Partners of Vietnam Veterans: Identifying their holistic health issues.

Submitted by

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Summary

To ascertain the holistic health issues of partners of Vietnam Veterans, nursing research was conducted as a pilot study survey with a non-randomised sample. A literature review found little information regarding the health issues of this population in Australia or internationally. Data were collected by an on-line, password-accessed, primarily quantitative questionnaire. For respondent recruitment, emails were forwarded to veterans of one Australian battalion from the Vietnam War, and the veterans were asked to show an attached 'Invitation to Participate' letter to their partners. The sample of partners (n=15) provided data about demographics and their health issues regarding four dimensions of holistic health (physical, social, psychological and spiritual); nurses focus on providing care according to holistic health needs.

Data analysis revealed social aspects had greatest impact on health. Mental health ranked second with physical and spiritual issues placed third and fourth. Common social health matters were communication problems with the partner, needing to be a 'peacemaker', concern about welfare of children and financial matters. Analysis of mental health data suggested that some partners may have been experiencing a 'secondary' form of Post Traumatic Stress Disorder (PTSD) as they became immersed in the veteran's PTSD pathology. Depression, anxiety and stress were commonly reported. Respondents were generally able to function well with day-to-day living and physical health ratings were similar to that of a similar demographic in Australian society. Also, physical health was similar with skeletal, joint and muscular problems predominating. Respondents were mostly ambivalent concerning spiritual matters and reported satisfactory health-related quality of life overall. Regarding their health having been negatively affected by the veteran's service in Vietnam, the majority reported not so, a large group were ambivalent, and a third group who stated many health problems had resulted for them. Six recommendations arise from the study.

Statement of Authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma.

No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Signed: ……

Date: ……...

All research procedures reported in the thesis were approved by the Faculty Human Ethics Committee, Faculty of Health Sciences, La Trobe University: Ethics Approval No: **FHEC09/85 (**Appendix 'D').

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Chapter 1. Introduction

The sizable ‘baby boomer’ population in Australia is ageing and within it is situated veterans of the Vietnam War and their partners. As this population moves from middle-age to old-age, and considering that the Vietnam War was a major incident in the last half century, it is of concern that research regarding the health issues of partners of Vietnam Veterans is largely lacking.

In this chapter a thesis is introduced that reports a pilot study entitled *Partners of Vietnam Veterans: Identifying their holistic health issues*. Presented in sequence is the problem prompting the study, the research question that is a logical consequence of the problem, and the related research aim and objectives. Also presented is background for the study including discipline specific information of relevance, the study's significance, potential benefits of the study, my personal motivation to conduct the study, and an introductory outline of subsequent chapters of the thesis.

The study was a descriptive survey using an on-line, anonymous and confidential questionnaire (see Appendix A) designed by the researcher to provide data about the specific objectives of the study. Respondents were partners of surviving Vietnam Veterans who served with one Australian Army battalion in the 1960s. Mostly quantitative data were sought, but some qualitative data was requested - as also were some non-identifying demographic data. Demographic and quantitative data were analysed using descriptive statistics including frequencies and measures of central tendency. Qualitative data were content analysed for predetermined categories pertinent to the aim of each question seeking qualitative data.

PROBLEM STATEMENT

Even though the Vietnam War officially ended on April 30 1975, it is anecdotally and empirically known that to this day veteran's families may experience the effect of a veteran's service. Numerous studies have identified and continue to investigate the health issues of veterans, their children and their grandchildren but there has been minimal investigation regarding the partner's specific health issues. As these veterans and their partners grow older, both will tend toward needing a greater frequency of nursing care - which is intrinsically holistic.

RESEARCH QUESTION

Regarding partners of Vietnam Veterans, what are their current holistic health issues?

AIM

The aim of the study is to identify holistic health issues experienced by partners of surviving veterans who served in the Vietnam War within one Australian Army battalion.

OBJECTIVES

Regarding a sample of partners of a group of Australian Vietnam Veterans, the objectives of this study were to:

- Measure overall self-reported health;
- Use the nursing holistic model of health to describe and explore health issues and the impact of such on health according to the holistic dimensions of physical, spiritual, social and psychological health;

- Measure self-reported, health-associated quality of life;
- Be an effective pilot study to identify variables for further generalisable research of the topic;

BACKGROUND

Three generations of Australians had their lives shaped in two world wars. Subsequently, there have been fifty conflicts and peace-keeping activities. According to the Department of Veterans' Affairs (DVA, 2008), in Australia during the late 1960s and early 1970s, a National Service Scheme required 20 year old males to register with the Department of Labour and National Service. They were then selected by a nationally televised ballot in which numbers representing birth dates were selected from a tumbler; selection would mean two years of national full time service in the Regular Army followed by three years part time service in the Army Reserve. As part of their duty, National Servicemen, or 'Nashos' as they were commonly called, would be eligible for 'special overseas service', which could mean combat duty in Vietnam. A total of 63,790 men were 'called up' for national service between 1965 and 1972 following legislation by the Menzies Government that feared regional implications for Australia from conflict in South East Asia (DVA, 2008).

The DVA document 'Australia in the Vietnam War' (2008) explains that between 1966 and 1971, Australian infantry battalions sent to Vietnam were typically comprised of a mix of regular soldiers and national servicemen. The Australian government, led by Gough Whitlam, was swept into power on 5th December 1972 by a strong anti-war sentiment and particularly by promises of the withdrawal of Australian troops from Vietnam with an end to military conscription. From 1964 until December 1972 when the scheme was suspended, 804,286 twenty-year-olds registered for national service; 63,735 national servicemen served in the Army and 15,381 served in Vietnam. As a consequence, some 200 Australian national servicemen lost their lives in this conflict.

The Vietnam War was the first televised conflict in history; nightly pictures of battlefields and casualties helped sway public opinion against Australia's involvement. Veterans experienced not only battle trauma but also bad homecoming experiences as they marched at the peak of a public anti-American mood and anger at the conscription process. The strong anti-war feeling manifested itself as students and the public turned their ire towards homecoming soldiers. As a result, some soldiers experienced a displacement of sorts from the community after encountering hostility in Vietnam and hostility during homecoming, and to follow.

The Royal Australian Regiment whose partners were the subject of the study, served in South Vietnam from late 1968 until late 1969. They had many fierce contacts with the North Vietnamese military resulting in casualties and soldiers wounded on both sides (RAR, 2008). The battalion, which had conflict in open terrain, jungle and subterranean environments, was involved in open warfare plus search and destroy missions. The battalion's history states ironically that their homecoming received a 'rousing reception' (RAR, 2008).

In Australia and elsewhere, many studies have identified health issues of Vietnam Veterans, their children and grandchildren but there is little study regarding the health issues of the partners of Vietnam Veterans. In Australia, a 'veteran' is defined by DVA as a person who holds an entitlement or war service pension card (Hoare, 2007); however, in this study a Vietnam Veteran is any person who served in the armed forces within the Vietnam War.

SIGNIFICANCE OF THE STUDY

Few studies have specifically targeted the health issues of partners of Vietnam Veterans either in Australia or overseas. Therefore this study is important because it has:

- Identified health related issues in a little known section of the population;
- Provided a starting point for nurses (and possibly other health professionals) to understand health related issues of partners of Vietnam Veterans from a holistic perspective;
- Provided some partners of Vietnam Veterans an opportunity to voice their health related experiences;
- Generated knowledge that is useful by quantifying the health related issues of partners of Vietnam Veterans;
- Performed as a pilot study for further research of this matter.

POTENTIAL BENEFITS

As little is known concerning the health issues in Australia of Vietnam Veteran's partners, it is hoped that this project will shed some light upon and add to the body of nursing knowledge regarding this subject and be an effective pilot study for further generalisable research of the topic. Respondents may have found comfort in knowing that someone is researching their population and that it will add to the general body of nursing knowledge. However, the respondent gained no direct benefit.

PERSONAL MOTIVATION FOR THE STUDY

Motivation for this study primarily sprang from the researcher's curiosity regarding the health issues of partners of Vietnam Veterans. Our family has a long military history stemming back to Gallipoli when Great Uncles Alexander (Service number 331) joined the headquarters service corps horse transport unit and Great Uncle Ernest (Service number 1914) joined the 5th Battalion, Australian Imperial Forces. Both brothers survived Gallipoli and went on to fight in France where they sustained life-long lung damage from being gassed in the trenches. After the war, Alex worked on the Lake Hume wall as a saddler and Ernest as a policeman in Melbourne. My father tells stories of how he smuggled beer to

them in their old age at the Randwick Repatriation Hospital; I often think that that was indeed a beneficial therapy. Additionally, I was inspired at a young age by my Aunt Olive (Jones) who was a Nurse-Commander in the Royal Australian Navy and Queen Elizabeth II's nurse during her Australian visits - and also my great, great grandmother who was the first midwife at Yarrawonga/Mulwala in the late 1800s. She was the first female entrepreneur in the area also as at the same time she ran and owned the only hotel thereabouts, and probably interacted with Boer War Veterans and their families. The present day local Businesswoman's Association built an excellent monument to her in the Mulwala cemetery.

SUBSEQUENT CHAPTERS OF THE THESIS

To place the study in context with current knowledge and to justify findings, Chapter 2 encompasses a review of literature relevant to the research question as found by searching both electronic and hard copy sources. The review is presented according to recurring themes throughout the literature. In Chapter 3 firstly the time-line of the study is presented then the methods used for the research study, including sampling, respondent selection, data collection and analysis, plus ethical considerations, all of which are explained in detail. In Chapter 4 the results of the study are presented. In Chapter 5 discussion of the results is presented with contrasts and comparisons to the findings of other relevant research studies. Also in Chapter 5, possible strengths and limitations of the study are stated. The final chapter, Chapter 6, is the concluding chapter of the thesis with some reflections of the researcher offered in regard to the study processes. Also in that chapter a list of recommendations arising from the study and allied research is offered - in regard to clinical practice, education, policy and further research required. All recommendations are presented with accompanying rationale.

SUMMARY OF CHAPTER 1

Presented is this chapter was an introduction the thesis reporting a study that sought to answer the research question: 'Regarding partners of Vietnam Veterans, what are their current holistic health issues*?'* In this chapter, the research problem, aim and objectives have been presented and the background and significance of the study was detailed. Potential benefits of the study and an explanation of my personal motivation to conduct the study were provided. Finally, further chapters of the study have been listed with a brief explanation of the purpose of each chapter. The next chapter, Chapter 2 is a review of pertinent literature.

Chapter 2. Literature Review

Presented in this chapter is a review of pertinent literature discovered from searching multiple library catalogues, database searches, reference lists and the Internet. Firstly explained is the search strategy in these areas when seeking to locate research reports and information relevant to health issues of the partners of Australian Vietnam Veterans with a view towards social, physical, spiritual and psychological aspects of health. First, a broad search was conducted regarding research concerning the international population of partners of war veterans and then the search narrowed progressively to partners of Australian Vietnam Veterans. Therefore, the literature review situates this study within the existing health knowledge base by describing and critically reviewing pertinent research and knowledge from the broader relevant literature to the narrow focus of the study. The literature review also aims to justify the study being conducted.

SEARCH STRATEGY

The initial broad and narrower searches of databases revealed a multitude of entries regarding the effects of Post Traumatic Stress Disorder (PTSD) upon a war veteran and some about secondary PTSD on the family. This research provided literature potentially relevant to the psychological aspect of health of partners. It was discovered very early that literature about physical, social and spiritual aspects of health regarding being a partner of a war veteran would be much harder to obtain. To widen the search and provide as many matches as possible for one query, Lib Explore™ was utilised. This device is a multi-faceted database search engine that is available through La Trobe University's Library; the engine has ability to allow a researcher to select many databases manually or select pre-determined sets. Unfortunately, Lib Explore had a very basic Boolean query feature and did not include 'wild card' searches, which was a draw back to any serious focussing effort.

USING BOOLEAN MATHEMATICS TO THE BEST ADVANTAGE AND FORMULATING AN ALGORITHM

When applying Lib Explore™ , the three primary Boolean operators "*and or not*" and selected keywords could be and were used as a starting point in the search. For example, "war *and* veterans *and* health *and* partners" revealed a plethora of matches that were primarily mental health and PTSD related. Similarly "war *and* veteran *and* health *and* partner" revealed an equal number of matches with similar themes. The most effective Boolean keyword query that could be obtained with Lib Explore™ was "war *and* veteran *and* health *not* violence *not* mental health *not* trauma *and* partner" but the query was cumbersome and not what the researcher wanted. It revealed 670 hits of which two were useful.

Databases with advanced Boolean mathematic query structures and wide capture areas such as Expanded Academic ASAP™ were utilised in the search. The search was then narrowed to exclude PTSD literature in an attempt to uncover other themes such as the physical, social and spiritual health issues of partners of Vietnam Veterans. By using the *not* operator, it was possible to filter words, thus narrowing the search and in conjunction with the wild card operator "*", which ignores the suffix of a word and thus broaden a search, I found that this gave a 'bow tie' effect to the search (broad, narrow and broad again). In this instance I used it to filter out words that are used in PTSD literature such as 'trauma' and used the wild card to include 'traumatic' and 'traumatise'. This search strategy was utilised to filter out similar words such as 'violence' in the same manner. An example of this query was 'war *and* veteran *and* health *and* partner *not* (trauma* *or* violence*)'. The brackets are used to encapsulate the two words with the '*or'* operator. In effect I was asking the engine to 'look for examples of partners of war veterans with health issues but exclude any reference to violence and trauma'.

The resultant war veteran and partner health literature found was then reviewed critically and thematically categorised by labelling them by the war, the country and the subject. Starting at an international level with any war and progressing to specific wars such as the Gulf Wars, Croatian Wars and the Vietnam conflict, the literature was further narrowed into Australians in any war, and eventually Australians in the Vietnam War in regard to partner health.

INTERNATIONAL VETERANS OF ANY WAR AND PARTNER'S HEALTH ISSUES

The Australian Centre for Post Traumatic Mental Health (ACPTMH) defines PTSD as manifesting in three distinct areas of symptomology. Before any diagnosis is made these symptoms must be present for at least a month and lead to significant distress resulting in dysfunction with normal activities of daily living. They explain that the time lag before a formal diagnosis is due to the majority of sufferers recovering with the help of existing support networks such as family and friends, according to ACPTMH, (2008) the three main areas of symptoms are:

1) Re-experiencing the event that includes intrusive distressing recollections of the trauma in the form of flashbacks, nightmares, intense psychological distress or physical reactions, such as sweating, heart palpitations or panic when faced with reminders of the event;
2) Avoidance of places, thoughts and feelings related to the event and emotional numbing such as loss of interest in daily activities and a feeling of detachment from others;
3) Hyperarousal with difficulty sleeping, irritability and poor concentration.

Kessler (2000) found that 12% of the American populace would suffer the affects of PTSD sometime in their lives. Within this diagnostic group, which features war veterans dominantly, it was found that many episodes spanning over years was an expected outcome. The residue of exposure to combat violence affected the sufferer across major functioning domains such as the stability of marriage,

employability and risk of suicide. Much research has been undertaken regarding the combat veteran but little is known regarding precise health implications upon the partner. However, the term 'secondary traumatisation' was first coined by Figley (1989) to describe manifestation of trauma in the partner of a veteran over time as they are exposed to ongoing PTSD symptoms in the veteran.

During Gulf War I, Australia provided a mostly naval contingent. There is little in the literature regarding psychological stressors experienced by Australians in the war and the combat experience will be different to the larger international ground forces. There are still parallels in the broader literature to the Australian experience. It is reported in the Australian Gulf war health study that by way of personal correspondence and reports to various committees, Australian veteran's stressors included constant fear of one's life, fear of inadequate medical training, uncertainty in relation to chemical alarms constantly going off, and difficulty breathing as a result of immersion or exposure to dust and chemicals (Sim, Abramson, Forbes, Glass, Ikin, Ittak, Kelsall, Leder, McKenzie, & McNeil, 2003).

There are many instances in the literature reporting about possible long-term health problems for Vietnam Veterans caused by contact with 'Agent Orange', which was primarily a defoliant aerial sprayed over the jungles of Vietnam in an attempt to deprive the North Vietnamese Army of cover. The defoliant included Dioxins and possibly an Acytl Cholinesterase inhibitor. This inhibitor is a common ingredient in house-hold insect sprays and in large quantities prevents 'clearing' of the neuro transmitter Acytl Cholinesterase across a synapse, thereby causing tetany in the victim (Zambon, Ricci, Bovo, Casula, Gattolin, Fiore, Chiosi, & Guzzinati, 2007).

Interestingly, in the United States (US) the President's Commission on Mental Health as reported in McCubin et al., (1975) found that 38% of marriages dissolved on the return of a serviceman from the Vietnam conflict. Many background variables were analyzed regarding the partner's support prior to

and during deployment in the form of letters from home and networks such as church and family. A combination of three variables were identified following a questionnaire regarding the quality of marriage pre and post deployment as contributing to the success of reintegration: the wife's assessment of the quality of marriage prior to service, the wife's level of dysfunction during the separation period, and length of marriage prior to separation. The report concluded that basically if the marriage had a solid foundation before the veteran's departure, then the union tended to continue after the veteran's return. Although there are some useful statistics in the report, it is a product of the era and tends to be written from a patriarchal point of view.

SELF REPORTED PARTNER'S PROBLEMS vs VETERAN'S PERCEPTIONS OF HEALTH

Anecdotally, extra health stressors are placed on the partners of US servicemen as their public health care system has no provision for blanket veteran/partner cover. Sharad, Avins and Mendelson, (1998) concluded that partners of veterans receive somewhat less cover and access to health services than veterans in the largest health care system in the US. This disproportionate access may cause an extra stressor on a partnership and they recommend that partners of war veterans should be integrated into the wider veteran health system.

The Australian experience is slightly better. Although partners have no access to the Department of Veteran's Affairs (DVA) health system via any 'coloured card' except when a war widow, they may be eligible for a partner's pension, which was ratified in the 2008/2009 national budget. This is somewhat based on recognition of the existence of secondary PTSD after prolonged exposure to a partner with PTSD (DVA, 2009).

An Australian study by Biddle, Elliott, Creamer, Forbes and Devilly (2002) theorised that clinicians naturally assume on presentation, that a veteran's core mental health problem is PTSD as defined by diagnostic manuals or symptom checklists, where in fact the veteran's main concern may be regarding a resultant co-morbidity such as depression or intrusive thoughts. The researchers wondered if there is a difference in health perception between the veteran, clinician and partner. The researchers found within the clinician/veteran/partner triad there was general agreement on easily observable manifestations of PTSD such as avoidance, anger, anxiety and alcohol use generated behaviour. Clinicians tended to focus on underlying pathological symptoms such as intrusive thoughts. Depression was the third most likely symptom to be endorsed after anger and anxiety. This conclusion may not have basis in fact as there is a semantic difference between the clinical and lay meaning of the word 'depression'. Alcohol use rated highest in the veteran/partner dyad possibly because it is easily recognisable and highly observable. A substantial proportion of veterans with PTSD use alcohol as a form of self-medication, with the partner often being a direct witness. The researchers highlighted the distinction between directly observable symptoms (such as alcohol problems) and less directly observable symptoms (such as intrusive thoughts). This is an interesting point that should be factored into studies of this kind. Generally the partner is the primary care giver and support person, so this may account for their overall higher rating of symptoms across the board compared to the clinicians. The researchers thought this observation could be due to clinicians seeing many veterans compared to the veteran/partner's relative isolation. Physical and somatic symptoms as reported by the veteran were a greater magnitude compared to the partner and clinician. Unfortunately, as with most of the literature, there was no somatic comparison between the veteran and the partner.

PARTNER HEALTH RATINGS

A report by Toseland, Labrecque, Goebel and Whitney (1992) on US veterans' caregivers' health pre and post support group involvement provided the only indication of physical and Likert-scale rated life satisfaction ratings in the literature. Although they were not identified as partners or partners as such, it would be fair to assume that the term 'caregiver' would be interchangeable to a great degree in this instance. Caregivers (*n*=42) were interviewed in their homes and their health status and physical wellbeing were measured on a 0 to 4 Likert scale with 0 being poor and 5 excellent. The respondents reported a mean of 2.56, just above average. The measures of anxiety and coping mechanisms were rated high in the tables presented in the published article but there was insufficient discussion in the article regarding the method of measurement or the range.

An Australian nutritional report that touches on the partner as caregiver, primary support and educator was conducted by Drummond and Smith (2006) who interviewed 50 Vietnam and World War II Veterans in South Australia. The most striking finding was that a veteran's level of health literacy was dependent on the partner's level of health literacy. The partner's level of health literacy was far greater than for the veteran, and in fact most veterans believed that their level of health was directly attributable to the care given by their partner.

THE 'SECONDARY POST TRAUMA AFFECTED' PARTNER AS CARE GIVER

Frančišković, Stevanović, Jelušić, Roganović, Klarić and Grković (2007) studied the effects of secondary PTSD on partners of veterans who had been engaged in the Croatian War. They found that two primary predicators to secondary PTSD are length of marriage prior to the veteran's deployment, and employment status. The study was undertaken in the Rejika School of Medicine in Croatia. Fifty

six partners of veterans completed a questionnaire with questions regarding secondary traumatisation. Given that the partner is 'gate keeper' of nutrition and health literacy, out of 56 partners studied, half had six or more symptoms of PTSD. It seems, therefore, that living with a traumatised veteran may negatively affect the rest of the family, especially the partner. Society expects the partner to maintain an empathetic and supportive primary care position with the ill husband. Solomon and Shalev (1995) as cited in Frančišković et al. (2007), introduced the concept of re-division of work and the empathy spiral. Traditionally, the partner of a returned veteran is seen to provide balance for the family, assuming the role of health educator and communication moderator. A re-division of roles occurs as the partner fills the communications space left by the husband with the children and she assumes the emotional and financial roles in the partnership. Fewer demands are placed on the husband as his partner commences to overcompensate and this in turn enables further under-functioning and therefore, increased demands on the partner, causing a downward spiral.

How does this translate into physical, spiritual, social and psychological problems for the partner? Unfortunately, the authors do not venture into the territory of health impact and the reader can only speculate about possible effects on the partner's health. The resultant full duty of care for the family may create feelings of resentment and exhaustion in the overburdened partner, which may increase stress and vulnerability for depression and the loss of identity. This is unknown.

A study by Eisen et al. (2006) between two cohorts of partners of US veterans deployed and non deployed during Gulf War 1, found that that there were no significant differences between the two partner groups' physical health conditions. This was a promising study for relevance but did not match demographics regarding partners of Vietnam Veterans, especially age and length of partnership with the veteran. However, the physical health categories it provided such as diabetes, the number of visits to doctors, and hepatitis and gastritis prevalence were useful in the design of the on-line questionnaire for

this study and as a comparison for results. Interestingly, in the Eisen et al. (2006) study the only difference between the two groups was prevalence of skin rashes. The partners of deployed veterans had a slightly greater frequency of skin rashes (28.3%) compared to (20.9%) for non-deployed veteran's partners.

THE AUSTRALIAN EXPERIENCE

In the Australian Institute of Health and Welfare (2007a) report regarding World War II DVA clients, it was estimated that some 143,000 people in this DVA treatment population have suffered some form of mental health issue. The most reported conditions were anxiety disorders, depression, alcohol dependence and PTSD. This aligns with veteran's experiences in all wars according to the broader literature. Australian veterans who served in Gulf War II deployment reflected much the same symtomology as international counterparts. A report by Sim et al. (2003) revealed main areas of health presentation included consistent psychiatric issues.

Australian studies of the health of Vietnam Veteran's partners are few, small and have mostly employed volunteer controls (Peach, 2005). They are still analogous with the more rigorous overseas studies in so much as the veterans, who often displayed PTSD symptomology and used alcohol as self-medication, induced a secondary PTSD in their partners.

SUMMARY OF CHAPTER 2

This review has indicated that research about PTSD, its related symptoms and the transference of similar stress symptoms to the partner, dominates pertinent literature. A vast amount of literature reported veteran PTSD research with only a tiny grain of literature focussing on the partner's health

needs. The Boolean algorithms helped exclude the non-violent and non-stress related literature, and teased out the very few spousal physical issues. Somatic manifestations due to the partner's proximity were scantly reported and can only be hypothesised upon at this point. Interesting themes to arise included the concept of 'the empathy spiral' and the shifting of responsibilities; also, the length and quality of marital time prior to deployment is reported to determine longevity of the post deployment union – although most Australian Vietnam Veterans are anecdotally known to have only married post deployment so this has limited applicability to the study population.

So, there is a gap in the literature regarding Vietnam Veteran's spousal health problems, yet some research done indicates that there may be quite vital health needs amongst these partners, including needs related to being the partner of a Vietnam Veteran. It is obvious that more research needs to be undertaken regarding these issues and that such research could be useful. The next chapter presents and discusses methods used to conduct the research study.

Chapter 3. Methods

In this chapter the methods applied to conduct the research are reported and explained. This chapter begins with the working time-line used to achieve the objectives of the study. The time line includes temporal blocks about gathering and analysing data, ethics submission and thesis production. The procedure required to gain ethics approval is explained and the sampling method is outlined including respondent procuring and a description of the target population. Regarding data collection, design and administration of the on-line questionnaire is explained and the chapter concludes with the method of data analysis.

Table 1. Time line (2009)

Feb-April	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov-Dec**
Commence ethics application	Finish and submit ethics application						
Commence developing on-line survey tool	Finish and test on-line survey tool						
		Gather data and analyze					
Write Introduction chapter	Write Literature Review and Methods chapter drafts				Write Results chapter	Write Discussion & Conclusion chapters	Polish thesis & submit

APPROVALS

Ethics approval by La Trobe University's Faculty of Health Sciences Human Research Ethics Committee (Appendix D) was granted before the study commenced. In addition, a formal letter of request (Appendix B – minus identifiers) for participant recruitment assistance was sent to the president of a national association of one Australian battalion that served in Vietnam in the 1960's. The letter had an attached copy of the *Letter of Information for Potential Participants* (Appendix C). Preliminary communication with the Association had occurred so that the researcher was aware the association would consider assisting recruitment depending on ethics approval and submission to the association of a formal application for assistance with adequate information for the request to be considered fully. The association responded in the affirmative but that letter is not attached in order to preserve anonymity of the association.

SAMPLE

A convenience sampling method was utilized for this study; the sample was partners of veterans from just one Australian Army battalion from the Vietnam War era, hence not a representative sample. High levels of bias were not considered a factor in this study as health problems are personal in nature and will vary from participant to participant. Although convenience sampling is widely used in nursing research, it has major flaws regarding limited generalisability and the possibility of high levels of bias due to the narrow population selection (Beanland, Schneider, LoBiondo-Wood, & Haber, 1999). However, a convenience sample is adequate for a survey that is considered a pilot study leading probably to further representative studies about the research (Beanland et al., 1999).

TARGET POPULATION

The Australian Institute of Health and Welfare, (AIHW) (2007a) estimated that Vietnam Veterans represented only seven percent of the total veteran population in Australia at that time, although as older veterans, especially WW II Veterans, die this percentage will rise sharply. The study population was bounded by the Australian Government's Department of Veteran Affairs' definition of a partner of a war veteran as a person who is legally married to, or is in a marriage-like relationship with, an Australian male veteran (DVA, 2009), and encompasses same-sex partners. Most likely the population's age range was from 40 years to early 70's.

There were no exclusion criteria. The inclusion criterion was that participants needed to be a partner of a surviving Vietnam Veteran, a partner as defined/recognised by the veteran, who would be passing on the request to participate in the study to their partner. Therefore, partners may or may not be married to the veteran, and may be male or female. A gender imbalance did occur however, because the study was focussed upon the health issues of partners of Vietnam Veterans who in this Battalion are all men and whose partners are mostly women. It was expected that the sample would be mostly well and not frail, although some participants may have some illness or be experiencing some frailty.

RESPONDENT RECRUITMENT

With the Battalion Association's assistance, an email was forwarded to surviving Vietnam Veterans who served with one Australian battalion. The primary purpose of the email was to distribute the Letter of Invitation (Appendix C) and include a Universal Resource Locator (URL) link to an on-line questionnaire (Appendix A). It was proposed that members forward the invitation to their partners; some members probably chose not to do so and their wives/partners possibly chose to not respond, but enough did (n=15) to provide an adequate sample for a pilot study.

The Battalion Association's email listing of surviving Vietnam Veterans who served within the Battalion is via sub-branches in each of the states. The Battalion Association informed that approximately 150 number of email contact addresses were sent the Letter of Invitation; however, not all of the email addresses may be current, not all Vietnam Veterans have partners, and not all of the Vietnam Veterans may have chosen to pass on the Letter of Invitation to partners. Therefore, it was not possible to know the number of potential respondents to then be able to calculate a 'response rate' to the questionnaire.

DATA COLLECTION

Data collection was via a password protected on-line questionnaire. The literature review revealed that little is known about the health of spouses of Vietnam Veterans; therefore, a previously applied, reliability and validity checked tool was not available. Therefore, a questionnaire needed to be developed as an on-line tool, with careful selection of items to be included – both aspects being presented and explained to follow.

Questionnaire Development as an On Line Tool

In the early development stage it was proposed that the questionnaire be written in the JAVA SERVER FACES™ environment in JAVA™ language as the researcher is proficient in both languages. JAVA™ is a language developed by Sun Microsystems™ and it has an object oriented nature ideal for this type of work. It was proposed that the questionnaire be housed on a server via an Asymmetrical Data Line at the researcher's home. This was quickly discounted due to reliability and time constraints. The questionnaire was eventually developed on a specialised host and maintained through a Secure Sockets Link (SSL) with a 32 bit encryption to ensure maximum data integrity. For perusal, the questionnaire can be accessed (using the password 'health') from the link:

http://www.surveymonkey.com/s_pass.aspx?sm=MQAI3XEnQ4aWfIM%2f9Dh%2b1Q%3d%3d

The questionnaire design aims were as follows:

- *Follow a holistic nursing care template*

From the outset, the questionnaire was developed to follow a pattern of holistic nursing care with its four themes encompassing physical, social, psychological and spiritual aspects of health. Each section had similar question blocks following the same pattern in each block.

- *Be jargon free and unambiguous*

The second design statement aimed at an unambiguous and jargon free, 'one question per object' approach written in a language understandable to respondents.

- *Have password protection*

A simple password was utilized to stop casual browsers of the Internet Web from contaminating data.

- *Be quick and easy to enter data*

As the questionnaire was primarily quantitative in nature, data entry mechanisms were important in the design to enable respondents to easily enter their choices. Hyper Text Markup Language (HTML) contains specialised data entry objects that are familiar to most people who use the internet or have ever filled out an on line form; therefore HTML was used.

In addition, design principals by Sue and Ritter (2007) suggest that a welcome screen be placed at the top of a survey questionnaire informing the participant about the length of the survey, its purpose and that all responses are anonymous – this was done. Simple instructions were included.

A password was provided to allow participants access to the questionnaire and restrict the general public; the survey was access controlled in an effort to focus upon the desired population. The password was "health" and was circulated amongst participants in an attachment to an email sent especially to members of the Battalion's Association by the Association.

When starting the design process with the initial layout on paper, I followed Sue and Ritter's (2007) suggestion that surveys start with simple demographic focussed, closed-ended questions that set the tone of the survey and are simple to answer. In an effort to make the survey questionnaire less 'clinical looking', a background colour of light pink was chosen - a cross sectional survey with 50 university students carried out by Sue and Ritter (2007) found that this colour had no negative connotations and engendered feelings of soft friendliness amongst participants.

Object Orientation

The concept of 'object orientation' is important to this study because it provides useful ready made data entry options, so the project followed that schema. Object theory states that computing is a composite of interacting objects, meaning that objects in a computer system are modelled as they are in the 'real world'. These objects have individual behaviours and can communicate with each other (Satzinger & Orvik, 2001). Although an abstract concept, data entry objects can easily demonstrate their object behaviour in a questionnaire with the following examples:

- *A radio button* is used because it has an 'once only' behaviour that is useful in questions where one only response is required, such as a person's age or a Likert 0 to 10 scale.
- *A tick box's* behaviour is multi choice and can be used in questions where there can be many answers such as co-morbidities where a respondent suffers from many ailments.
- *A drop down box's* behaviour means that it can hold alpha numeric content, which is practical for magnitude or set key words.
- *A text box* or text area is usually the only qualitative data entry object in a questionnaire, as was so for the questionnaire designed for this study. It allows typed text to be entered if the respondent wishes to expand on a theme. All objects have their own memory and communicate their information when the form is completed.

Questionnaire Item Development

As directed by the suggestions of Jackson and Furnham (2002), and also after consulting with an expert in the discipline of nursing, a grid was devised as a map for broad question categories into which suitable items could be placed. The grid followed the theme of holistic nursing care; that is, horizontal title sections were divided into Physical, Social, Psychological and Spiritual health. These holistic health categories chosen also reflected those listed in *Older People at a Glance*, a report by the Australian Institute of Health and Welfare (AIHW, 2007b). This report relied on participant's self-assessed data gathered during the 2006 national census and focused on health of males and females above the age of 50. Within the questionnaire, demographic questions, activities of daily living and mobility 'once off' close-ended questions were not put under the holistic headings.

Items, which were partly derived from literature and also from advice provided by the expert consultant who also had clinical and research expertise regarding the health of Australian war veterans and their families, were inserted under each holistic dimension title in the left vertical column that pertained to identifying a specific problem and measuring its affect on the participant's functioning.

As mentioned earlier, the broad layout followed a similar example of a tool used in a study conducted by Eisen et al. (2006) that investigated spouse health issues of American soldiers serving in the Gulf I War, and this tool was a starting point for designing the Likert scales. Points along the continuum used wording described by Edwards et al., (1997).

In the design phase, questions were grouped into categories and measurement characteristics determined, as presented in Table 2.

Table 2. Question layout

Question numbers	Category	Measurement
1 -6	Demographic	Nominal
7-9	Health, Mobility ADL (0 to 10 Likert Scale)	Ordinal
10-17	Holistic health self report	Nominal
18-19	Factors negatively affecting health (0 to 10 Likert Scale)	Ordinal

Pilot Testing

Woken, (2009) explained in an instructional paper for University of Illinoise students that a pilot study permits preliminary testing and an opportunity to check a questionnaire's structure and flow. It was found that wording of the questionnaire and format was user-friendly, the questionnaire was pilot-tested by having a partner of a Vietnam Veteran answer the questionnaire on-line. She was able to access and complete the questionnaire easily and had no suggestions for improvement of wording and directions. She was not eligible to participate in the study, so was able to 'pilot-test' the questionnaire. Although having more than one person pilot-test the questionnaire was ideal, limited time to undertake the research as an honours thesis project, limited the finding of others to do the pilot-testing.

Questionnaire Administration

Respondents completed the on-line questionnaire that gathered tabulated data through an embedded graphic user interface (GUI). The GUI was designed by the host company to show basic descriptive

statistics as the questionnaire progressed. Each question had a graphic component that displayed a histogram and a textual component that counted the number of participants, their percentage rating and response count. These results could be shared or downloaded in Microsoft Excel™ format and compressed in the archive programme originally written by Phil Katz and now widely known as the ZIP format for transmission. Each participant's response was automatically placed in a data base and could be browsed on a person-by-person basis. All data was anonymous and transmissions between the researcher's computer and the server were done via Transport Layer Security (TLS). The TLS protocol allows client/server applications to communicate across a network in a way designed to prevent eavesdropping, tampering, and message forgery. TLS provides endpoint authentication and communications confidentiality over the Internet using cryptography; it was denoted by the 'locked padlock' icon present on the researcher's computer (Burd, 2001).

DATA ANALYSIS

The Aim of Data Analysis

The desired outcome of data analysis effort in this study was to organise the raw data from the participants of the study into meaningful information by descriptive statistics in an attempt to recognise emerging patterns (Minichiello, Sullivan, & Greenwood, 2004). Descriptive statistics is a process of reducing data into manageable segments allowing researchers to describe various characteristics and summarise data under study.

As explained by (Minichiello et al., 2004), this is achieved firstly by measurements of central tendency that may be the:

- *Mode*: Represents data that occurs most frequently.

- *Median*: Is the exact centre of ascending or descending data where one half lies above and the other half is below.
- *Mean*: Is the most common form of average and is simply obtained by adding a data set together and dividing the sum by the number of data. The mean represents the centre of a distribution in a sense that the sum of the differences between the mean and each individual data will always equal zero.

Choosing a Central Measure for Data

Martin and Peirce (1994) suggest that the unwary statistician may mislead the reader by using the incorrect measure of central tendency. If the distribution is skewed, the three measures of central tendency can be markedly different. They suggest the mean is the most common measure of central tendency due to its stability between sets of data. They caution that this too can be misleading if the set has "outlying" data that has been introduced through error or contamination. When the three measures of central tendency coincide, then the distribution is said to be symmetrical.

Minichiello et al., (2004) states that to describe various characteristics and summarise data under study, the dispersion and spread of data needs to be calculated, including frequencies. Therefore, needing to be analysed was *variance* (dispersion and spread). The range was required to be analysed, this being the spread of data from the lowest to the highest and is useful in the initial organization of sets. The semi quartile range was required, this indicating the range in the middle 50% of scores, which is useful because it remains stable as it is bordered by those margins and is not affected by a single extreme score. Also needing to be calculated was standard deviation (SD) – this being a measure of the variance of the data from the mean. It is stable from one data set to another but like the mean, it can be misleading if the 'bell curve' is markedly skewed.

Beanland (1999) illustrates the relationship between level of measurement and measures of central tendency/variability. Table 3 is an expansion of Table 2 and illustrates commonly used measures of central tendency and variability used with their measurement category. This was the researcher's guide during the data analysis phase of this study.

Table 3. Questions and measures

Question numbers	**Category**	**Measurement Category**	**Central tendency**	**Variability**
1 -6	Demographic	Nominal	Mode	Modal percentage, range, frequency distribution
7-9	Health, Mobility ADL	Ordinal	Mode, Median	Range, Percentile, semi-quartile range, Frequency distribution
10,12,14	Holistic health self report	Nominal	Mode	Modal percentage, range, frequency distribution
11,13,15	Holistic health affect on life	Nominal	Mode	Modal percentage, range, frequency distribution
18-19	Factors negatively affecting health	Ordinal	Mode, Median	Range, Percentile, semi-quartile range, Frequency distribution

Recognising Patterns

For data analysis, quantitative questions on the on-line questionnaire were grouped together into logical categories. For example, questions one to five were purely demographic and ten to seventeen were concerned with specific health problems and the health impact on the respondent's life. Raw data was downloaded from the web site and coded into a text file. The text file was in turn coded into Comma Separated Values (CSV) format and imported into the Statistical Package for the Social Sciences (SPSS™) programme. The CSV format, which pre-dates personal computers, was chosen as it has been the mainstay of data entry for decades due to its universal flexibility, clarity and ease of formatting. The SPSS™ programme has rigid data input format rules that can be easily accommodated by the CSV format. The resultant SPSS™ outputs for each question were then compared to the on-line version for transcription error detection.

The researcher of this study analyses his environment visually in normal day-to-day operation and is deemed primarily a "visual person". To obtain an initial "feel" for the data, each question was tested for central tendency and variance, with a histogram produced for each question to check its symmetry and possible skewness. Keeping in mind that "doing" a task is also a successful data collection activity that has worked well in the past for the researcher ("hearing" unfortunately rates a dismal third place in the triad), each question's histogram was placed on a table so that the entire questionnaire could be overall viewed from above; it was hoped that emerging patterns could be spotted using this method. The questionnaire was structured with questions from a demographic perspective at the start to health in the middle and ending with self reported Likert quality of life and veteran impact on health

measures, so similar patterns were place together to explore these further if need be, and similar possible impacting themes were placed together to gauge patternation.

Qualitative Component.

Anecdotal evidence and the researcher's personal experience in designing on-line forms has shown that people are reluctant to fill out text fields compared to singular radio buttons and drop down options. However, there is little evidence to support this in the literature. In an ad hoc study by Chui Chui Tan (2009), people were asked to complete four on-line applications, one for each major search engine. Their eye movements over the forms were tracked using a thermal technique in an effort to gauge the "usability" of the form and to analyse design best practice. Figure 1 shows that the study ascertained participants lingered across a text area and took no notice of the small asterisk based instruction line. The participants tended to complete a simple uncluttered single column form much more readily and tended to focus on the task at hand until completed.

Figure 1. Form eye heat map.

Image from: “Web site design guidelines: an Eye tracking study” © C. C. Tan.

The majority of the on-line study reported in this thesis was formatted for quantitative input; it was decided in the planning stage to include a qualitative element represented as ‘opportunistic’ text fields. Text boxes were provided beneath each nominal self-reported health and health impact question grid in the questionnaire in the hope that respondents would wish to expand in narrative form upon the grid’s theme and how it had affected their life’s functioning. Each section of qualitative text was cut and pasted onto a Word™ document and emergent themes were identified by content analysis through highlighting and coding into themes that were then categorized under one of the four holistic nursing foci by a ‘letter-boxing’ process described by Annells and Whitehead, (2007).

ETHICAL CONSIDERATIONS

The Battalion’s Association was assured that the researchers would not be accessing the association's database of email addresses of surviving veterans of the Battalion, nor would the researchers be accessing any private information held by the association about the surviving veterans.

Informed Consent

A *Letter of Information for Potential Participants* (Appendix C) was forwarded by email to surviving veterans of the battalion by the Battalion's Association via a representative of the association's executive committee. The veteran was asked to pass on the *Letter of Information for Potential Participants* to his partner. The veteran may have chosen not to do that, or their wives/partners may have chosen not to respond, but those partners who did respond, were indicating informed consent by providing data on the questionnaire. If the partner was able to read and understand the *Letter of Information for Potential Participants* (Appendix C), and to follow directions to access the questionnaire on-line, and was able to successfully supply data into the questionnaire, they were regarded as competent to give consent.

Emotional Stress

It was anticipated that due to the nature of the study, emotional stress or distress may be caused for respondents. In the Letter of Invitation to Participate (Appendix C), respondents were informed that if they experience emotional distress from responding to the questionnaire, that free counselling was available to them as a partner of a Vietnam Veteran from the *Veterans & Veterans Families Counselling Service* (Government funded) with details about how to contact that service provided. This service has experienced, qualified counsellors able to address emotional responses to matters that may have arisen and perhaps stressed or upset the partner from answering the questionnaire. The respondents were told that if they wished to not answer a question or subset of a question, that was acceptable.

Data Security

Security measures were designed and included in the site format for the questionnaire. These included password protection to prevent the accidental or malicious completing of the form and thus contaminating the survey and Secure Sockets Link (SSL) between the site and the researcher's home computer to prevent the interception of transferring data by third parties. The on-line responses to the questionnaire were anonymous. Each respondent's data was automatically formatted into tabular form and viewed via the SSL link; the tables were password protected and only accessible by the student researcher.

Within all questions, including demographic data questions, no personally identifying information was requested of respondents to the questionnaire. All analyses were reported and discussed as collective descriptive statistics or aggregated content analysis (of qualitative data). The automatically generated emails containing data and any other associated documents (regarding analysis) was stored on a password protected computer and backed up on an encrypted flash drive in an office at the student researcher's home. When the study had concluded, all hard copies of questionnaire responses and the electronic raw data will be stored for a period of 5 years, as is required by the Public Records Office of Victoria Standard (PROS02/01) and then destroyed. Storage will be within the secure research archives of the Division of Nursing and Midwifery in George Singer Building, Bundoora Campus of La Trobe University.

RIGOR

Does the questionnaire measure what it is supposed to; that is, the health concerns of a veteran's partner? Content validity in this study was achieved through review of content by an expert in the field

of nursing who has had experience with research of veterans and carers, plus has nursed both veterans and their partners. She provided feedback that allowed the researcher to adjust the content of questions, plus sequencing and logical flow. Beanland et al., (1999) concludes that reliability is the measure of the instrument's consistency, stability and equivalence. This was sought by modelling the questionnaire's questions along similar lines to "Older people at a glance" (2007b) and similar surveys detected during the literature review. However, specific testing of reliability and validity of the questionnaire was beyond the scope and time-limit of this pilot-study, which is also an Honours study thesis. If the on-line questionnaire is to be used for a follow-up, generalisable study, the questionnaire requires thorough testing for reliability and validity.

The on-line questionnaire was developed using the commercial site "Webmonkey™ .com". These sites provide an easy and accessible platform for questionnaire development. The platform provides "skip logic" which is a method of flow control governed by Boolean statements and "forced flow" whereby a respondent may not proceed until a question is answered. Evans, et al., (2009) found that these sites could be a "double edged sword" concerning rigor. The ease and availability of design enables anyone to manufacture a professional looking quality questionnaire using a company logo without content validity or reliability. They concluded that although the end product may look good, the questionnaire would be useless without rigor. In an article about the proliferation of invalid questionnaires, Rempusheski, (1990) stressed that without reliability and validity, the end product impacts on the organisation and the profession negatively.

DISSEMINATION OF RESULTS

The results of the survey are being reported within this Honours Thesis and it is anticipated that the results will be published in relevant professional refereed journals; results may also be presented at

relevant conferences and seminars. A summary of the results will be provided to the Battalion's Association for either posting on the association's website or for accessing on request – this will be at the discretion of the Battalion's Association. Also, a copy of the Honours Thesis will be provided to the association.

SUMMARY OF CHAPTER 3

Presented and explained in this chapter were methods applicable to the study, as summarised to follow.

Relevant approvals for the conduct of the study of health of partners of Australian Vietnam Veterans were sought and a timeline drawn up during the early stages of planning. It was decided that a convenience sample be selected of partners of veterans who served with one Australian Battalion in the Vietnam War. The selection mechanism was via a letter of invitation (Appendix C) that was distributed by the Battalion's Association to surviving veterans of the Battalion – for forwarding to their partners. The letter contained an explanation, password and a URL to the on-line questionnaire and explained ethical considerations such as the right not to answer questions and a link to a counselling service in the event of distress. Items and layout for the on-line questionnaire followed the nursing holistic paradigm of care and according to accepted web layout rules. Data entry mechanisms were facilitated via object oriented buttons and text boxes.

Data collection was achieved as participants (n=15) entered responses to questions through a hosted on-line password protected questionnaire. Raw data was downloaded and coded into a CSV file that was imported into the SPSS™ programme to ascertain central tendency and generate histograms of each question for study and comparison. The output of the SPSS™ programme was compared to the on-line version for error detection in coding. Although some

processes added to rigor of the questionnaire, reliability and validity were not fully tested and will need to be achieved before use of the questionnaire as a toll for any generalisable research. The chapter concluded by outlining dissemination of the findings.

The following chapter will present results of the study that sought to answer the research question "Regarding partners of Vietnam veterans, what are their current holistic health issues?"

Chapter 4. Results

In this chapter, the results of the study are presented, including in graphic and/or tabular form when necessary, to answer the question: 'Regarding partners of Vietnam Veterans, what are their current holistic health issues?' The sequence of presentation of results is congruent with the sequence of questions in the questionnaire. Demographics of respondents are firstly presented and encompass questions 1 - 5. To follow, the survey results are presented, encompassing questions 6 - 19. Descriptive statistics for the results are provided as appropriate for each question, with some bar graphs and/or tables also presented regarding results. For questions that deal with physical, psychological, spiritual and social issues, and that encompass holistic nursing arenas, tables are presented dealing with issues and impact in close proximity for clarity and comparison.

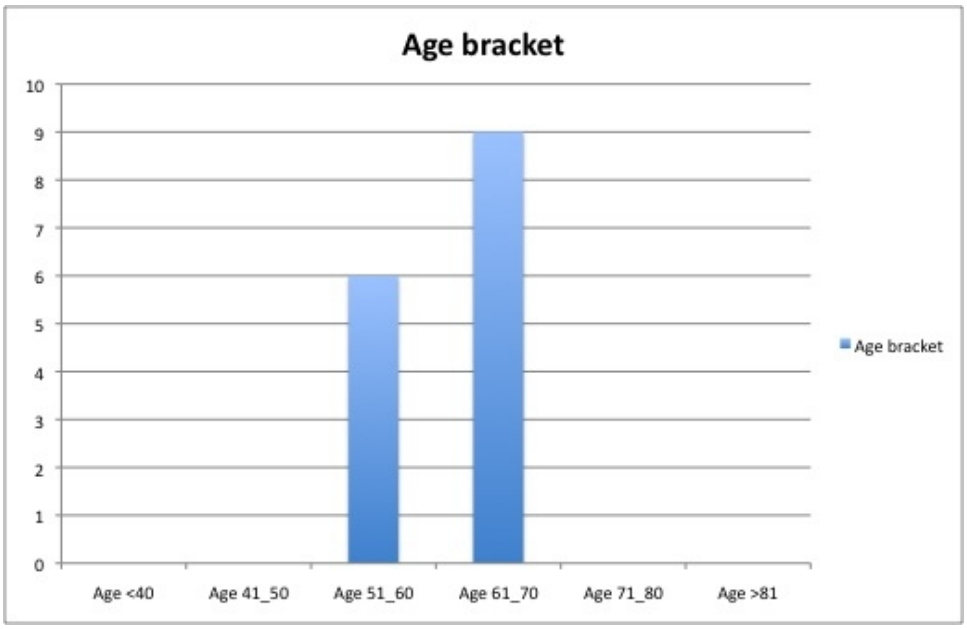
The number of respondents was fifteen, so the sample size was 15 (n=15). The number of responses for each question was n=15 unless otherwise stated before the applicable question. Percentages are rounded to the nearest number and represent the percentage of the numbers of responses for that question (n size).

SURVEY RESULTS - DEMOGRAPHICS OF RESPONDENTS

Question 1. Age

The most common age range grouping was between 61-70 years, as 60% of respondents were within that age range. As indicated in Figure 2, the remaining 40% were aged between 51 and 60 years.

Figure 2. Bar graph of age groupings of respondents



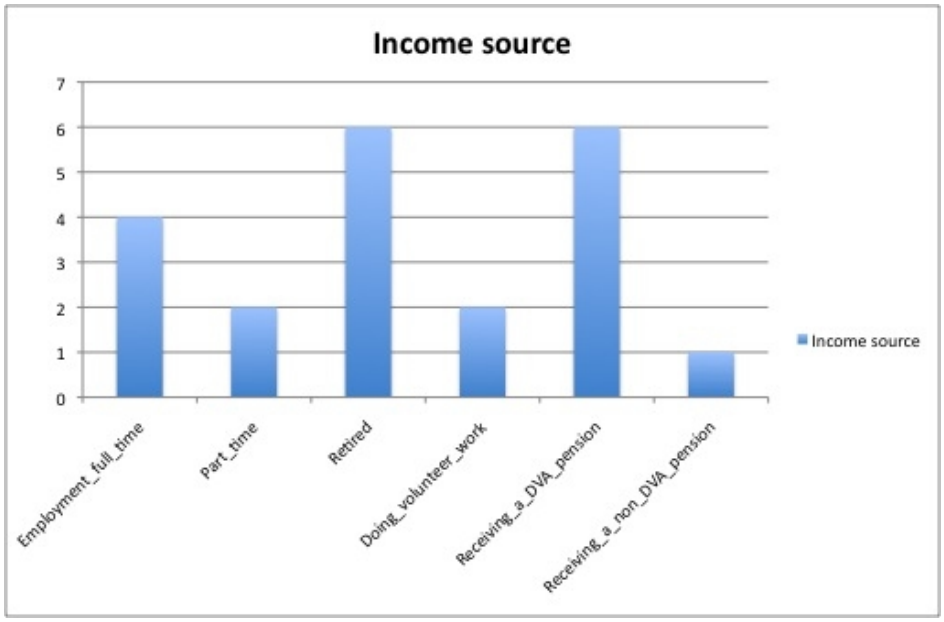
Question 2. Gender

Fourteen of the respondents were female (93%) but one was male. All respondents answered this question (*n*=15).

Question 3. Employment status and income source

There were multiple responses to the question about employment status and income source; some respondents selected multiple answer options indicating various combinations of employment/retirement status and pension receipt or doing volunteer work. Three of the retired respondents received a DVA pension, one of whom also did volunteer work. One retired respondent received a non-DVA pension and one working full time also received a DVA pension. Figure 3 shows that the results for this question are bi-modal with the 'receiving a DVA pension' and 'being retired' categories each having a frequency of 6.

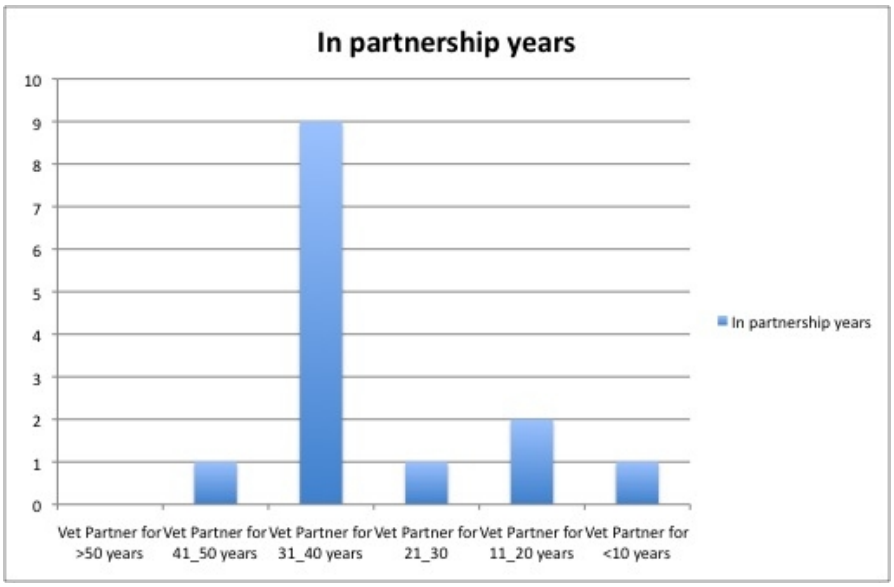
Figure 3. Bar graph of employment status and income source of respondents



Question 4. Years partnered with a Vietnam Veteran

One person declined to answer this question (*n*=14). The most frequent response (mode) was having been partnered with the veteran for between 31 to 40 years, which was indicated by 9 respondents (64%). Figure 4 indicates, as a bar graph, the results for this question. The range was from less than 10 years to between 41 to 50 years.

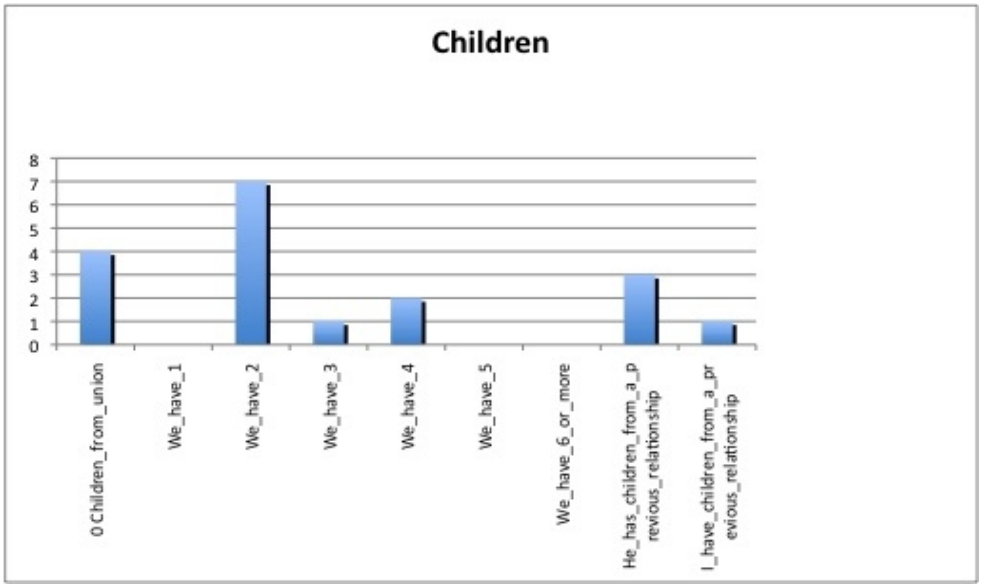
Figure 4. Bar graph showing the years in partnership with a Vietnam Veteran



Question 5. Children

One respondent declined to answer this question (*n*=14) that allowed multiple responses representing combinations of children from the union, children from the veteran's previous relationships and children from the respondent's previous relationships. One respondent had children from the veteran's previous relationships and from her own but they had no children from their union. One other respondent had no children from the union with the veteran but had children from the veteran's previous relationship. Both these respondents who recorded no children from the union were the only respondents who had children from previous relationships. Figure 5 indicates the highest number of respondents (mode), a frequency of 7; these respondents had two children resulting from the relationship**.**

Figure 5. Bar graph showing the origin of children within the partnership

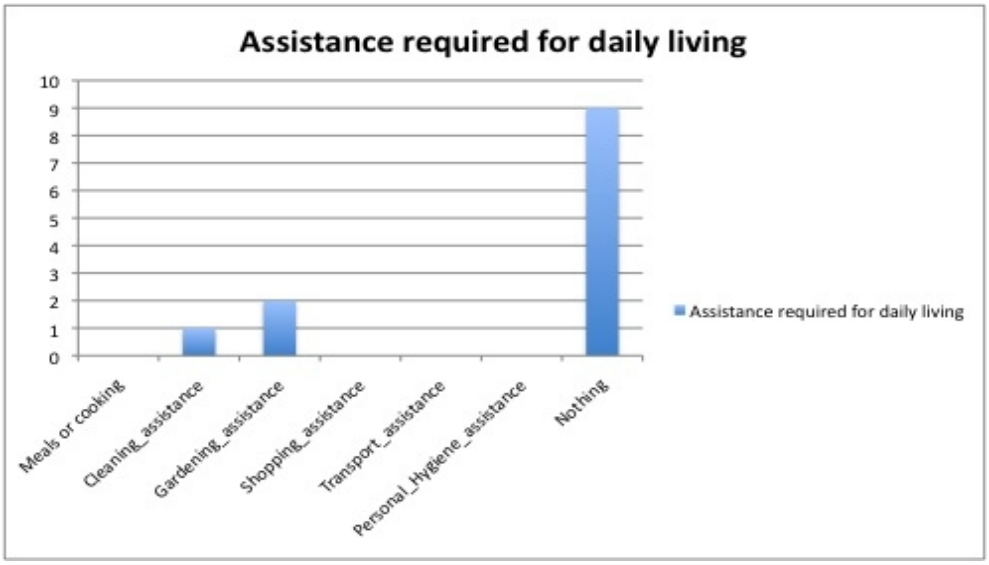


SURVEY RESULTS – ABOUT HEALTH ISSUES

Question 6. Assistance required for daily living

This question allowed multiple responses and four people chose not to answer the question (*n*=11). Figure 6 indicates a majority of respondents chose the 'nothing' option which recorded a frequency of nine. One respondent chose the combination of 'gardening' and 'cleaning' and wrote, *"I employ assorted trades people because my veteran believes he is unable to help or is unwilling"*.

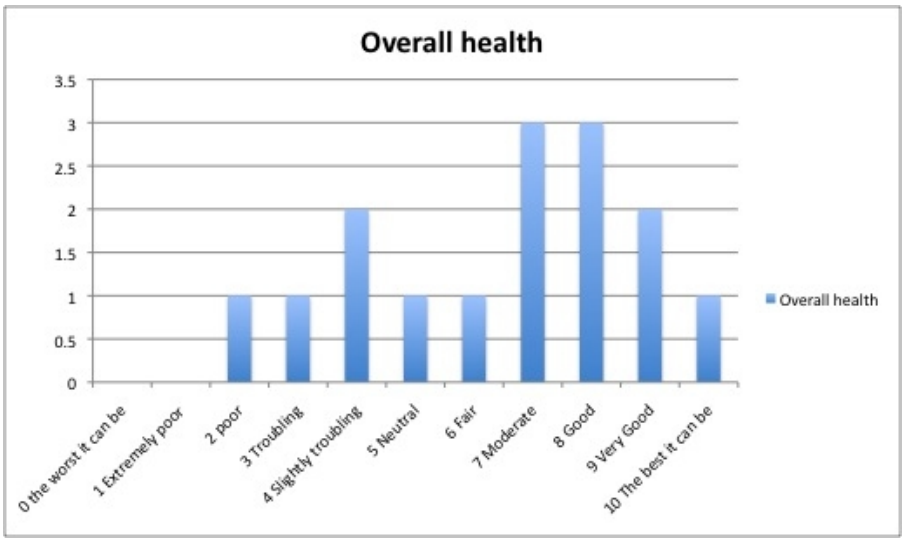
Figure 6. Bar graph showing assistance required for daily living



Question 7. Self-reported overall health

This question employed a 10-point Likert scale for respondents to rate their overall self-reported health, 0 being the worst it could be and 10 as the best it could be. The entire sample answered this question (*n*=15) to produce a bi-modal response as 20% of respondents indicated either that their overall health was in the 'moderate' or 'good' category (see Figure 7).

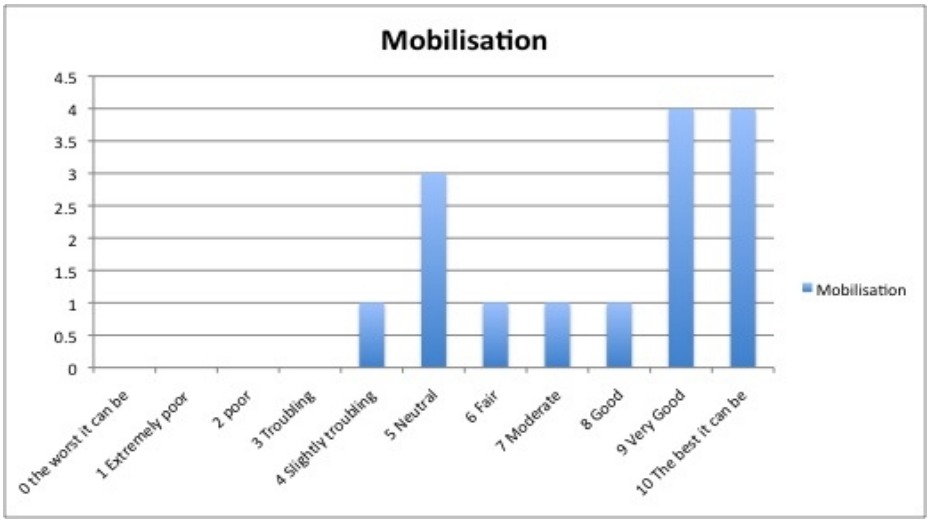
Figure 7. Bar graph showing self-reported overall health



Question 8. Ability to walk and mobilise

This question employed a 10-point Likert scale for respondents to rate their ability to walk and mobilise; 0 being the worst it could be and 10 as the best it could be. The entire sample answered this question (*n*=15). As is displayed in Figure 8, this question produced a bi-modal response as 27% of respondents indicated either their ability to walk and mobilise was in the 'very good' or 'the best it can be' category. There was a smaller peak as 20% of respondents chose the 'neutral' option.

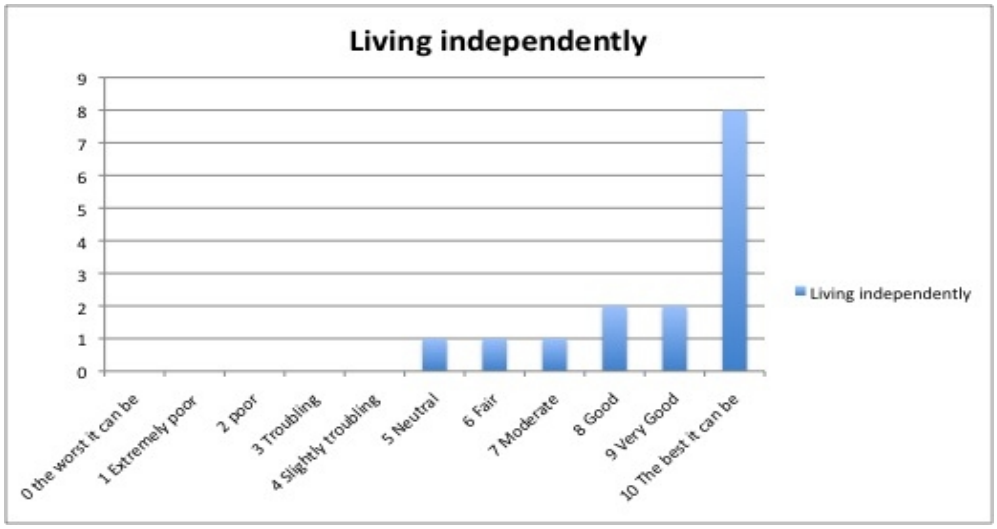
Figure 8. Bar graph illustrating self-reported ability to walk and mobilize



Question 9. Ability to live independently

This question employed a 10-point Likert scale where respondents rated their ability to live independently; 0 being the worst it could be and 10 as the best it could be. All answered this question (*n*=15) and as Figure 9 indicates, there was a 53% response (8 people) for the 'best it can be' option.

Figure 9. Bar graph illustrating self-reported ability to live independently



HOLISTIC HEALTH SELF REPORT AND HOLISTIC HEALTH AFFECT ON LIFE

Question 10. Physical health problems

This question, which listed 33 items as potential physical health problems, allowed multiple responses and was answered by the entire sample (*n*=15). As Table 4 indicates, the mean number of physical health problems selected per respondent was 3.9 – the range was 1 to 9 items identified per respondent. Skeletal health problems predominated with neck and arthritis problems the most frequently indicated, both items incurring a frequency of 6 – spinal problems was an item selected by four respondents. Chronic pain and high blood pressure were also frequently selected items, with a frequency of 4 and 5 respectively. In this question, 66.66% of items were selected at least once.

Table 4. Frequency of physical health problems (Question 10), and impact on health in descending order by greatest impact (Question 11)

Physical Health Problem	**Question 10 Frequency of problem**	**Question 11 Greatest impact**	**Question 11 Moderate impact**	**Question 11 Least impact**
Arthritis	6	5	1	
My spine	4	4		
My neck	6	3	3	
Chronic pain	4	1	1	
My skin	3	1		2
Headache	3	1		1
Fluid retention	3	1		1
My bowel	3	1		1
Osteoporosis	3	1		1
My eyes	3	1		
Gynaecological	1	1		
Hormone	2	1		
High blood pressure	5		4	
My kidneys	2		2	
Asthma	1		1	
My bladder	1		1	
My ears	1		1	
My teeth	2		1	
Diabetes	1			1
My sinuses	2			1
My heart	0			
Low blood pressure	0			
My blood	1			
A stroke	0			
Emphysema	0			
My liver	0			
My gall bladder	0			
Broken bones	0			
My mouth	0			
Allergies	1			
Renal dialysis	0			
Cancer	0			
Nothing	0			
Re Question 10: mean number of problems selected	**= 3.9**			

Question 11. Health impact of physical health problems

This question of 33 items, identical in item and item order provided in question 10, and allowing multiple responses, was answered by the entire population (*n*=15). Respondents could choose one of three ratings of magnitude for each physical health issue they had selected in the previous question. A

magnitude of 1 indicated greatest impact on health of the physical problem, 2 a moderate impact and 3 least impact. As indicated in Table 3, arthritis, spine and neck issues caused the greatest impact on respondents. The highest impact was recorded for 'neck' (*f*=6), 'arthritis' (*f*=5), 'spine' (*f*=4) and 'chronic pain'. Regarding moderate impact on health, 'high blood pressure' (*f*=4), 'my neck' (*f*=3) and 'my kidneys (*f*=2) were the most frequently selected items. In the least impact option, 'my skin' had a frequency of 2. So, arthritis, spine and neck were the physical health issues that rated most highly both in incidence with issues and impact on health. No selected physical health problem registered across all of the impact options.

Question 12. Mental health problems

This question of 16 listed items regarding possible mental health problems allowed multiple responses and was answered by the entire population (*n*=15). As Table 5 indicates, 'depression' and 'nothing' were the most often selected items, being chosen six times each. The mental health problem next frequently selected were anxiety (*f*=4), followed by stress, mood swings, insomnia and despair recording a frequency of 3. For this question, 81.25% of items elicited a response. One respondent wrote: "*My husband's health and mental problems sometimes get on top of me, creating anxiety and anger, but not on the whole*". The mean number of mental health problems selected per respondent was 1.7 (excluding the option of 'nothing') – the range was 0 to 9 items selected per respondent.

Table 5. Frequency of mental health problems (Question 12), and impact on health in descending order by greatest impact (Question 13)

Mental Health Problem	Question 12 Frequency of problem	Question 13 Greatest impact	Question 13 Moderate impact	Question 13 Least impact
Depression	6	5	1	
Anxiety	4	4		1
Stress	3	3		
Nothing	6	3		
Mood swings	3	2	1	
Insomnia	3	2		1
Despair	3	1	2	1
Having enough emotional support	3	1	1	1
Anger	2	1	1	
Crying	1	1		
Grief	2	1		
Post Traumatic Stress Disorder	1	1		
Alcohol use	1			1
Illicit drug use	0			
Bi polar disorder	0			
Schizophrenia	0			
Re Question 12: mean number of problems selected (excluding 'nothing')	**= 1.7**			

Question 13. Health impact of mental health problems

This question allowing multiple responses, was not answered by 2 people (*n*=13). The 16 items were identical to those in Question 13. Respondents could choose one of three ratings of magnitude of impact on health for each identified problem: 1 for greatest impact, 2 for moderate impact and 3 for least. As indicated by Table 5, the mental health problems that had the greatest impact on respondent's health included depression (*f*=5), anxiety (*f*=4) and stress (*f*=3). Two people registered despair as a problem that had a moderate impact on their health; despair registered across each magnitude as also

did ‘not having enough emotional support’. The triad of depression, anxiety and stress was predominant in results to both questions 12 and 13, as discernible in Table 5.

Question 14. Social health problems

This question allowed multiple responses and the question was answered by the entire population (*n*=15). Within the question, 28 potential social health problems were listed. The mean number of social health problems selected per respondent was 4.2; range was 0 to 13 items selected per respondent. As illustrated in Table 6, needing to be a ‘peacemaker’ was the most frequently selected problem (*f*=7) that was selected by almost half the sample. ‘Communication with my partner’ registered a frequency of 5. Problems communicating with the veteran, not wanting to socialise, finances and money, worrying about the health of children, decision making and not being able to mix well were the other common selections. One respondent wrote: *“I am basically shy and like my own company which impacts on the ability to socialise. Have concerns for my daughter who is not employed and for her daughter as they are not established in their own home. She is a single mum”.* In Question 14, 85.7% of items elicited a response.

Question 15. Health impact of social health problems

This question allowing multiple responses was not answered by 2 people, (*n*=13). The 28 items were identical to those in Question 14. Respondents could ratings of magnitude of impact on health for each identified problem: 1 for greatest impact, 2 for moderate impact and 3 for least impact. ‘My relationship with my partner’ most commonly had the highest impact on the partner’s health (*f*=4) followed by concern about the welfare of the children (*f*=3). ‘Needing to be a peacemaker’ rated highly in the social health problems identified in Question 14 but did not seem to affect the health of respondents greatly overall; however, 2 registrations for this did occur in the greatest magnitude of impact. ‘Communication with my partner’ and ‘not mixing well with other people’ registered in all of

the magnitude levels. ‘Concern regarding relationship with their partner’, ‘concern about the welfare of children’ and ‘finances’ all rated highly as an impact factor regarding health.

Table 6. Frequency of social health problems (Question 14), and impact on health in descending order by greatest impact (Question 15)

Question 16. Spiritual health problems

Social Health Problem	Question 14 Frequency of problem	Question 15 Greatest impact	Question 15 Moderate impact	Question 15 Least impact
My relationship with my partner	4	4		
Concern about the welfare of my or my partners' children	4	3	1	
Finances (how to spend/save money)	3	3		
Communication with my partner	5	2	2	1
Not wanting to socialise	3	2	1	
Needing to be a 'peacemaker'	7	2	1	
Family harmony	2	2		
Concern about the health of my or my partners' children	3	2		
Not having enough money	3	2		
Concern about having enough money in retirement	3	2		
Nothing	4	2		
Not mixing well with other people	4	1	1	1
Decision making with my partner	3	1	1	
Differences in opinion with my partner about how to raise children	2	1	1	
Not fitting in with my neighbourhood	1	1		
Ensuring my partner and I share responsibilities	2		1	1
Concern about the health of my or my partners' grand children	2		1	1
Not being able to socialise with others	2		1	
Ensuring my partner and I share housework	1		1	
Concern about the welfare of my or my partners' grand children	2		1	
Withdrawal of or disconnection from the family	1		1	
Being lonely	2		1	
Having enough social support	1			1
Friendship(s)	3			
Separation during my partner's active service	0			
Standard of housing	0			
Frequent moving	0			
Having sufficient transport	0			
My safety	0			
Re Question 14: mean number of problems selected (excluding 'nothing')	= 4.2			

Listing 14 items, this question allowed multiple responses and was answered by the entire population (*n*=15) with 52% of respondents indicating that they had no spiritual problems, this being the most common response (*f*=10). The mean number of spiritual health problems selected per respondent was 0.6 – the range was 0 to 5 items selected per respondent. The most common spiritual health problems recorded were 'not having sufficient meaning or regarding my life', 'feeling guilty' and 'lack of feeling at peace', all with a frequency of 2. In this question, 50% of items elicited a response.

Question 17. Health impact of spiritual health problems

This question allowed multiple responses for 14 items and was not answered by 5 people (*n*=10). The items were identical in type and order as in Question 16. Respondents could choose one of three ratings of magnitude of impact on health for each identified spiritual health problem: 1 for greatest impact, 2 for moderate impact and 3 for least impact. As Table 7 indicates, the option of selecting 'nothing' had the greatest frequency of 3. Next frequently recorded choices in the magnitude of greatest impact were 'not having sufficient meaning or purpose regarding my life', 'feeling guilty' and 'lack of feeling at peace' all with a frequency of 2. One respondent wrote: "*I attend church quite regularly. My partner does not attend*".

Table 7. Frequency of spiritual health problems (Question 16) and impact on health in descending order by greatest impact (Question 17)

Spiritual Health Problem	Question 16 Frequency of problem	Question 17 Greatest impact	Question 17 Moderate impact	Question 17 Least Impact
Nothing	10	3		2
Not having meaning or purpose	2	2		
Feeling guilty	2	2	1	
Lack of feeling at peace	2	1		
Not being able to forgive	1	1		
Not wanting to forgive	1	1		
Matters about an after life	1	1		
My relationship to 'God'				
Spiritual distress				
A crisis in faith				
Religious doubts				
Anger at religion				
Anger at God				
Prayer				

Re Question 16: mean number of problems selected (excluding 'nothing') **= 0.6**

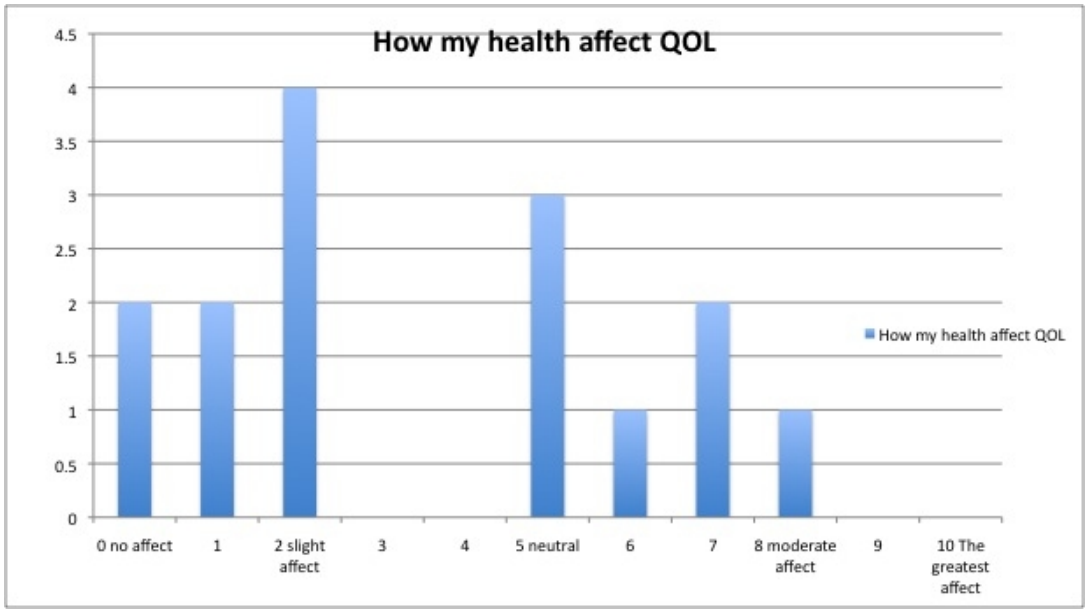
FACTORS NEGATIVELY AFFECTING HEALTH

Question 18. How health negatively affects quality of life

This question employed a 10-point Likert scale where respondents rated how their health has negatively affected their quality of life. This self reported quality of life as a function of health was represented by a 0 for having no negative impact and 10 as the greatest negative impact. All the sample answered this question (*n*=15). As is displayed in Figure 10, the most common response was 26.6% of respondents (f=*4*) recording a '2' to indicate their health as having a slight impact on their quality of

life. Also 20% recorded ‘neutral’. The mean response was 2.1. However, four respondents indicated that the impact was greater than neutral, up to the level of a moderate effect.

Figure 10. Bar graph for self reported negative impact by health on quality of life

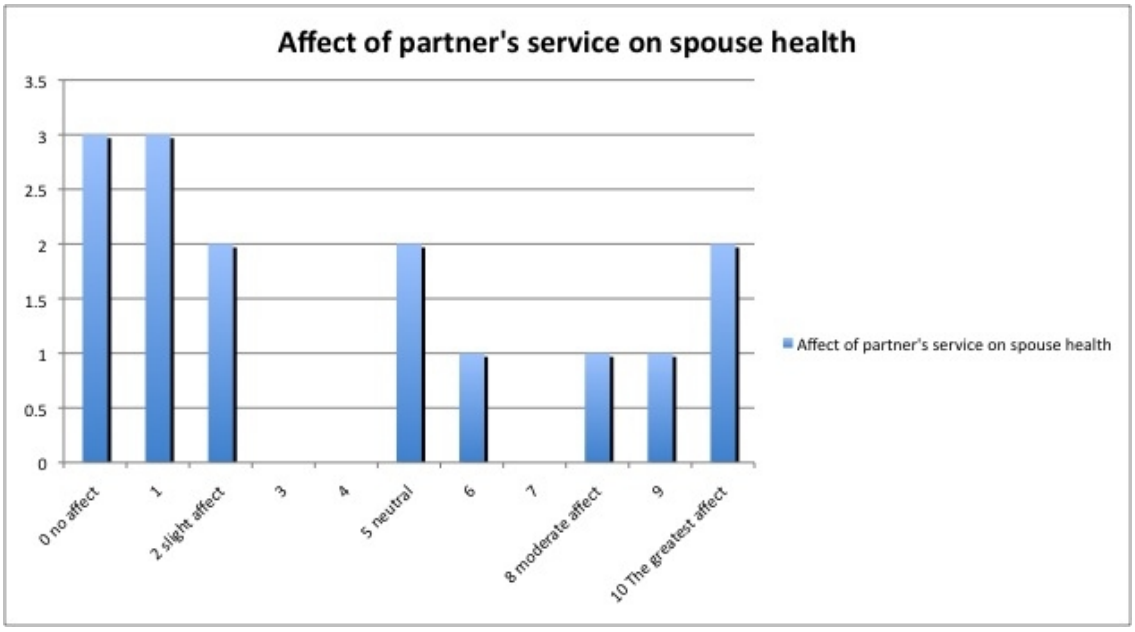


Question 19. How health has been negatively affected by partner’s service in Vietnam

This question employed a 10-point Likert scale where respondents rated how their partner’s service in Vietnam negatively had impacted on their health. Two people chose not to answer this question (*n*=13). The self reported negative impact on a respondent’s health due to their partner’s involvement in the Vietnam conflict was represented as 0 having no negative impact and 10 as the greatest negative impact.

Figure 11 illustrates a bi-modal response with 20% of respondents representing a frequency of 3 indicating ‘0’ or ‘1’, which translates as no negative affect or almost none. Two people recorded a slightly negative or neutral effect on health. The mean response was 1.87.

Figure 11. Bar graph of the self reported negative impact on health due to their partner's Vietnam service



However, the results indicate 3 groupings of respondents. The largest group (53%) recorded little or no health impact in this regard. The middle group (20%) were neutral on the matter and the second largest group of four people (26.6%) recorded the greatest impact on their health from their partner's service in Vietnam.

These four people who reported either a '10', '9' and '8' on the Likert scale for this question, also had reported in Question 14 as having communications/relationship problems with their veteran, being concerned about the welfare of children and 'having to be a peacemaker' (see Table 8). They also indicated multiple responses in the mental health questions with between seven and nine selections in the "has the greatest affect" indicator areas covering depression, anxiety and despair (see Table 9).

Table 8. Frequency of social health problems (Question 14) and impact on health in descending sort by greatest impact (Question 15) for the respondents (n=4) who indicated the highest that their health has been affected by their partner's Vietnam service (Question 19).

Social Health Problem	**Problem frequency**	**Greatest impact**
My relationship with my partner	3	3
Communication with my partner.	4	2
Needing to be a 'peacemaker'	3	2
Concern about the health of my or my partners' children	3	2
Differences in opinion with my partner about how to raise children	2	1
Concern about the welfare of my or my partners' children	2	
Decision making with my partner	1	1
Family harmony	1	1
Finances (how to spend/save money)	1	1
Not having enough money	1	1
Concern about having enough money in retirement	1	1
Having enough social support	1	
Friendship(s)	1	
Ensuring my partner and I share responsibilities	1	
Ensuring my partner and I share housework	1	

Table 9. Frequency of mental health problems (Question 12) and impact on health in descending order by greatest impact (Question 13) for the respondents (n=4) who indicated the highest negative impact on health from their partner's Vietnam service (Question 19)

Mental Health Problem	**Problem frequency**	**Greatest impact**
Depression	2	2
Anxiety	2	2
Despair	2	1
Insomnia	1	1
Mood swings	1	1
Crying	1	1
Anger	1	1
Stress	1	1
Grief	1	1

SUMMARY OF CHAPTER 4

In this chapter the results of the study were presented in sequence according to questions asked in the survey tool. Questions 1 to 6 focussed on demographics of the respondents (n=15) who predominantly were female, there was one male respondent. Source of income varied but the main source was from DVA pensions. Regarding family structure, children originated in and out of the union with the veteran partner; those who had children out of the union had none that originated inside the current partnership.

Questions 7 to 9 ascertained functional matters regarding health status and self-reported health status. Respondents indicated overall they required little or no assistance with daily living and that their walking plus mobility was moderate to good, with their ability to live independently being generally good. Their overall health was rated as moderate to good.

Questions 10 to 17 were paired questions regarding the physical, mental, social and spiritual dimensions of health. As reported in this chapter, in the first of each paired question, respondents identified health problems in that dimension and in the second question indicated the magnitude of problems identified in regard to impact on health per se. The results of paired questions were also presented together in a table showing the identified problems in descending order by greatest magnitude. Regarding physical health problems, although respondents had previously indicated relative independence in their activities of living, skeletal and joint problems such as arthritis, neck, spine and chronic pain were ranked highly regarding impact on health. Depression ranked the highest regarding mental health problems selected with also depression, anxiety and stress reported as impacting the highest upon their health. Social health problems elicited the greatest number of responses. 'Having to be a peacemaker' was the major social problem and communication with the partner registered the second highest frequency. Concern regarding relationship with their partner,

concern about the welfare of children and financial matters all rated highly as an impact factor on their health. Spiritual health problems received the lowest number of responses and had the highest number of people choosing not to answer the question. Generally indicated was that there were no spiritual health problems but for those problems indicated, not having a meaning or purpose in life, feelings of guilt and lack of feeling at peace were the most common.

The last two sets of results presented in the chapter were firstly that in general, their health does not impact negatively on their quality of life. Secondly, the issue was whether their partner's service in Vietnam had impacted negatively on the respondent's health? Respondents seemed to be divided into three groups on this matter with the majority reporting little or no negative impact. The second largest group had the greatest negative impact and the third were ambivalent. Data provided in the survey by the second group were explored and appeared to indicate that in the social dimension of health there were considerable problems - communication with their Veteran partner was the greatest problem for these respondents. However, mental health problems also impacted considerably on their health overall.

In Chapter 5, the results of the study will be discussed including in contrast and comparison to previous knowledge about the focus of the study. Also discussed will be possible implications of the results, and both limitations and strengths of the study.

Chapter 5. Discussion of Results

In this chapter, discussion is presented of the results of the study. The results will be contrasted and compared with current knowledge regarding common health issues for this population and/or the general public with similar demographics. Implications of this pilot study will be explored, and strengths and limitations of the study will be identified.

DEMOGRAPHICS OF RESPONDENTS

Fourteen respondents were female and one was male; however it is not clear whether this person actually was a partner of a Vietnam Veteran. This speculation is fuelled by the fact that he declined to answer question 4: "I have been partnered to a Vietnam Veteran for 'x' years" and he listed PTSD as "It has the greatest impact" in question 13. There is no way of actually knowing, so his data were included.

As respondents were all aged between 51 to 70 years, they were either in their late middle-aged years or in early old age. As most of the battalion when sent to Vietnam in 1969-70 consisted of conscripted national servicemen aged in their early 20s, this age range of respondents is not surprising. Other members of the battalion who were non-conscripted soldiers would also have tended to be young except for those at some level of leadership and some long-term 'regular' soldiers. Therefore, as partners of Vietnam Veterans, these fifteen respondents would approximate the age of the veterans or be a bit younger. As respondents were in the age range of 51 to 70 years, they could be expected to be beginning to experience health problems that commonly arise with ageing, but not yet be in an age range where multiple health problems exist or frailty is experienced. Therefore, demand on health care

would possibly be starting to increase but not yet be as great as when older, which is indicated according to the many biomedical risk factor tables in the Australian report "Older People at a Glance" (AIHW, 2007b).

Given the respondents' age groupings and the fact that they are in partnership with a Vietnam Veteran, they could commonly be expected to be receiving a DVA pension. The results inform a mixed combination of income sources, including DVA and non-DVA pensions and those in full time and part time employment. According to The Australian Bureau of Statistics (ABS), the traditional downward curve of people in full time employment by age crosses over a new group of people working into their traditional retirement time; this cross over occurs at the age of 65-69. The ABS has calculated a rise in those working into previously considered 'retirement years' as this curve continues (ABS, 2003). The results of this study seem to concur with the ABS indication - people working full time and part time emerged and half of the 61-70 age group worked full time.

It is difficult to determine a comparison within the broader community as to the length of marriage given the age of the couple. Unfortunately, ABS does not record statistics regarding the length of marriage versus age for the general population.

It was expected that children resulted from within and outside the partnership; this was the case with results showing a mode of 2 children (f=2) resulting from the partnership, which is the national average (ABS, 2008). However, it was interesting to note that the couples that identified having children outside their partnership, had no children within their own union. The reason for this was not sought.

HEALTH ISSUES

Regarding self-reported general health and associated factors, a group of people emerged in the results that were separated from the main body of respondents. Where the main group reported good and very good overall health and mobilisation, a result similar to studies of this age group by the Australian Health and Aging Unit (AIHW, 2007b), a small portion of people reported a 'slightly troubling' and neutral response. If Figure 7 (see Chapter 4) is studied, attached to the overall health question, the observer can see a small 'bell curve' forming away from the main group, centred on item 4, the 'slightly troubling' category. This pattern can be seen again in Figure 8 (see Chapter 4) about the mobilisation question. The demographics of the smaller group were analysed and it was found that they were 'scattered' in age, years married and the number of children, so these factors could be ruled out as potentially relevant.

Interesting also, is that the entire population answered these first questions about health matters in the questionnaire, possibly because these matters are foremost in their minds. Happily, from a nursing perspective, the highest rating for the study occurred in the 'living independently' question where 53% of people reported that their ability to live independently was a good as it possibly can be.

HOLISTIC HEALTH

The outside observer can never imagine what it is like to live with a Vietnam Veteran, especially if he is dysfunctional or dysfunctional to some degree. From a nurse's perspective, the best description appears in Lyons' (1999) phenomenological study of 10 partners of Vietnam Veterans living in South Central US. She described living with a Vietnam Veteran as a gradual process of becoming enmeshed in the

veteran's pathology over 3 blurred stages. All spousal energies are directed at minimising the effect on self and family, culminating in intermittent movement towards resolution and healing.

Holistic dimensions of health (physical, psychological, social and spiritual) were covered in these questions. Each was divided into two questions: the first identified multiple health problems and the second rated those problems from 1 to 3 (1 being the most impact on health). These questions generated a large amount of data. Patterns in holistic health for the partners were not immediately recognisable. The entire sample always answered the first question identifying health problems but the second question was intermittently answered by the sample. A search of the literature failed to identify problems with asymmetric responses to an identical dual question and in fact, similar designs could not be located in other research efforts. Possibly the questions looked too similar and respondents may have asked themselves "Didn't I just do this?" Possibly these questions were considered too difficult, or possibly were too hard to understand. In any case, it was a design problem that could be rectified in future studies.

The number of responses was recorded for each heading enabling a grading from highest to lowest in each category. "Social Health" recorded the most responses followed by "Mental Health", "Physical Health" and "Spiritual Health". These results are now discussed in that order.

Social Health Problems

This category generated the most data of the four categories of holistic health foci with 50 responses. Needing to be a 'peacemaker' in the partnership was the most identified health issue overall but interestingly it did not have the greatest impact on the health of respondents. Possibly some respondents declined to answer the 'impact on my health' question due to its apparent complexity – this

is not known. There is little or no research of the partner (or wife) in the role of peacemaker in a dysfunctional family. Lyons (1999) mentions the role in her phenomenological study of 10 wives of Vietnam Veterans living in South Central US. She identifies the wife as overcompensating to fill the space left by the veteran through filling the ancillary roles of therapist, peacemaker and rescuer. Devine and Braithwaite (1993) studied a convenience sample of 59 adolescents from state and private schools in Canberra and found that coping roles children assume in dysfunctional families included 'the responsible child', 'the clown' and 'acting out' to divert attention away from the main conflict. The placatory role of 'peacemaker' did not feature predominantly in children. However, it is unclear if the partner of a Vietnam Veteran is diverting attention or actually assuming the role left by the veteran, or possibly both.

Communication and relationship problems with their partner featured predominantly in the results. Communication problems were identified in Chapter 2, the literature review, within for example the research by Solomon and Shalev (1995) as cited by Frančišković et al. (2007). They introduced the concept of re-division of work and the empathy spiral. Traditionally, according to these researchers, the partner of a returned veteran is seen to provide balance for the family, assuming the role of health educator and communication moderator. A re-division of roles occurs as the partner fills the communications space left by the withdrawing and dysfunctional veteran, especially communication with the children, and assumes the emotional and financial roles in the partnership. It is interesting that in our study also, financial matters and the welfare of children rated highly, possibly as the partner had assumed these responsibilities in part or totally. Fewer demands are placed on the husband as his partner commences to overcompensate and this in turn enables further veteran under-functioning and therefore, increased demands on the partner, causing a downward spiral (Solomon and Shalev [(1995)] as cited in Frančišković et al. [2007]).

Mental Health Problems

At the outset, the researcher assumed that this category would be the most dominant factor affecting the health of the partners. In reality, mental health problems were second in prevalence after social problems with the respondents having a mean of 2.5 problems each with 31 responses. The respondents tended to have a triad of depression, anxiety and stress, all recognised symptoms of PTSD. Are these symptoms due to an inducted secondary PTSD? There were no questions in the questionnaire identifying the cause of this triad so one can only speculate through the literature. Researchers Ray and Vanstone (2009) contacted several hundred members of a support group for Canadian partners of Vietnam Veterans via letter of invitation and used an interpretative phenomenological study to find that 70% of partners suffered this triad compared to 30% in the broader community. The study reported in this thesis revealed the opposite, although depression was the predominant problem; 37% of the sample indicated having this compared to 70% in the broader Australian community in this age group (AIHW, 2009).

Why is depression linked with PTSD? There are no definitive answers. In a prospective longitudinal study in Australia, Greiger (2005) studied 363 people on admission to a trauma centre. The researcher found that in the acute phase of PTSD, depression is a separate construct or co-morbidity but as the disorder progresses into a chronic phase after not being treated, PTSD and PTSD/depression are indistinguishable. So, one explanation could be that the partners suffer secondary PTSD as described by Figley (1989), from which depression, anxiety and stress manifest. It is important from a nursing perspective to recognise that these problems do exist in a population that is moving towards greater exposure to the health care system as they age.

Physical Health Problems

The Australian Bureau of Statistics (2009) state that arthritis is a 'National Health Priority Area' (NHPA). Diseases such as arthritis can be delayed by addressing one's lifestyle, precipitating factors such as poor diet or insufficient exercise, or by better management of conditions such as high blood pressure or obesity (Okoro, 2004). Muscular skeletal problems and high blood pressure predominated in the results with 30 responses above the mean of 4 problems per person. High blood pressure rated highly as a problem but did not seem to affect the functioning of respondents. The respondents indicated that their health was negatively affected by muscular skeletal problems dominated by arthritis, neck issues, chronic pain and spinal problems. Interestingly, although these rated highly as a negative impact on health, the scores in mobility and living independently in Question 8 and Question 9 do not reflect this. It is possible that these problems have not manifested to an extent as to alter function. The findings generally agreed with the national figures where muscular skeletal problems rated 58%, the highest magnitude in the AIHW report, when indicating the burden of disease for this age group (AIHW, 2007b).

Spiritual Health Problems

Wensley (1995) states that the concept of providing spiritual care as part of the nursing holistic diagnostic structure derives from nursing theory, which describes humans as Biological-Psychosocial-Spiritual beings. She links spirituality primarily with the end of life experience for people and nurses are ideally suited to administer spiritual care at that time. This link to the end of life may explain the low response rates to this question; it was found that 53% of respondents indicated that they were untroubled by spiritual problems. Those who answered indicated that not having a meaning or purpose in life, feeling guilty and a lack of feeling at peace impacted on their health.

FACTORS NEGATIVELY AFFECTING HEALTH

Data from these questions could lend themselves to correlative analysis between the health of respondents and their veteran partners' PTSD magnitude, but this was not the intention of this, a pilot study, and the veteran partner's health status was not sought.

The first in this duo of questions asked whether the respondent's quality of life was negatively affected by health problems. The entire population answered this question and Figure 10 (see Chapter 4) shows the majority indicated that their quality of life was not affected negatively by their health. It can be seen that the small normal curve centred on magnitude 7 in the Likert scale appears almost a mirror image of the graph in Figure 7 (see Chapter 4), the results of the 'overall health' question. The sample has a group separate from the main sample whose health is more greatly affected by various factors. Figure 10 (see Chapter 4) shows three groups, the largest group of which has little of no negative affect on quality of life. The second largest group form a small normal curve in the moderately affected region and the last group are neutral.

The second question asked if their health had been negatively affected by their partner's service in Vietnam. Initially the researcher assumed that everyone in the group would be affected by their partner's service in Vietnam. Surprisingly, as in Question 18, three groups can be discerned from results in the graph, Figure 11 (see Chapter 4). The majority have no or very few problems, a large group who are ambivalent, and a third group who experience many problems. Why are there three groups? The researcher decided to follow the group with the most problems back through the data. Opposed to the main group selecting 'having to be a peacemaker' as the major issue, this group reported having communications/relationship problems with their veteran, being concerned about the welfare of children, and 'having to be a peacemaker' as issues - in that order as indicated in Table 7 (see Chapter

4). They registered unremarkable responses in most of the questionnaire including the health and spiritual questions but indicated multiple responses in the mental health and social health questions, with respondents registering between 7 and 9 responses in the 'has the greatest affect' indicator areas covering depression, anxiety and despair as Table 8 (see Chapter 4) illustrates. One possible explanation of the emergence of three groups is that their veterans were in various phases of recovery and treatment for PTSD (if experiencing PTSD, which although common in Vietnam Veterans, is unknown about the respondent's veteran partner) and this is possibly reflected in the partner's health and quality of life. The induction of PTSD in the partner as 'secondary PTSD' was covered in the literature review (Chapter 2). The veterans of the largest group of respondents may have undergone treatment for PTSD, the most affected group's veteran partners perhaps have not undertaken treatment, and possibly the third group is in a 'transitional' stage between the two (starting treatment). However, this is speculation, as there appears to be no pertinent studies about this matter reported, so it is unknown.

THE EXISTING BODY OF KNOWLEDGE

How does this study fit into the existing body of knowledge? Studies to date have concentrated upon the reduction of PTSD symptoms in the veteran, symptoms as listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) for PTSD. The few studies that include the partner of the veteran incorporate only reporting of symptom reduction for the veteran. Two spousal self-report studies have explored couples therapy and reduction of PTSD induced anxiety and depression within the union. Semi-structured interviews were used by Sautter et al. (2009) to measure reduction of DSM-IV symptoms due to cognitive therapy used with the couples. Rabin and Nardi (1991) used self-reporting data collection methods and found significant reductions in PTSD symptoms after couples-based interventions.

There are no self-reporting studies regarding the affect secondary PTSD has on the holistic health of partners. There is a need for future research within the realm of secondary PTSD and the negative affects it has on the holistic health of partners. Future studies could incorporate data that would enable researchers to track the course of recovery and improvement of holistic health in the partner as the veteran receives treatment. The limitations section of this chapter incorporates mention of this aspect. 'Being a peacemaker' was a strong emergent theme for the partner in this study. There is virtually no research on the role of the partner as 'peacemaker' in the PTSD affected partnership, so this could be a subject of future research. Most studies have centered on the roles that children assume in dysfunctional alcoholic families.

POSSIBLE LIMITATIONS and STRENGTHS

As dot points, a number of potential limitations in this study are listed, and some strengths also:

- In hindsight, it was illogical to include a magnitude dropdown with the category of 'nothing' in questions 11, 13, 15 and 17. This diluted data as some respondents indicated that 'nothing' had the greatest affect on their health. This could have been omitted although it was included in each previous question.
- Respondents indicated financial stress was a health factor. It would have been beneficial to include a financial stress question and rating its magnitude of impact on the partner's health.
- Although this pilot study was to determine the health of partners and was not an inferential study, it may have been helpful to include questions regarding the veteran's health status from the partner's perspective, for example whether the veteran has started, was undergoing or had completed treatment for PTSD – but this would have required informed consent requirements from the veterans as well.

- The sample was small (*n*=15) and randomised sampling was not used, so the results are not generalisable; however, this was a small pilot study that could lead to further research that may be generalisable.
- Not all respondents answered the four questions regarding magnitude of impact regarding holistic health problems, which minimised data for those questions. In any future study, these two questions should be incorporated into one question with a magnitude box on each category line.
- As there was one male respondent about whom it is uncertain if he was a veteran wrongly answering the questionnaire, or if he was a partner to a veteran, a yes/no question enquiring of their partner status would have clarified this matter.
- No cause was sought from respondents for the questions of anxiety and stress. This is probably a minor point but 'skip logic' could be used to direct the respondent to another multi-choice question to elicit causes and clarify these points.
- A major strength of this research is the contribution to building the nursing body of knowledge about a group of people not explicitly studied previously. Also, the study may lay the groundwork for future larger studies.

SUMMARY OF CHAPTER 5

Discussion of results in this chapter identified that social health problems were the most frequently reported followed by mental health problems, with physical problems third in incidence. Spiritual health problems did feature but least strongly of all four holistic health categories. Comment has been made that some respondents displayed many of the symptoms of PTSD including anxiety, depression and stress. Needing to be a peacemaker and having communications problems with the veteran were

discussed as themes in the results. Although not able to be stated as present amongst respondents, discussion has been offered about how secondary PTSD is a phenomenon that can negatively affect the health of a partner of someone with PTSD, especially manifesting in social and mental health areas. Although this small pilot study did not seek to measure correlation between items, discussion in this chapter posed whether the health of the partner was dependent on the stage of recovery or treatment the veteran was receiving for PTSD (if experiencing PTSD). The partner may pass through stages of recovery as he/she becomes unmeshed in their veteran's health pathology. Also presented in this chapter was a list of possible limitations and strengths of the study.

The following chapter, Chapter 6, will conclude the thesis with recommendations for the nursing profession emanating from the results of this pilot study.

Chapter 6. Conclusion

Chapter 6 concludes the thesis with reflections of the researcher in regard to the study processes and also offers a list of recommendations arising from the study and allied research in regard to clinical practice, education, policy and further research required. All recommendations are presented with accompanying rationale. Finally, the thesis is summarised.

REFLECTIONS

What are the health problems of partners of Vietnam Veterans from a holistic nursing perspective? With hindsight it has been recognised that the researcher commenced this thesis armed with pre-determined ideas regarding the health of Vietnam Veterans and their partners. Initially, when commencing to plan the study, he attempted to filter out references to PTSD in an effort to isolate somatic issues but soon found that this was unproductive and was a clear indication of a gap in knowledge regarding aspects of this sample's health.

Ellen Toronto (2009) observes that internet technology and its ubiquitous interfaces tend to disassociate the user from the developer (in this case the respondent and researcher). In this study the researcher saw separation having advantages and disadvantages; dissociation with the patient flys against the essence of nursing philosophy and there are many seminal texts which deal with this subject such as Stein-Parbury's 'Patient and Person' (2008). It was a conflict that possibly other nursing researchers deal with; respondents became data viewed 'at arm's length'. In the relatively new realm of online nursing research, the researcher discovered dissociation to be a 'double edged sword' as it was not possible to show empathy or interact with respondents but on the other hand, he could not ostensibly affect the

respondents with personal biases. Additionally, the experience of conducting this pilot study emphasised how important a well-crafted online questionnaire is to this style of research, as discussed in the limitations section of the previous chapter.

A major insight for the researcher was the concept of secondary PTSD. Data seemed to indicate that the partner can be enmeshed within the veteran's health pathology and develop a set of PTSD symptoms such as anxiety, depression and stress. There is also a possibility that as the veteran seeks help and his PTSD resolves, so too may the induced symptoms resolve in the partner; data may have indicated three distinct respondent groups in various stages of recovery as their partners gained help but of course could not be ascertained as it was not within the scope of this pilot study to perform correlations.

'Withdrawal' in the veteran is a recognised symptom of PTSD. The researcher found the concept of reactive depression interesting as it tends to manifest after a PTSD episode and last for a relatively short time. As the veteran seeks help, communication channels in the partnership might become clearer but this was not ascertainable from the study. For nurses, this could be an important health indicator and goal.

Nurses should be aware of the re-division of work and the empathy spiral that affects partners of a PTSD affected person, as described by Frančišković et al. (2007). A re-division of roles occurs as the partner fills the communications space left by the husband with the children and she assumes the emotional and financial roles in the partnership. Fewer demands are placed on the husband as his partner commences to overcompensate and this in turn enables further under-functioning and therefore, increased demands on the partner, causing a downward spiral.

Originally it was thought by the researcher that the main issues for respondents would be about mental and physical health. As the study progressed and data were analysed, it was observed this was far from reality as data indicated social problems affected the quality of life markedly for respondents, perhaps because these questions fell into realms concerning inter-relationship difficulties, communication concerns with the veteran and welfare of children.

The prime issue was the draining role of the partners when being 'peacekeeper' in the relationship and in the family. This provided a 'window' into the inner workings of these partnerships and illustrates the complex nature of the relationship. There is no research into this role except for a study previously mentioned by Devine and Braithwaite (1993) who studied a convenience sample of adolescents of dysfunctional alcoholic families in Canberra, Australia, when it was found that children do not usually assume a placating role but instead assume other roles.

RECOMMENDATIONS

Recommendations from the results of the study are tentative as this research was a pilot study with a small non-randomised sample. As the main purpose of the study was to inform a larger study using a randomised sample of the population, the first recommendation with a set of sub-recommendations, is for this further research. Other recommendations are offered tentatively for nursing education, nursing practice, and policy development.

Recommendation 1

That a future survey of this population, if using on line techniques applying the instrument used in this pilot study or a modification thereof, should consider the following:

1 That questions should be included after the demographic section to gauge the economic stress the respondent is undergoing.

Rationale: This was an extra stressor that was identified in data and a missed part of holistic health that may influence a partner's health.

2. That inferential statistics be employed to study correlation between variables, including PTSD treatment status of Vietnam Veterans and the partner's health; this may require a Likert scale question to be added regarding the quality of health and life of the veteran from the partner's perspective and a 'three radio button' question indicating if the veteran has, is undertaking, or has not undertaken treatment for PTSD (with ethical considerations met).

Rationale: Correlation of items is needed for fuller understanding of the research focus. Also, data indicated that three groups existed but because this study was descriptive and not inferential in aim, correlations could not be ascertained for these variables and also other variables.

3. The inclusion of a multiple choice question for each holistic dimension that incorporates the identified health issue and the magnitude of impact of these issues on the respondent's health, but that the option of 'nothing' should have no 'magnitude dropdown'.

Rationale: The 'magnitude health has on my life' questions were identical to the preceding question identifying health issues and were not regularly completed by all respondents. Completion rate may be improved by incorporating 'magnitude dropdowns' after a check box identifying the health issue.

4 The inclusion of a multiple choice question that identifies the cause of anxiety and stress.

Rationale: As anxiety and stress occurred with considerable frequency in data, it would be helpful to pin-point causes and determine the impact on the partner's health.

5. The inclusion of an 'I am a partner of a Vietnam Veteran' Yes/No question.

   Rationale: There was uncertainty whether one respondent was the partner of a Vietnam Veteran or mistakenly a Vietnam Veteran responding to the tool. In future studies this question could act as a filter early in the questionnaire.

6. That the recruitment letter be rendered as succinct as possible in as informal language as possible, indicating the reason for the study in easy to understand terminology.

   Rationale: Anecdotal feedback from some in the battalion indicated that potential respondents exhibited inertia and that a slow uptake of the study was partly based on a general feeling that they were an 'over studied' group of people needing to feel sure that the study was required.

Recommendation 2

When teaching undergraduate and postgraduate students of nursing about social determinants of health, emphasis should be included about dysfunctional family structures and the assumption of roles by family members including concepts such as the 'empathy spiral' and 'division of work', with possible mention of the example of the health of partners of Vietnam Veterans.

Rationale: This study showed that these phenomenons occur in many dysfunctional family structures and nursing students may find it helpful to understand interactions of pathological dynamics.

Recommendation 3

That nurses be informed about the results of this study and follow-up research to guide planning of nursing care for partners of Vietnam Veterans and to help develop empathy toward these patients.

Rationale: The results have implications for engaging with such patients constructively and to plan appropriate person-centred nursing care, as discussed previously in this thesis.

Recommendation 4

That nursing assessment of partners of Vietnam Veterans include a focus on multidimensional holistic health that especially includes social and psychological health issues, but also physical and spiritual health issues.

Rationale: Although working within a holistic framework of care, usually general nurses are required to primarily focus on physical health issues but the results indicate that all dimensions of health may impact on the health of a partner of a Vietnam Veteran, with social and psychological issues most strongly indicated. The results suggest that regarding social health issues, communication with partner, financial, relationship and welfare of children problems can exist, and similarly mental health issues may include a degree of depression, anxiety and/or stress.

Recommendation 5

That DVA funding directed to community nursing and also counselling services for partners of Vietnam Veterans ensure a holistic assessment and treatment model be maintained regarding social, psychological, physical and spiritual issues.

Rationale: All aspects of this study including the structure of the questionnaire were modelled on a holistic health assessment platform and it was found to be practical and necessary regarding relevant issues about the health of partners of Vietnam Veterans, as results indicate.

Recommendation 6

That future Government funding for this population consider ensuring care for holistic health aspects such as depression, anxiety, financial stressors and dysfunctional family dynamics.

Rationale: Partners of Vietnam Veterans have special health problems as they proceed with the general post World War II "population bulge" into old age. Nurses and the health system should have pre-installed resources to cater for this expected influx.

FINALLY …

This pilot study has tentatively revealed windows of understanding that may be useful to nurses in designing future larger studies with a holistic focus on the health of partners of Vietnam Veterans. Implications from the results for education, clinical practice and policy have also been suggested with tentative recommendations offered.

Also, the study has provided somewhat a 'testing ground' for the burgeoning platforms for on-line research as applicable to nurse-driven design. The researcher has noted that designs used by nurses for on-line research tend to rely on dated technology despite being on the "internet". The simple object oriented questionnaire used in this study answered the research question by identifying and exploring health issues for partners of Vietnam Veterans although only tentatively doing so due to the small, non-randomised sample of the population.

Although inferential statistics were not used, possible patterns in some data could be hypothesised particularly about matters that may arise from living with a veteran who has PTSD, such as: the concept of secondary PTSD; social interconnections determining the partner's health, especially the existence of effective communication between the partner and veteran; and the concept of roles such as

‘peacekeeper’. Anecdotal and empirical evidence worldwide and in Australia have revealed much information regarding the affects of PTSD upon its sufferers including strongly about PTSD for war veterans. Unfortunately, there has been little knowledge gained about the Vietnam Veteran’s sphere of influence regarding the effects PTSD pathology has on those closest to him, especially partners. This study contributes to extending that knowledge and particularly so if leading to further research with that focus.

An outsider cannot fully understand the complexities of health care issues experienced by partners of Vietnam Veterans including the possible impact of becoming enmeshed in a Vietnam Veteran’s PTSD pathology from a partner’s perspective but research can provide valuable insights. The researcher was grateful to have the opportunity to peer through (albeit small) windows of data to gain some of this insight with the guidance of a supervisor.

Appendences

Appendix A Questionnaire

Questions within the On-Line Questionnaire

Please note, it is not possible to duplicate the formatting for the on-line questionnaire but this can be accessed on-line at:
http://www.surveymonkey.com/s_pass.aspx?sm=MQAl3XEnQ4aWfIM%2f9Dh%2b1Q%3d%3d
using the password health (in lowercase)

Please note answer responses to questions 7-9 and questions 18 & 19 are formatted as 11 point Likert Scales (0-10)

An Anonymous & Confidential Questionnaire

Partners of Vietnam Veterans: Identifying their holistic health issues

Researchers: Student Researcher: Phil Shields RN
Supervisor: Professor Merilyn Annells RN, PhD

Please indicate your answers to the following questions by clicking on the appropriate buttons - and in some places where requested, adding some words if you want to.

It would be appreciated if you answered all the questions but it is your right to only answer the questions that you want to answer.

When answering the questions, please do not supply your name or that of any other person.

1) I am:

40 years or less
41-50
51-60
61-70
71-80
81 years or more

2) I am:

Female
Male

3) I am
(You may have multiple responses to this question)

Working full-time for payment
Working part-time for payment

Retired
Doing volunteer work
Receiving a DVA pension
Receiving a non-DVA pension

4) I have been the partner of the RAR Vietnam Veteran for:

50 years or more
41-50 years
31-40 years
21-30 years
11-20 years
10 years or less

5) In regard to my RAR partner and me having children:
(You may have multiple responses to this question)

We have none
We have 1
We have 2
We have 3
We have 4
We have 5
We have 6 or more
He has children from a previous relationship
I have children from a previous relationship

6) I need assistance from others for:
(You may have multiple responses to this question)

Meals or cooking
Cleaning
Gardening
Shopping
Transport
Personal Hygiene
Nothing
Other (text)

7) I rate my overall health as:
(Where 0 is the worst it could be and 10 is the best it could be)

8) I rate my ability to walk and mobilise as:
(Where 0 is the worst it could be and 10 is the best it could be)

9) I rate my ability to live independently as:
(Where 0 is the worst it could be and 10 is the best it could be)

10) I have a problem concerning:
(You can give multiple responses to this question)

Headaches
Chronic Pain
My heart

High blood pressure
Low blood pressure
My blood
Fluid retention
Diabetes
A stroke
Asthma
Emphysema
My sinuses
My liver
My bowel
My gall bladder
My spine
My neck
My Kidneys
My bladder
Arthritis
Osteoporosis
Broken bones
My eyes
My ears
My teeth
My mouth
My skin
Gynaecological problems
Hormone problems
Allergies
Need for Renal Dialysis
Cancer
Other physical challenge (text)
Anything specific that you might like to add about the above matters (text)

11) Concerning problems indicated in Question 10, those that have the greatest impact on my health are:
(Select up to a maximum of 3 problems. Select 1, 2 or 3 in the dropdown box next to the ailment, 1 indicates the greatest impact.)

Headaches
Chronic Pain
My heart
High blood pressure
Low blood pressure
My blood
Fluid retention
Diabetes
A stroke
Asthma
Emphysema
My sinuses
My liver
My bowel

My gall bladder
My spine
My neck
My kidneys
My bladder
Arthritis
Osteoporosis
Broken bones
My eyes
My ears
My teeth
My mouth
My skin
Gynaecological problems
Hormone problems
Allergies
Need for Renal Dialysis
Cancer
Other(s) (text)

12) I have a problem concerning:
(You can give multiple responses to this question)
Depression
Anxiety
Insomnia
Mood swings
Crying
Anger
Stress
Despair
Grief
Alcohol use
Illicit drug use
Bi-polar disorder
Schizophrenia
Attempted suicide
Post-Traumatic Stress Disorder
Having enough emotional support
Other mental challenge(s) (text)
Anything specific that you might like to add about the above matters (text)

13) Concerning problems indicated in Question 12, those that have the greatest impact on my health are:
(Select up to a maximum of 3 problems. Select 1, 2 or 3 in the dropdown box next to the ailment, 1 indicates the greatest impact.)
Depression
Anxiety
Insomnia
Mood swings
Crying

Anger
Stress
Despair
Grief
Alcohol use
Illicit drug use
Bi-polar disorder
Schizophrenia
Attempted suicide
Post-Traumatic Stress Disorder
Having enough emotional support
Other mental challenge(s)

14) I have a problem concerning:
(You can give multiple responses to this question)
Not wanting to socialise with others
Not being able to socialise with others
Mixing well with other people
Fitting in with my neighbourhood
Having enough social support
Friendship(s)
My relationship with my partner
Separation during my partner's active service
Sharing responsibilities and house work with my partner
Communication with my partner.
Decision making with my partner
Family harmony
Differences in opinion with my partner about how to raise children
Needing to be a 'peacemaker'
Concern about my or my partners' children's health
Concern about my or my partners' children's welfare
Concern about my or my partners' grand-children's health
Concern about my or my partners' grand- children's welfare
Withdrawal or disconnection from the family
Finances (how to spend/save money)
Not having enough money
Concern about having enough money in retirement
Standard of housing
Frequent moving
Having sufficient transport
Being lonely
My safety
Other social challenge(s) (text)
Anything specific that you might like to add about the above matters (text)

15) Concerning problems indicated in Question 14, those that have the greatest impact on my health are:
(Select up to a maximum of 3 problems. Select 1, 2 or 3 in the dropdown box next to the ailment, 1 indicates the greatest impact.)
Not wanting to socialise with others

Not being able to socialise with others
Mixing well with other people
Fitting in with my neighbourhood
Having enough social support
Friendship(s)
My relationship with my partner
Separation during my partner's active service
Sharing responsibilities and house work with my partner
Communication with my partner.
Decision making with my partner
Family harmony
Differences in opinion with my partner about how to raise children
Needing to be a 'peacemaker'
Concern about my or my partners' children's health
Concern about my or my partners' children's welfare
Concern about my or my partners' grand-children's health
Concern about my or my partners' grand- children's welfare
Withdrawal or disconnection from the family
Finances (how to spend/save money)
Not having enough money
Concern about having enough money in retirement
Standard of housing
Frequent moving
Having sufficient transport
Being lonely
My safety
Other social challenge(s) (text)
Anything specific that you might like to add about the above matters (text)

16) I have a problem concerning:
(You can give multiple responses to this question)

Not having sufficient meaning or purpose regarding my life
Feeling guilty
Not being able to forgive
Not wanting to forgive
My relationship to 'God'
Spiritual distress
A crisis in faith
Religious doubts
Anger at religion
Anger at God
Prayer
Matters about an after-life
Lack of feeling at peace
Other spiritual challenge(s) (text)
Anything specific that you might like to add about the above matters (text)

17) Concerning problems indicated in Question 16, those that have had the greatest impact on my health are:

(Select up to a maximum of 3 problems. Select 1, 2 or 3 in the dropdown box next to the ailment, 1 indicates the greatest impact.)

Not having sufficient meaning or purpose regarding my life
Feeling guilty
Not being able to forgive
Not wanting to forgive
My relationship to 'God'
Spiritual distress
A crisis in faith
Religious doubts
Anger at religion
Anger at God
Prayer
Matters about an after-life
Lack of feeling at peace
Other spiritual challenge(s) (text)

18) I rate how my health negatively affects my quality of life as:
(Where 0 is the least negative affect it could have and 10 is the most negative affect it could have)

19) I rate how my health has been negatively affected by my partner's service in Vietnam as:
(Where 0 is the least negative affect it could have and 10 is the most negative affect it could have)

When you have finished answering the questions that you want to answer, then press the 'send' button.

Thank you very much for being a participant in this research study.

Appendix B Letter of Request (to the battalion's national association)

Division of Nursing & Midwifery
Faculty of Health Sciences
Melbourne 3086 Victoria

Letter of Request RAR

Title of the research study: ***Partners of Vietnam Veterans: Identifying their holistic health issues.***

Researchers: Student Researcher: Phil Shields RN
Supervisor: Professor Merilyn Annells RN, PhD

Date

Mr ……
National President
RAR…… Association
.
Dear……..,

I am writing in regards to a research study that I am undertaking for my Bachelor of Nursing (Honours) degree with La Trobe University. My supervisor is Professor Merilyn Annells.

Rationale for the Study

Even though the Vietnam War officially ended on 30th April 1975, it is anecdotally and empirically known that to this day some Veterans' families experience effects of the Veterans' service in that war. Numerous studies have identified and continue to investigate the health issues of Veterans, their children and their grandchildren but there has been minimal investigation regarding specific health issues of partners. As Veterans and their partners grow older, both will tend to need a greater frequency of nursing care – which is intrinsically holistic. Knowing what health issues are currently being experienced by the partners can indicate possible issues requiring nursing care and associated attention into the future.

Also, I hope that this study will be an effective 'pilot study' to identify variables for further generalisable research of the topic, if funding can be acquired.

Aim - The aim of the study is to identify holistic health issues experienced by partners of surviving Veterans who served in the Vietnam War within one Australian Army battalion.

Participants - Participants will be partners of surviving Vietnam Veterans who served with one Australian Army battalion (……RAR) in the 1960s.

The Request RAR
That …..RAR Association will assist the study by facilitating the process of recruiting respondents (study participants) for an anonymous and confidential on-line questionnaire that will collect data for the study.
The proposed recruitment process is detailed to follow:

- The RAR Association would forward to surviving Vietnam Veterans of the battalion RAR or whom they have email addresses, a brief email that succinctly explains the purpose of the study and who are the researchers, plus a request that Veterans show an attached *Letter of Information for Potential Participants* to their partners. A copy of the *Letter of Information for Potential Participants* is here-attached for consideration by RAR Association.
- Hopefully the Veterans will show their partners that letter, with sufficient interest generated for partners to

'jump on-line" and complete the questionnaire; however, some Veterans may choose to not show the letter to their partners, and some partners may choose to not respond if shown the letter, but hopefully some will and that would be an adequate sample for this, a 'pilot study'.

- In the *Letter of Information for Potential Participants* there is a web-link to the on-line questionnaire, and also a supplied password providing access to the questionnaire – the password will ensure that people browsing the web do not come across the questionnaire and decide to respond uninvited.
- The partners who do respond will be indicating informed consent by providing data on the questionnaire (this is a NHMRC approved ethical consent process for questionnaires).
- **In the attached *Letter of Information for Potential Participants* is information that if participants experience emotional distress from responding to the questionnaire, free counselling is available to them as a partner of a Vietnam Veteran from the *Veterans & Veterans Families Counselling Service* (Government funded) with details about how to contact that service provided. As you know, this service has experienced, qualified counsellors able to address upsetting emotional responses to matters that may arise from answering the questionnaire, although the questions are not too intrusive.**

Therefore, the researchers will not be accessing the RAR Association's data base of email addresses, nor will the researchers be accessing any private information held by the RAR Association about surviving Veterans.

The Questionnaire

The anonymous and confidential, password protected, on-line questionnaire focuses on physical, social, physiological and spiritual aspects of health. It is easy to answer and would be quick to complete.

For the perusal of theRAR Association, the questionnaire can be accessed at
http://www.surveymonkey.com/s_pass.aspx?sm=MQAI3XEnQ4aWfIM%2f9Dh%2b1Q%3d%3d
The password **health**, all in lower case, needs to be used to access the questionnaire.

Each respondent's data (answers) will be automatically formatted into an e-mail message addressed to me, the student researcher – the email address is password protected and only accessible by me. Only my supervisor and I will have access to data collected. All data will be securely stored.

Ethics Approval: I will ensure that ethical standards and requirements stipulated by La Trobe University's Faculty of Health Science Human Research Ethics Committee Guidelines (2008) will be met at all times. That Committee has provided ethics approval for this study. All of the Committee's standards and requirements reflect the human research best practices of the National Health and Medical Research Council (NHMRC) in Australia. The attached *Letter of Information to Participants* details how respondent anonymity and confidentiality, plus security of data, will be ensured.

If you require further information, or if you have any questions regarding this study, you can contact me in the first instance, or my supervisor - as per contact details listed below. In the advent you have any queries that I or my supervisor are not able to answer to your satisfaction, or if you have any complaints, you may contact the Secretary of the Faculty of Health Sciences Human Ethics Committee at La Trobe University (Telephone: 9479 3583) – in the event of complaints, you will be provided with a *Complaints Regarding Human Research* form.

Thank you for considering this request.

Respectfully yours

Phil Shields (Honours Student)
Division of Nursing and Midwifery, La Trobe University

Albury/Wodonga Campus, Victoria
Ph: (03) 9479 5956 Email: shields_phil@yahoo.com.au

Professor Merilyn Annells (Supervisor)
Professor of Community Nursing
Division of Nursing and Midwifery, La Trobe University
Bundoora Campus, Victoria, 3086
Ph: (03) 9479 5956 Email: m.annells@latrobe.edu.au

Appendix C Letter of Invitation for Potential Participants

Division of Nursing & Midwifery
Faculty of Health Sciences
Melbourne 3086 Victoria

Letter of Information for Potential Participants

Title of the research study: ***Partners of Vietnam Veterans: Identifying their holistic health issues.***

Researchers: Student Researcher: Phil Shields RN
Supervisor: Professor Merilyn Annells RN, PhD

This letter is to introduce Phil Shields, who is a Bachelor of Nursing Honours student, and his supervisor, Professor Merilyn Annells at La Trobe University, and to invite you as a partner of an RAR Vietnam Veteran, to participate in a research study. If you require further information, you can contact the student in the first instance, or the supervisor - as per contact details listed below.

What the research is about: Nursing is built on a body of knowledge derived from the scientific method of enquiry; this is known as evidence based or research based knowledge. This study is researching current health issues of partners of Vietnam Veterans. Knowing what health issues are experienced by partners of Vietnam Veterans can inform about what type of nursing care and associated attention is required for the partners into the future. Health is understood to be wider than just physical health. The topic of this study is an area that has been identified as needing further research and as a pilot study, will hopefully lead to larger projects.

What you are being invited to do: Vietnam Veterans of …..RAR are being asked to pass this letter to their partners so that these partners, including yourself, can consider participating in an on-line questionnaire. The questionnaire is anonymous and confidential – you will be unidentifiable. The questionnaire is easy to answer, consisting of buttons to click and text boxes for some responses. It has four sections that are very similar in form. The four sections deal with the holistic nature of nursing care and span your physical, social, psychological and spiritual health.

The web-address for the questionnaire (that can be clicked onto here) is:
http://www.surveymonkey.com/s_pass.aspx?sm=MQAl3XEnQ4aWfIM%2f9Dh%2b1Q%3d%3d
The password is the word health, all in lower case.

Your answers to the survey questionnaire will be automatically formatted into an e-mail message addressed to the student researcher – the email address is password protected and only accessible by the student researcher.

Your rights: If you experience emotional distress from responding to the questionnaire, free counseling is available to you as a partner of a Vietnam Veteran from the *Veterans & Veterans Families Counselling Service* (Government funded) phone: 1800-011-046. This service has experienced and qualified counsellors able to address emotional responses to matters that may arise and perhaps stress or upset you from answering the questionnaire. If for any reason during the interview you become upset, it will be up to you whether or not to stop, continue or postpone the questionnaire. When you respond by entering data into the questionnaire you are indicating informed consent; however, you will not be able

to withdraw your data after the questionnaire has been submitted. You will not be discriminated against or disadvantaged in any way should you choose not to participate in this research study.

Confidentiality: The researchers will not be accessing RAR…. Association's database of email addresses of RAR…. Vietnam Veterans, nor will be accessing any private information held by the Association about …..RAR Vietnam Veterans. The questionnaire is hosted by a third party company specializing in on-line data collection; their privacy policy can be viewed here. The researchers named above are the only persons with access to the encrypted data from the on-line questionnaire. Once the study has finished, hard copies of data will be stored separately for a period of 5 years, as is required by the Public Records Office of Victoria Standard (PROS02/01), and then destroyed. Storage will be within the secure research archives of the Division of Nursing and Midwifery in George Singer Building, Bundoora Campus of La Trobe University. Once the survey has been submitted, participants will be unable to withdraw their data.

The results of the survey will be reported within an Honours Thesis and published in relevant professional refereed journals; results may also be presented at relevant conferences and seminars. A summary of the results will be provided to ….RAR Association for either posting on the Association's website or for accessing on request – this will be at the discretion of ….RAR Association. Also, a copy of the Honours Thesis will be provided to ….RAR Association.

Benefits
To you*:* No direct benefit will be gained by participants; however, we are researching a population that will add to the general body of nursing knowledge.
To humanity generally: As there is little known concerning the health issues in Australia of Vietnam Veterans' partners, it is hoped that this project will shed some light upon and add to the body of nursing knowledge regarding this subject, and be an effective pilot study for further generalisable research of the topic.

Questions regarding this project:
If you have any complaints or queries that the investigators have not been able to answer to your satisfaction, you may contact the Secretary, Human Ethics Committee, Research and Graduate Studies Office, La Trobe University, Victoria, 3086, (ph: 03 9479 1443, e-mail: humanethics@latrobe.edu.au).

Thank you for considering this request,

Respectfully yours,

Phil Shields (Honours Student)
Division of Nursing and Midwifery, La Trobe University
Albury/Wodonga Campus, Victoria
Ph: (03) 9479 5956 Email: shields_phil@yahoo.com.au

Professor Merilyn Annells (Supervisor)
Professor of Community Nursing
Division of Nursing and Midwifery, La Trobe University
Bundoora Campus, Victoria, 3086
Ph: (03) 9479 5956 Email: m.annells@latrobe.edu.au

La Trobe University
Faculty of Health Sciences
MEMORANDUM

TO: Professor Merilyn Annells School of Nursing & Midwifery

SUBJECT: *Reference:* **FHEC09/85**

Student or Other Investigator: Philip Shields

Title: **Partnersof Vietnam Veterans: Identifying their holistic health issues**

DATE: 3 June, 2009

The Faculty Human Ethics Committee's (FHEC) reviewers have considered and approved the above project. You may now proceed.

Please note that the Informed Consent forms need to be retained for a minimum of 5 years. Please ensure that each participant retains a copy of the Informed Consent form. Researchers are also required to retain a copy of all Informed Consent forms separately from the data. The data must be retained for a period of 5 years.

Please note that any modification to the project must be submitted in writing to FHEC for approval. You are required to provide an annual report (where applicable) and/or a final report on completion of the project. A copy of the progress/final report can be downloaded from the following website:
www.latrobe.edu.au/rgso/forms-resources/forms/ethic-prog-final.rtf.

Please return the completed form to The Secretary, FHEC, Faculty of Health Sciences Office, La Trobe University, Victoria 3086.

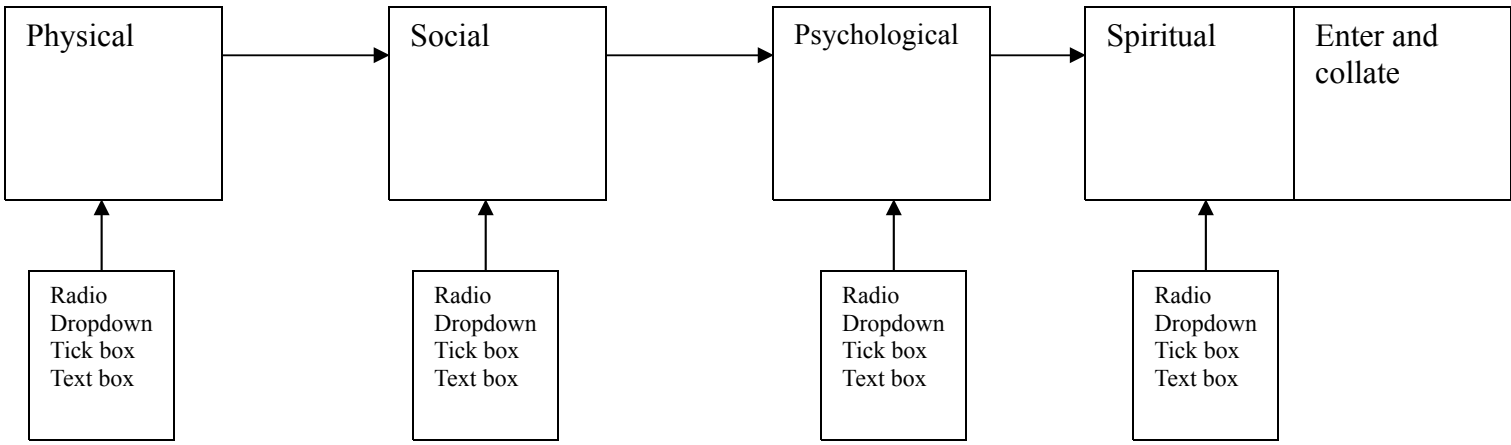
If you have a student/s involved in this project, a copy of this memorandum is enclosed for you to forward to the student(s) concerned.

Natalie Humphries
Secretary
Faculty Human Ethics Committee
Faculty of Health Sciences

Appendix D Ethics approval

Appendix E Object diagram

Object diagram.



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