursing skills and knowledge. It was also found that there is little or no military nursing based induction or support for the preparation of the NOs' roles. As a group however, the NOs' appear to be in a slightly more positive and clinically orientated position in the NZ Army in the more recent few years. This in itself sets the scene for an encouraging way forward for the work that is ahead for the development of military nursing practice for the NOs of the NZ Army.

Recommendations

For Practice. To support the NOs' development of their military nursing practice, it would be necessary to consider the elements that constitute their practice,

including the elements noted in the literature, alongside of the military nursing practice they have already been involved in, to identify where their individual training gaps may be. This would assist in creating an individualised pathway to ensure comprehensive and thorough preparation for a military nurse to be safe and proficient with the skills and knowledge needed for a deployment.

For Education. As a result of the participants' comments, it is recommended that organisational support be sought to designate senior clinically experienced NOs to develop and implement an induction and training pathway focussed on military nursing practice for NO in the NZ Army. Also investigate access to a military nursing course with a coalition partner.

For The Future. Further investigate autonomous nurse-led roles, for example Nurse Practitioner (NP) and Clinical Nurse Specialists (CNS), and their utilisation in the military nursing practice setting.

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Dear

**RE: MASTERATE OF RESEARCH THESIS STUDY – WHAT CONSITUTES
THE CONTEMPORARY PRACTICE OF A MILITARY NURSE FOR
NURSING ORRICERS IN THE NZ ARMY?**

I would like to invite you to participate in the above-mentioned study. Please find attached an information sheet, consent form and list of indicative questions for your perusal.

This is an exciting research project and I hope you will join me in my endeavour to learn more about the roles of RNZNC members within the NZ Army.

Kind regards

Michelle Argyle

Information for Research Participants

Date:	12 July 2014
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Project Title:	What constitutes the contemporary practice of a military nurse for nursing officers in the NZ Army?
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Researcher:	Michelle Argyle
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Description of the research:

This is qualitative research involving interviews with members of the Royal New Zealand Nursing Corps to ascertain what constitutes the clinical knowledge required for NZ military nurses. This work will complement a previous study that established the specific clinical skills required for deploying NZ military nurses, together developing evidence based recommendations for the future delivery of training to maximise nursing support for the Army's war fighting effectiveness.

What will participating in the research involve?

The research interview will take place at a time and place negotiated with you. It will be conducted face to face if geographically appropriate, alternatively via telephone. It is envisaged to take approximately 20-30 minutes. The indicative questions that will be asked of you are included with this documentation and you will be encouraged to expand on them if desired. With your permission, the interview will be recorded for later analysis. I may also take notes to provide a source of review for clarification.

What are the benefits and possible risks to you in participating in this research?

As individuals and RNZNC members alike this study offers an opportunity to acknowledge and reflect on what it means to be a military nurse in the NZ Army today. It is intended to support your future career pathway as a military nurse.

Your rights:

- You do not have to participate in this research if you do not wish to and you will not be disadvantaged in any way if you do not participate.

- You are welcome to have a support person present (this may be a member of your family/whanau or other person of your choice).
- You may request that the researcher does not audiotape your interview.
- You may request a summary of the completed research.

Confidentiality:

Identifiable information about you will not be made available to any other people without your written consent. Two academic supervisors (EIT) will oversee the analysis process and writing of the thesis however the information will have been anonymised. Your name will not be associated with any reporting of the information you provide.

Follow up contact will be made to confirm your participation or you wish to decline. If you wish to know more about this study, please contact

Contact Person:	Michelle Argyle		
EIT School/Section:			
Work phone #		Email address	
Mobile phone #			

Supervisor Name(s): (if applicable)	Professor Bob Marshall		
Work phone #	06 9748000 x 5422	Email address	bmarshall@eit.ac.nz

Head of School/Manager:	Dr Elaine Papps		
Work phone #	06 9748000	Email address	epapps@eit.ac.nz

For any queries regarding ethical concerns, please contact:

Chair, Research Approvals Committee, EIT. Ph. 974 8000

This study has been approved by:

The Eastern Institute of Technology ethics committee on 29 August 2014 Reference 4-14 and NZDF Personnel Executive in accordance with DFO 3.14[5] on 16 July 2014 Reference 5000/PB/5/3.

INDICATIVE INTERVIEW QUESTIONS

As a military nurse in the NZ Army you are invited to participate in the study as outlined in the attached information sheet. These are the general areas intended for discussion with you in the interview.

Experience prior to commissioning

1. What course of study did you complete for your initial nursing qualification, where did you attend and in what year did you start practicing?
2. For how many years (full time equivalent) did you practice prior to joining the NZ Army?
3. What was your main area(s) of nursing practice prior to joining the NZ Army?
4. In your opinion why did you consider this your main area of practice and how did you get into this area of practice? (eg time, qualifications, interest)
5. What other areas of practice were you employed in before joining the NZ Army and for how long?

Since commissioning:

6. During your time in the NZ Army in what areas have you mainly practiced?
7. What training (informal/formal) did you receive to work in this/these area(s) of practice?
8. Do you feel this training was adequate preparation for the role? If not, what was missing, or could have prepared you more effectively?
9. Discuss other areas of nursing (if any others) that you have practised in?

Your point of view as a military nurse

10. What aspects of clinical preparedness have you needed to develop since becoming a military nurse?
11. In your experience what areas of nursing practice have made up your practice as a military nurse?
12. Have you received any specific military nursing training for your development in this specialty area? YES/NO Tell me more.
13. What specific areas of military nursing practice do you think nurses would benefit from receiving more in-services or external courses?



CONSENT FORM

Project Title: What constitutes the contemporary practice of a military nurse for nursing officers in in the NZ Army?

Researcher(s): Michelle Argyle

I have read and I understand the Information for Research Participants sheet dated 27 June 2014 for volunteers taking part in this study. I have had the opportunity to discuss this study and am satisfied with the answers I have been given.

I understand I am able to withdraw all of my information until 27 October 2014.

I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time and this will in no way affect my employment.

I understand that my participation in this study is confidential and that information will be sensitively anonymised in any reports on this study.

I have had time to consider whether to take part, and know who to contact if I have any questions about the study.

	Yes	No
I agree to take part in this research	<input type="checkbox"/>	<input type="checkbox"/>
I consent to my interview being audio-taped	<input type="checkbox"/>	<input type="checkbox"/>
I wish to receive a summary of the results	<input type="checkbox"/>	<input type="checkbox"/>

Signed: _____

Name: _____

Signature of Research Participant's Support Person (if applicable)

Date: _____

Witness: _____

I/We as researcher(s) undertake to maintain the confidentiality of information gather during the course of this research.

Signed _____

Dated _____

This study has been approved by the Eastern Institute of Technology ethics committee on 29 August 2014 Reference 4-14 and NZDF Personnel Executive in accordance with DFO 3.14[5] on 16 July 2014 Reference 5000/PB/5/3.

NEW ZEALAND ARMY
2nd Health Support Battalion (NZ)
MINUTE

N1024455/4730

27 Jun 2014

AC PERS (through ORM)

**REQUEST FOR APPROVAL TO CONDUCT PERSONNEL RESEARCH ON:
WHAT CONSTITUTES THE CONTEMPORARY PRACTICE OF A MILITARY
NURSE FOR NURSING OFFICER IN THE NZ ARMY?**

References:

A.

Reference A is a request for authority to conduct personnel research within the NZ Army for the purposes of study requirements for the Master of Nursing. The area of research is military nursing as a specialty area of nursing practice.

Aim

1. The purpose of this research project is as follows.
 - a. With the demand for transactional training to be agile and relevant, the question arises for the Royal New Zealand Nursing Corps (RNZNC) what clinical knowledge underpins the contemporary practice of the Nursing Officer (NO).
 - b. The aim of this study is to analyse accounts of today's Corps members and ascertain the optimal clinical knowledge of a NZ military nurse.
 - c. This work will complement previous study that established the specific clinical skills required for deploying NZ military nurses, together building an evidence base looking forward to deliver innovative training which maximises the support to the NZ Army's war fighting effectiveness.

Requirement

2. The research will fulfil the thesis requirements of the Masterate of Research at Eastern Institute of Technology (EIT).
3. The research will also be of use to the NZDF as this study aligns to numerous key focus areas for change detailed in per the Strategic Object Summary as follows:
 - a. S2 – supports validation of NOs as part of the Light TG and Combined Arms TG;
 - b. S3 – supports embedded continuous improvement programmes by pers learning to conduct research and through this research process disseminating findings;

- c. W1 – 'leadership by influence' via benevolence by validating the experiences of NOs and valuing nurses as leaders;
- d. W2 – enhancing combat effectiveness by lessons learnt for future preparedness and the clinical expertise the NO complements to the provision of HSS;
- f. W3 – capitalises on the current low 'non-operational' tempo environment to make the most of this opportunity to develop future capability;
- g. W4 – utilising sound methodologies for evidence based practice to support guidance of investment decisions;
- h. W5 – ensuring continuous improvement through the research and evidence based practice;
- i. M1 – creates an positive environment to recruit and retain NOs as recognised leaders and giving value to the skills they bring to enhance to NZ Army; and
- k. M2 – supports transactional training through agility and relevance through supporting higher education to develop evidence based practice within NZ Army.

4. The risk to the NZDF is deemed to be low. Risk mitigation will include the information sheet clearly stating: the research being conducted; intention of what will be done with the data; that feedback will be provided, that the study is supported by the Health Directorate; participation is voluntary, outline the benefits of participation; the only other study the researcher is away of is the routine attitude survey (approximately annual); data will be confidential and reported on in a way that ensure confidentiality; and feedback of results will be sought from a sub-sample IOT ensure trustworthiness.

5. The research will be supervised by two EIT supervisors in addition to the Principal Nursing Officer (PNO) 2 HSB (NZ) as the key stakeholder representative will maintain visibility of the project. The final and full report will be distributed only to the EIT supervisors and an external examiner.

Methodology

6. This research will be a survey consisting of an interview using open-ended questions conducted by the researcher. The documents will be sent via email to the invited participants for consideration. Follow up communication by the researcher will ascertain if the invitee is willing to participate and this will be confirmed by signing and return of the consent form. All raw data will only be viewed by the researcher. The anonymised analysis will be discussed with the academic supervisors. Once anonymity is confirmed accuracy of themes will be previewed by an organisational representative if deemed necessary for trustworthiness.

- a. Research Proposal 27 Jun 2014 (EXHAMIL14, 2JUL – 7AUG, lead clinician) consisting of:

(1) EIT progress report submission:

- (i) Consent form, information sheet, ethics application and indicative interview questions (Annexes A-D). These documents have been developed under the guidance of two EIT research supervisors.

(2) DPE application:

- (i) Pre-assessment form; and
- (ii) The minute. The content of these documents has been developed in consultation with the PNO, 2 HSB (NZ) who has been nominated by the DNS as the stakeholder representative.
- b. Once approval is indicated by DPE the EIT ethics application will be submitted (desirable Jul 2014);
- c. Early August send out documents packages, follow up contact at seven days;
- d. Aug-Sep 2014 conduct interviews; (EXRSII14 – coy based, dates TBC)
- e. Oct 2014 begin analysis; (EXKK14 – dates TBC ? Nov)
- f. Draft thesis Nov-Dec 2014; and
- g. Submit final thesis with EIT January 2015.

7. It is intended the participant population will be the current and the recently withdrawn, Regular Force (RF) service members of the RNZNC. To be included in the study, participants will have internet access, contactable at the time of the study and willing to participate. Corps members serving prior to 1995 will be excluded as this study aims to capture the experience of contemporary military nursing in order to provide an evidence base for future training. Thirty invitation packages will be sent to participants ageing from 23 to 65 years. Returns numbering 15 or more are desirable to afford sufficient data for analysis. In addition to the participants, two academic supervisors will view the study throughout the process. Members are known to the writer and in the majority are contactable by intranet however attempts to contact two members now resigned will be through personal contacts and social media. There will be no offer of payment or reward for participation.

8. For the data analysis the raw data will be organised into logical meaningful categories then examination of these categories will be conducted in a holistic way to enable interpretation – to see how this study of a real world situation unfolds naturally

without any manipulation. Thus applying steps as in Haggerty (2010) – using Colaizzi's (1978) descriptive phenomenological method. While reading the raw data: highlight and extract significant statements directly relating to the issue being studied; develop and write the meaning of each significant statement capturing the essence of the reported experiences; organise the extracted meanings into themes.

- a. All raw data will be stored at the researcher's private residence and not accessed by anyone other than the researcher.

Resources required

9. The research will require the use of a dictaphone and the researcher's note taking abilities.

Researcher

10. The project officer for this research will be CAPT Michelle Argyle, Nursing Officer, 2 HSB (NZ). The researcher will be supervised throughout the process by Professor Bob Marshall (EIT, bmarshall@eit.ac.nz, 06 974800, extension 5422 and Clare Buckley (EIT, cbuckley@eit.ac.nz).

Timeline

11. The research will begin late August and through September 2014, dependent on organisation and academic approval (EIT ethics deadline 13th of each month). The data gathering is anticipated to be conducted over four to six weeks and the analysis is anticipated to take a similar timeframe. Consequently a brief on findings and implications can be expected early in December 2014.

Ethical Considerations

12. This research will be conducted in accordance with the Privacy Act and ethical guidelines outlined in Schedule Two of Annex B to DFO 21/2002. No identifying information about any participants will be reported.
 - a. The purpose of this work is not to study or analyse the data in such a way that draws comparisons with Maori nor would the results have any specific implications for recruitment or retention of Maori NOs in the future. However it is envisaged that through the data it will become apparent that knowledge in relation to the TOW and cultural safety in the delivery of nursing care will contribute to the knowledge base of a military nurse.

13. It is requested that the proposed research into what constitutes the contemporary practice of a military nurse for NOs in the NZ Army be approved.

M.F. ARGYLE
CAPT
NO

Phone: 06 3519099 Extension 8014
Mobile: 0210788545
Email: michelle.argyle@nzdf.mil.nz , michelleargyle@gmail.com

Annexes:

- A. Consent Form.
- B. Information Sheet.
- C. RAD form (EIT application for approval of research activity).
- D. Indicative Interview Questions.
- E. RAD form (EIT application for approval of research activity).

RECOMMENDED/NOT RECOMMENDED

ORM
Date:

APPROVED/NOT APPROVED

AC PERS

Date:

16/1/14

RAD Form

APPLICATION FOR APPROVAL OF RESEARCH ACTIVITY

1. Applicant details

1.1 Name of Applicant(s)	Michelle Argyle
1.2 Position of Applicant(s)	Nursing Officer (NO), NZ Army
1.3 School and Faculty	EIT, Faculty of Nursing Studies
1.4 Contact Phone	
1.5 Supervisor (if applicable)	Professor Bob Marshall and Clare Buckley
1.6 Project Title	What constitutes the contemporary practice of a military nurse for nursing officers in the NZ Army?
1.7 Project Start Date and Duration	July 2014 to April 2015

2. Research Outline

2.1 Aims/objectives/hypotheses of project

Introduction: Although military nursing is recognised internationally as a specialty area of nursing practice that is associated with skills and knowledge, the New Zealand Defence Force (NZDF) does not yet define nor specify the expected clinically based body of knowledge for military nursing or provide any specialised training when a civilian trained nurse joins the organisation.

Research problem: The clinical knowledge specific to military nursing that provides the foundation to the practice of a nursing officer (NO) in today's NZ Army is not clearly established and consequently there is no formal training pathway for the development of military nursing as a specialty area of practice.

Purpose: With the demand for transactional training to be agile and relevant, the question arises for the Royal New Zealand Nursing Corps (RNZNC) regarding what clinical knowledge underpins the contemporary practice of the NO. The aim of this study is to analyse accounts of NOs and ascertain the clinical knowledge required of a NZ military nurse. This work will

complement a previous study that established the specific clinical skills required for deploying NOs, together building evidence based recommendations for delivery of training to maximise nursing support for the NZ Army's war fighting effectiveness.

Design: This is qualitative research involving interviews with NOs to ascertain what constitutes the clinical knowledge required for today's NZ military nurses. The qualitative descriptive approach has been chosen for the capacity to accommodate the context specific to the setting – nursing in the military being an area of specialty nursing as well as acknowledge the participants as social beings, in a dynamic setting, where the individual re-contextualises dependant on the situation ("Research Paradigms in Education", n.d.).

Ethical Considerations: In acknowledgement of the Treaty of Waitangi (1840), the Tangata Whenua (in this instance the senior chaplain of Ngati Tumatauenga) has been consulted. Further learning in the conduct of research either with or on behalf of Maori, has been gained from discussions with a representative from the National Library (who provides guidance within the library in respect to the TOW and knowledge as a taonga). These opportunities for insight have not only provided the beginning point for partnership and will guide the development to invite participation in the study but more importantly have initiated an awareness in consideration of the analysis of the data – what the depth of meaning it will bring and what it represents. Any Maori participation will be reliant on the only NO of Maori descent agreeing to participate who is now a civilian employee. Furthermore the emphasis of the information sheet will incorporate the principle of protection, informing of the process of data analysis, storage and retention. On the other hand to protect an individual's right, the option to decline participation will also be included.

Data will be anonymised in all reports, presentations and publications arising from this research. Those invited will not be coerced in any way and given the freedom to choose or decline participation.

2.2 Participants

It is intended the participant population will be Regular Force (RF) service members of the RNZNC. To be included in the study, participants will have internet access, be contactable at the time of the study and willing to participate. NOs serving prior to 1995 will be excluded as this study aims to capture the experience of contemporary military nursing in order to provide an evidence base for future training. Invitation packages will be sent to a random selection of fifteen participants aged from 23 to 65 years. As participants become available interviews will be conducted until no new data is evident, then one more interview be held in order to reach 'saturation plus one'. Volunteers who are not interviewed will be sent a thank you letter indicating sufficient participants were interviewed. In addition to the participants, two academic supervisors will view the study throughout the process. Members are known to the writer and are contactable by the NZDF internal internet system. There will be no inducement for participants to participate, offer of payment and no reward for participation.

2.3. Explain the data collection methodology

The survey will consist of an interview using prewritten guidelines (see Indicative Interview Questions) conducted and recorded by the researcher. The documents (Information for Research Participants, Indicative Interview Questions and Consent Form) will be sent via

email to the invited participants for consideration. The research interview will take place at a time and place negotiated with the participant. It will be conducted face to face if geographically appropriate, alternatively via telephone. It is envisaged to take approximately 20-30 minutes. The indicative interview questions that will be asked and if desired the participant will be given further opportunity to expand on these questions. The researcher may also take notes to provide a source of review for clarification.

Follow up communication by the researcher will ascertain if the invitee is willing to participate and this will be confirmed by signing and return of the consent form. All raw data will only be viewed by the researcher. The anonymised analysis will be discussed with the academic supervisors. Accuracy of themes will be ascertained for trustworthiness by asking one prearranged participant to preview the analysis derived from her own interview.

2.4 Data analysis and storage

For the data analysis the raw data will be organised into logical and meaningful categories by reading and re-reading the interview notes then examining these categories in a holistic way to enable interpretation – to see what constitutes contemporary military nursing practice in a real world situation. Thus applying steps as in Haggerty (2010) – using Colaizzi’s (1978) descriptive method. While reading the raw data: highlight and extract significant statements directly relating to the issue being studied; develop and write the meaning of each significant statement capturing the essence of the reported experiences; and organise the extracted meanings into themes.

All raw data will be stored on a password protected computer and not accessed by anyone other than the researcher.

2.5 How will the data be reported, and to whom?

The findings will be: presented as a report to the Director of Nursing (Directorate of Army Health); as part of the course of academic study be published following organisational approval; fed back to participants as a summary; it is intended to present a summary to the RNZNC and at a national nursing conference.

3. Will the research

3.1 Collect confidential, personal or financial information?

Yes	The raw data will include information that is considered Staff In Confidence (SIC) in that years of experience and qualifications contribute to remuneration levels. Access to the data will be limited to the researcher and two academic supervisors. In fact the academic supervisors will not view the study until analysis has been drafted by which stage the information collected will have been anonymised.	
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3.2 Involve more than minimal risk?

	<p>Assessment of the research using New Zealand Defence Force guidelines for the conduct of personnel research, indicates the level of risk associated with this research is low. Risk mitigation includes the use of the information sheet clearly stating: the research being conducted, the intention of what will be done with the results of the research; that feedback will be provided; once successfully through the NZDF application process the study will be supported by the Director of Nursing Services and Director of Army Health; participation is voluntary; the time burden for this study is estimated at 20-30 minutes and would not create an onerous overall collective survey burden to the individual (one human resources survey is conducted by NZDF annually); and data will be confidential and reported in such a way that will ensure confidentiality and anonymity.</p>	No
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3.3 Involve vulnerable participants?

Yes	<p>The participant information sheet and consent form will clearly indicate that there will be no negative outcomes for staff that choose to or not to participate and to note that this research has been endorsed by the NZ Army.</p>	
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3.4 Record research participants on audio or videotape?

Yes	<p>Notes will be taken by the interviewer during the interview which will also be concurrently audio taped. Subsequently the recording can be used to verify or expand on the notes.</p>	
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3.5 Involve or impact upon Maori?

Yes	<p>The purpose of this work is not to study or analyse the data in such a way that draws comparisons with Maori nor would the results have any specific implications for recruitment or retention of Maori NOs in the future. However it is envisaged that through the data it will become apparent that knowledge in relation to the TOW and cultural safety in the delivery of nursing care will contribute to the knowledge base of a military nurse.</p> <p>The consultation with Maori was undertaken as part of the process for the current course of study and reiterated the importance of protection for participants. Furthermore this process has given the writer guidance in consideration to the depth of meaning the data may represent and subsequently broaden insight and increase awareness during the analysis for what might seem to the writer as peripheral or insignificant themes. It has been beneficial to frankly discuss the research processes with Maori representatives as it reiterates for the writer the different cultural perspectives that a question may be interpreted or answered, not answered, how in small some ways we are similar however in many ways we are not.</p>	
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Signature of the Applicant:

Date:

Dean/Manager Signature

Date:

(Association, 2007a)