COMBAT IN THE GULF WAR II: THE LIVED EXPERIENCE OF FEMALE VETERANS

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ABSTRACT

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Purpose: The purpose of this dissertation inquiry is to discover the experiences of female veterans in order to understand the impacts of combat on their physical and mental health, and to shed light on directions for future research. The research question for this inquiry is: What is the lived experience of female combat veterans who deployed to the Gulf War II?

Methods: The methodology used in this qualitative inquiry is a descriptive phenomenological approach using Husserl's philosophical framework. Colaizzi's method was used for data analysis.

Data Analysis: Analysis revealed seven themes: Living in constant fear while deployed, combat has different meanings, bringing the war home, fear of being forever changed, disrespect from fellow military members, physical health: for better or worse, and combat has rewarding experiences.

Conclusion: Early detection and assessment is crucial to providing interventions to military veterans to reduce the invisible wound of war, PTSD, and ultimately increase quality of life.

TABLE OF CONTENTS

Page

LIST OF TABLES

Table Page

CHAPTER I

INTRODUCTION

Focus of Inquiry

The Gulf War comes under the umbrella term *Global War on Terror* which was waged in response to the 9/11 attacks on United States (US) soil. The Gulf War I, also known as Operation Desert Storm, started in 1990 and ended in 1991. The Gulf War II is comprised of Operation Iraqi Freedom (OIF) and Operation New Dawn (OND) in Iraq and Operation Enduring Freedom (OEF) in Afghanistan which began in 2001 and involved other neighboring countries including Kuwait and Pakistan. The focus for this dissertation inquiry is female combat veterans who have served in Iraq and Afghanistan during the Gulf War II from 2001 through 2013.

The US military has been involved in the Gulf War II for more than 11 years now with no clear end in sight. The proposed step down is to end combat and continue training and advising Afghan troops through 2014 (Burns, 2012). More than two million military males and females have served in this war from the US (Hermann, Shiner, & Friedman, 2012). Females are a rapidly growing group in today's military whose roles have expanded. Haskell and colleagues (2010) reported that females represent 15% of active duty members, 17% of National Guard members, and 20% of those recruited for the military. Of the females serving in the military today, approximately 50% have deployed to the Gulf War II (Dutra et al., 2011).

Despite females' presence in the battlefield over the past 11 years, the Department of Defense (DOD) did not officially permit females to serve in combat infantry or special operations (Luxton, Skopp, & Maguen, 2010). The ban has been lifted on females serving in front-line combat (Stewart & Alexander, 2013) and is expected to be implemented in the near future. However, battle lines where troops in war meet do not exist in the Gulf War II (Seal et al., 2009). There are no safety zones leaving military members vulnerable to enemy attacks from many forms of guerilla warfare tactics such as mortars and improvised explosive devices [IEDs] (Street, Vogt, & Dutra, 2009). This asymmetric warfare yields combat exposures resulting in continuous stress of unknown dangers (Institute of Medicine [IOM], 2013). For military members, there is a constant threat of attack. At any moment, anyone can be killed or injured (Wise & Baron, 2006). This non-existent battle line is exposing female veterans to war zone experiences and thus combat stressors. Long-term consequences of exposure to combat stressors or traumatic experiences are a major concern because they can lead to posttraumatic stress disorder [PTSD] (Gibbons, Hickling, & Watts, 2012).

The problem is that although we know many issues affecting females in combat, we do not have a sense of the totality of their experience of combat in the Gulf War II. Females are represented in all of the military forces which include Army, Air Force, Marines, and Navy. They also serve in Coast Guard and Reserve Units. Missions often differ within the various military forces. Females occupy a wide range of military roles as officer or enlisted personnel in various geographical locations throughout Iraq,

Afghanistan, and neighboring countries. More research needs to be conducted to give female veterans a voice regarding their experiences while deployed to the Gulf War II. Documenting their experiences through their articulations, may lead to better assessment of their mental and physical health. Many military members are returning home with undetected PTSD and other mental and physical conditions, despite current and extensive assessments following deployment (Boyd et al., 2013).

Purpose of the Study

The purpose of this study is to discover the experiences of female combat veterans in order to understand the impact of combat on their mental and physical health, and to shed light on directions for future research. The proposed study will contribute to professional knowledge by identifying the needs of the female combat veteran to improve detection and assessment of their mental and physical health needs and to promote access to care. This may ultimately reduce the risk of PTSD and subsequently improve quality of life for female combat veterans.

A phenomenological approach will be used in this qualitative study. The researcher will attempt to gain a deeper understanding of the experiences of female veterans in combat who have deployed to the Gulf War II.

Qualitative research seeks to understand the phenomenon under study from the prospective of the participants. Phenomenological research is conducted to promote a deeper understanding of complex human experiences as they have been lived by the study participants (Koch, 1995). Husserl's view of phenomenology is that the focus is on

the phenomenon itself and it supports descriptive research whose purpose is to describe experiences to capture the lived experience of participants. An important tenet of Husserl's approach is the belief that the meaning of lived experiences may be solved only through one-to-one transactions between the researcher and the participants (Wojnar & Swanson, 2007). This researcher will attempt to identify the essence of human experiences about combat as described by female veterans who have served in the Gulf War II.

Philosophical Framework

Phenomenology is the most appropriate framework to guide the design of this study. Phenomenology is a philosophical perspective that helps those conducting research to explore and understand everyday experiences while being open to what presents as a phenomenon (Converse, 2012). The theoretical underpinnings of phenomenology come from the disciplines of psychology and philosophy which articulates that it is the experiences of individuals within their lifeworld (McConnell-Henry, Chapman & Francis, 2009). Phenomenology is the study of the lived experiences to achieve understanding of an experience from participants' perspective (Koch, 1995). The underlying assumption of phenomenology is that lived experiences can be understood by refining their essence (McConnell et al., 2009). Van Manen (1990) describes essences as the internal meaning structures, therefore, phenomenology is the systematic attempt to discover and describe the internal meaning structures of the lived experience. The goal of phenomenological research is not necessarily to generalize the

results, but rather to comprehend the meaning of an experience of a phenomenon (Converse, 2012).

In order to produce a philosophically congruent phenomenological design, researchers should know the history and philosophical underpinnings of phenomenology (Converse, 2012). During the 17th century, Descartes' philosophy represented the mind-body split known as Cartesian duality. This belief offered a mechanistic view of the person (Koch, 1995). The term 'phenomenology' was derived from the Greek term *phaenesthai* which means to show itself or appearance (McConnell-Henry et al., 2009). The concept of appearance was first developed by Kant during the 18th century (as cited in Walker, 2010). Kant (2003) believed that a phenomenon appears in the mind and it exists in reality, separately from human senses. In the early 19th century, Hegel (1977) viewed phenomenology as a way to study consciousness to knowledge and how knowledge makes its appearance. Later in the 19th century, Brentano's principle of intentionality maintained that every mental act is related to an object and has meaning (as cited in Converse, 2012). Intentionality became a central concept of phenomenology by his student, Husserl, who many consider to be the father of phenomenology (as cited in Converse, 2012).

Edmund Husserl was a German philosopher as well as a mathematician. Phenomenology has emerged as an important approach to research since his publication of *Ideas* in 1913 (Paley, 1997). In another publication, *Logical Investigations*, Husserl defined phenomenology as the science of essence of consciousness (as cited in Wojnar &

Swanson, 2007). Husserl believed that his approach to phenomenology would advance philosophical study to that of traditional sciences (as cited in Snow, 2009).

Transcendental or descriptive phenomenology, developed by Husserl, is one of the main schools of thought of phenomenology (as cited in McConnell-Henry et al., 2009). Husserl introduced the concept of life-world or lived experience (as cited in Koch, 1995). Thus, the researcher using Husserl's phenomenology asks about the meaning of human experience. In addition to intentionality, other components of Husserl's phenomenology include the description of essences and philosophical reduction. Intentionality refers to consciousness and the idea that consciousness is always directed toward an object. Phenomenological research illuminates phenomena as they present themselves to consciousness (McConnell-Henry et al., 2009). Wojnar and Swanson (2007) state the phenomenological researcher asks questions about the essence or meaning of a phenomenon as experienced by those who lived it. The researcher must set aside her culturally induced interpretation of combat experiences before the description phase (Converse, 2012). This is known as phenomenological reduction and the manner in which this is achieved is known as bracketing (Wall, Glenn, Mitchison, & Poole, 2004). Bracketing refers to the researcher setting aside any preconceived belief or opinions of combat experiences (Paley, 1997). The researcher will focus all awareness on the phenomenon of combat which will allow an increase in insight (Burns & Grove, 2009). The culminating aspect of a phenomenological study is the descriptive writing that discusses the essence of the experience as described by the participants (Creswell,

2013). In this study, the essence of combat experience as lived by female combat veterans will be described. The phenomenological framework will provide a philosophical perspective that will influence the focus of the study, data collection and analysis, and communication of the findings.

It is important that the research design adhere to the philosophical assumptions of the descriptive phenomenology. Ontology is concerned with the nature of reality and what can be known about it (Doucet, Letourneau, & Stoppard, 2010). The ontological belief of descriptive phenomenology is that truth exists as an essence, independent of the researcher, and can be described (Converse, 2012). Thus, the essence of combat experienced by female veterans can be discovered after the researcher brackets, or sets aside her beliefs about the opinions about the experience. Epistemology is concerned with study of knowledge and the ways in which it can be known (Doucet et al., 2010). The epistemological belief is that knowledge is created through interactions between the researcher and female combat veterans. Intuiting takes place where the researcher focuses all awareness and energy on combat experienced by female veterans. Methodology refers to how reality can be understood (Maggs-Rapport, 2001). This study will involve interviews with female veterans who have experienced combat. Field notes will be used by the researcher to record unstructured observations and to describe them. Reflective notes will be used by the researcher to note reflections and progress in the interviews. The phenomenon of combat must be presented by the female veteran to the researcher's consciousness exactly how the female veteran experiences it in a clear and

unaltered manner (Wall et al., 2004). The researcher must set aside their culturally induced interpretation of combat experiences before the description phase (Converse, 2012). The final element is writing the descriptions and disseminating them through scholarly venues such as publications in peer-reviewed journals.

Researcher's Relationship and Assumptions

As I was leaving the Naval Hospital one afternoon after having lunch with my husband, I saw one of my military nurse friends in the parking lot. She shared with me that she had just received notice of deployment to the Gulf War II. While we were talking, all of the hardships of war that I had become familiar with as a spouse were running through my head. Although her main concern was leaving behind her 16 month old daughter, I was thinking about the traumatic experiences that she could possibly be exposed to and how the consequences could linger on. She had a relatively short deployment for the time and returned in 9 months. Three months later, her husband filed for divorce. This scenario is all too common in the military community.

I am a military spouse who has spent the last twenty plus years living in military communities. My spouse is a military officer who has deployed three times to the Gulf War II for a total deployment time of approximately three years. I experienced first-hand many of the hardships of war from a spouse's perspective and also from family and friends associated with the military. Military members were returning from deployment changed. Due to PTSD, my husband's life changed and thus, my life changed.

I have had the wonderful opportunity to work with and live near females in the military for many years. I became more interested in female veterans because of my interest in women's health and upon recognizing the increasing numbers of female veterans deploying, serving new roles in combat, leaving their children behind, and facing extended periods in combat and multiple deployments which increased their exposure to trauma.

My experiences of a military spouse and research findings from the literature led to the subsequent assumptions significant to this study:

1. Female veterans are content in their military roles.
2. There are gender differences to trauma exposure from Gulf War II.
3. Deployment to the Gulf War II is a life-changing event for veterans.
4. The military environment in the deployment situation is ill prepared for females.
5. Female veterans will truthfully describe their combat experiences.
6. Through in-depth interviews, the researcher will analyze significant statements, generate meaning, and develop descriptions of the combat experience of the female veteran deployed to the Gulf War II.

Rationale of the Study

This study has significance to nursing practice, education, and research. As a profession, nurses are committed to protecting their patients against stressors that adversely affect the health of patients. Nurses in all settings should consider their

patients at risk for trauma. Nurses need to be informed about female veterans, including their traumatic experiences while deployed. This study will help nurses understand the unique characteristics of females serving in war. Understanding the experiences of female veterans in combat may lead to improved detection and assessment of mental health conditions that result from traumatic experiences, such as PTSD, in the health care setting. PTSD becomes more difficult to treat once in the chronic stage (Foa, Keane, & Friedman, 2000) when the symptoms last three months or longer (American Psychiatric Association, 1994). These health issues may not only impair the female veteran's health but also their family and social relationships.

Despite the use of validated PTSD screening and diagnostic tools by healthcare providers, many military members still do not receive evidence-based assessment and treatment methods (Wisco, Marx, & Keane, 2012). Many returning veterans may separate from the military and their eligibility for healthcare through the military or VA may be limited or they may not live close to these services (Peterson, Luethcke, Borah, Borah, & Young-McCaughan, 2011). It is imperative for all healthcare providers to become familiar with the challenges these veterans face.

The findings from this study may also lead to improved practice by the implementation of effective assessments and interventions, such as refined assessment tools and referrals to appropriate health services to promote recovery. Also at stake is the female veterans' ability to maintain employment. Nurses are at the forefront of having interactions with female veterans, which is an important first step in assessing traumatic

experiences of combat and getting essential interventions to decrease the toll that these experiences take on female veterans and their health.

Knowledge of combat experiences empowers nurses to educate not only their patients, but also other healthcare providers about possible mental health implications of these stressors. Course content addressing female veterans and their experiences in war should be added to nursing schools' curriculum. The amount of literature is minimal in the topic of combat and females; therefore nurses should consider conducting more research in this area. The ultimate goal is to improve the health and quality of life of female veterans who suffer with the invisible wound, PTSD, resulting from combat.

This study is also significant for the female veterans who disclose their lived experiences. Through telling their experiences, they will be listened to and this will help bring awareness of the array of problems faced by female veterans who have experienced combat. Their voices will be heard. Bringing awareness to female veterans and combat experience helps guide efforts to advocate for them.

Studying the lived experiences of female combat veterans is important and timely because of post-9/11 terrorist threats, the ongoing Gulf War II, and threats of conflicts in other countries which may involve the US military. The number of females in the military continues to increase and their presence in combat is not avoidable. The experiences and stories of female veterans will be documented which could possibly lead to policy changes or reforms to improve conditions for females while deployed to war.

This study also may contribute to female veterans' feeling of helping other veterans in similar situations.

Summary

As the numbers of female veterans serving in war continues to escalate, there is an increased need for awareness of the multitude of traumatic challenges they face as well as a need for more research for this unique population. It is crucial to learn more about the experiences of female combat veterans while deployed to the Gulf War II. The process of qualitative, descriptive phenomenological research will be used in this study to garner descriptions of the lived experience of female combat veterans. Nurses need to be at the forefront of research to inform nursing knowledge to implement interventions to make a positive impact on the lives of female combat veterans. More research is needed to reduce the invisible wounds of war such as PTSD and its devastating and debilitating consequences on our veterans. This study not only has the potential to guide evidence-based practice, but it also has implications for public policy concerning our female combat veterans.

CHAPTER II

REVIEW OF THE LITERATURE VIEW

The current Gulf War II commenced in 2001 and is known by the combat operation names of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) which occurred in Iraq and Afghanistan, respectively. Research concerning military veterans in combat from these operations began to evolve shortly after the beginning of the war and continues to evolve at a rapid pace. Much of the existing literature has been built upon knowledge gained from prior wars such as the Vietnam War and Desert Storm. Although these studies have been valuable to the understanding of combat in OIF/OEF (IOM, 2013), more studies are needed to focus specifically on OIF/OEF veterans. Few studies have focused specifically on females and the effects of combat on their health. Although females constitute a minority in the military, strides are being made by researchers to bring issues concerning females to the forefront.

Databases used to search for the most up-to-date articles over the past 10 years included *Cumulative Index to Nursing and Allied Health Literature (CINAHL), Proquest, Medline, Cochrane, Sage,* and *Published International Literature on Traumatic Stress (PILOTS).* The *PILOTS* database is available for access from the National Center on PTSD produced by the US Department of Veterans Affairs. To avoid restricting the search, no limiters were used. Literature searches were conducted using the keywords: females, combat stressors, posttraumatic stress disorder, and PTSD. Searches were further narrowed by the keywords: Gulf War II, OIF, and OEF. Several peer-reviewed

journals were hand searched for relevant articles. Reference lists of relevant articles were also searched for articles pertaining to female veterans and combat. The articles used for the literature review were research, primary, and secondary resources. After review of pertinent literature regarding female combat veterans, three components began to emerge. These components included combat stressors, barriers and stigma of receiving mental health treatment, and PTSD. To better understand the distinctiveness of females in combat, the unique characteristics of the current Gulf War II will be discussed followed by the components gleaned from the literature. This chapter concludes with a manuscript entitled "Deployment and PTSD in the Female Combat Veteran: A Systematic Review."

Unique Characteristics of the Gulf War II

The current Gulf War II, which has ended in Iraq but is ongoing in Afghanistan, has unique characteristics that differ from previous wars fought by the US military. Becoming familiar with these characteristics may be valuable to understanding trauma resulting from combat exposure. In 1973, the all-male draft known as the Selective Service Act of 1948 was terminated (Reeves, Parker, & Konkle-Parker, 2005). The US military today is an all-volunteer force, meaning there is no draft. It is much smaller and more diverse with various ethnic minorities (Reeves et al., 2005).

In addition to active duty military forces, some personnel are drawn from the National Guard and Reserve units. Deployment stress among females in the National Guard and Reserve may be profound (Mattocks et al, 2012). These personnel may receive less training than their active duty counterparts and therefore may feel less

prepared for deployment (Vogt, Samper, King, King, & Martin, 2008). After deployment, they re-enter society without the comradeship of military personnel who shared their experiences (Booth-Kewley, Larson, Highfill-McRoy, Garland, & Gaskin, 2010) and may have a harder time adjusting back to civilian employment (Milliken, Auchterlonie, & Hoge, 2007). National Guard and Reserve units typically experience fewer separations from their families due to military commitments than their active duty counterparts and therefore may be more affected by concerns of family disruptions (Vogt et al., 2008). These personnel may receive less support from their home communities (Mattocks et al., 2012) and may be at increased risk for mental disorders. Milliken et al. (2007) reported that individuals in National Guard and Reserve units serving in Iraq reported higher rates of mental health problems and were referred for mental health treatment at higher rates than active duty military personnel.

Because the US is an all-volunteer force, military members are serving extended deployments, re-deployments, and/or multiple deployments resulting in increased exposure to trauma. The pattern of repeat deployments is unique to the Gulf War II (Kline et al., 2010). A higher proportion of military members are being deployed. Deployments are longer and re-deployments are common with infrequent breaks between deployments (Hosek, Kavanagh, & Miller, 2006). Since 2003, approximately 38% of military members have deployed more than once and approximately 10% have deployed three or more times (Shanker, 2008). The deployment circumstances create an unstable situation for military members returning from deployment because they may soon return

to war. There may not be enough time to resolve stress issues before coping with yet another deployment.

Another significant and unique characteristic of the Gulf War II involves females. In 1948, President Truman passed the Women's Armed Forces Integration Act that permitted females to serve in regular peacetime units. Since that time, females have served as medical personnel, support, and peacekeeping staff in Vietnam, Grenada, Panama, Bosnia, and Kosovo (Women's Research & Education Institute [WREI], 2006). The Women's Armed Services Integration Act in 1967 was modified and repealed the cap of the allowance of 2% of females in the military (WREI, 2006). The Selective Service Act of 1948 expired in 1973 and ended the draft (WREI, 2006). Since then, recruiting of females escalated and the number of females joining the military increased dramatically (Middleton & Craig, 2012). Although females have served over the years in previous wars, it was not until the Gulf War that females began serving in combat settings (Fitzgerald, 2010). Risk of combat exposure for females is compounded by the enemy's use of guerilla warfare tactics in the Gulf War (Vogt et al., 2011). During the Gulf War I, approximately 41,000 females deployed (WREI, 2006). Thirteen females were killed and two were abducted as prisoners of war (WREI, 2006). As of 2010, females comprised approximately 15% of active duty members, 17% of National Guard and Reserves, and 20% of new recruits (Haskell et al, 2010). Approximately 50% of those have served in OIF and OEF combat operations (Dutra et al., 2011). The dangers

associated with the deployments to the Gulf War II are reflected overall by 144 deaths and over 850 injuries of female veterans (DOD, 2012).

For the first time in the history of US wars, females are serving alongside their male counterparts in almost every capacity in combat-exposed areas (Cohen et al., 2009; Katz, Bloor, Cojucar & Draper, 2007) and they face countless challenges. The Gulf War I represented the first conflict that females who were mothers, partnered or single, have deployed (Vogt, Pless, King, & King, 2005) and it continues in the current Gulf War II. This is also the first conflict where males and females live and work in close quarters (Vogt et al., 2005). The unique characteristics of females and the Gulf II underscore the need for research concerning the lived experience of females who have deployed.

Combat Stressors

Deployment to the Gulf War II can involve exposure to a range of both stressful and traumatic experiences (Street et al., 2009). These experiences are unique to females serving in the military beginning with the Gulf War as they are serving in combat-exposed areas for the first time. Females are integrated into the same units, battalions, and platoons as males (Katz et al., 2007). Females may experience feelings of isolation and lack of support from their male counterparts (Society for Women's Health Research, 2009). Social support may serve as a protective function from deployment stressors (Hermann et al., 2012). Females may also experience gender harassment which includes hostile and degrading behaviors from their male counterparts (Street, Vogt, & Dutra, 2009). Females are, in essence, serving in combat and suffering with a diversity of war

zone experiences which include extrapersonal, interpersonal, and intrapersonal stressors while deployed.

Extrapersonal Stressors

Female veterans are serving with their male counterparts in almost every capacity in combat-exposed areas in Gulf War II. Females are serving as pilots, military police (Luxton et al., 2010), intelligence personnel, medical personnel, and mechanics (Street et al., 2009). Additionally, females serve aboard ships and have roles in convoys. Even while performing noncombat roles, females are exposed to hostile situations and military attacks such as suicide bombings, sniper attacks, car bombs, and IEDs (Katz et al., 2007).

Other extrapersonal stressors that females are exposed include witnessing injury, death of fellow military members, noncombat trauma such as training accidents, and military sexual trauma [MST] (Fontana, Rosenheck, & Desai, 2010). As many as 1 in 5 females seeking healthcare in the VA system report sexual assault while deployed (US Department of Veteran Affairs, 2012). Females experiencing MST are at least nine times more likely to develop PTSD than those not experiencing MST (Kimerling, Street, Gima, & Smith, 2008).

A quantitative study by Piertzak, Whealin, Stotzer, Goldstein, and Southwick (2011) of 285 male veterans revealed that witnessing the wounding or killing of someone in one's unit and being exposed to friendly fire are most strongly associated with the development of PTSD. Limitations of this study included use of self-report instruments and male participants from National Guard and Reserve units from the state of

Connecticut. The results may not generalize to all military members, including females, from different branches of the service.

Another quantitative study by Maguen and colleagues (2012) examined gender differences in combat exposure, MST, and their associations with mental health outcomes in military members at an Army installation deployed to the Gulf War II. Of 7251 participants, only 554 were females. Self-report instruments were used to gather data. Results of the study included that males reported higher combat exposure while females reported more exposure to death. Further, 12% of females reported MST as compared to 1% of males. There were no differences in PTSD symptoms in male or female veterans. Limitations include a small sample of females, use of self-report instruments, and lack of generalizability to females and other branches of the military. The authors suggested that clinicians should assess for a full range of traumatic combat experiences.

A difficult work environment and the lack of adequate hygiene facilities for females are also extrapersonal stressors along with exposure to extreme weather, ubiquitous sand, lack of supplies, and ineffective equipment. The austere conditions of the deployments along with burdensome battlefield clothing and gear can lead to an increased risk of urinary and gynecologic infections. Females may self-impose fluid restriction to avoid urination (Albright, 2005) which may lead to urinary tract infections. The American College of Obstetricians and Gynecologists (2006) state that risk factors for vaginitis include stress, estrogenic contraceptives, blood from menstruation, and vaginal products that increase the pH levels. These risk factors occur in the deployed

setting. Many female veterans choose to suppress their menstruation during deployment with hormonal contraception to decrease the distressful symptoms of menses (Trego, 2012). The heavy battlefield gear may be the origin of many musculoskeletal conditions plaguing female veterans (Haskell et al., 2011).

Pregnancy is an extrapersonal stressor from combat. A study by Buller et al. (2007) determined through a retrospective review that 77 out of 1737 gynecologic visits revealed pregnancies. The average age of the female was 27 with the rank of E-4 (enlisted). The most common complaint was amenorrhea and most pregnancies were in the first semester which indicated most females became pregnant during deployment (Buller et al., 2007).

Female veterans deployed to the Gulf War II also serve as nurses and other healthcare providers. They provide care for those injured and witness death in the aftermath of battle. Another significant stressor for female veterans is when their comrades do not return home with them. Female veterans face a myriad of challenges while deployed.

Interpersonal Stressors

Interpersonal stressors of war for females include leaving their children behind to serve in war. The Gulf War represents the first time females who had children and were married have deployed to war (Vogt et al., 2005). Family disruption is a significant interpersonal stressor for the female veteran. Military members are often given little notice of deployment and face extended and/or multiple deployments. Female veterans

are three times more likely to be divorced and are more likely to married to other military members than male veterans (Boyd, Bradshaw, & Robinson, 2013).

Reintegration of the female veteran as a parent back into the family is a major concern because the strong parent-child attachment is challenged during long or frequent absences. Females may also feel guilty about missing notable milestones in their family's lives (Kelley et al., 2001). For the children of a female veteran, deployment to combat means prolonged separation from the mother, changes in daily roles and routines, and an increased sense of danger (Flake, Davis, Johnson, & Middleton, 2009). A detrimental effect on the children is that children of deployed parents exhibited greater anxiety and both behavioral and emotional problems three years post deployment (Chandra et al., 2010). In addition to children, females may have other family responsibilities at home such as caring for elderly parents or other family members.

Intrapersonal Stressors

Many female veterans have suffered traumatic experiences before joining the military. Suris, Lind, Kashner, Borman, and Petty (2004) estimated that 27% of female veterans were victims of child sexual abuse before the age of 14, while Shultz, Bell, Naugle, and Polusny's (2006) study revealed 49% of female veterans were victims of child sexual abuse. Approximately 19% of female veterans were victims of domestic violence prior to entering the military (Sadler, Booth, Mengeling, & Doebbeling, 2004). These intrapersonal stressors may be putting females more at risk of PTSD when combined with the stressors of war.

Barriers and Stigma of Mental Health

Upon return from deployment, most military members desire to come home to a grateful nation and be seen as those who bravely fought for their country. Purple hearts are awarded for traumatic and severe physical injuries; however, there is no award for the invisible wounds of war such as PTSD. Non-combat physical injuries are often viewed as weakness and most military personnel do not seek treatment unless they are unable to carry out their duties (Feczer & Bjorklund, 2009). They are also more likely to minimize the severity of their symptoms (Wisco et al., 2012). Stigma and barriers to care associated with mental disorders include embarrassment, being perceived as weak by peers and leadership, and negative beliefs about mental health care (Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009). Other concerns include the impact to military members' career and/or discharge (Hoge et al., 2004) and lower levels of perceived unit support (Wisco et al., 2012). Stigma perceptions are highest among those military members who screen positive for mental health disorders, including PTSD (Wisco et al., 2012).

Involvement in war can have dramatic consequences for the mental and physical health and well-being of the military members deployed. Stressors of combat may be putting military veterans at risk for PTSD, especially females who are serving in combat-exposed areas for the first time and whose numbers are increasing.

Post-Traumatic Stress Disorder

PTSD remains the most prevalent mental health disorder resulting from combat experience in the current Gulf War II (Cohen et al., 2009) and is a growing threat to the health of combat veterans as the war continues. Hermann, Shiner, and Friedman (2012) state that deployment to combat zones in the Gulf War II is clearly associated with the development of stress reactions and PTSD. The prevalence of new PTSD cases among returning veterans is as high as 21.8% (Seal et al., 2009). More males endure traumatic events than females, 56% as compared to 51%, but the prevalence rates of PTSD in females is at least twice those of males (Gill & Page, 2006; Tolin & Foa, 2006). One out of every five females who deployed to the Gulf War II has been diagnosed with PTSD (US Department of Veterans Affairs, 2012).

Escalating prevalence rates of PTSD in OIF/OEF veterans highlight the need for early detection and assessment of PTSD is essential for providing necessary interventions to promote recovery and increase quality of life for victims of trauma (Dunn, Julian, Formolo, Green, & Chicoine, 2011; Geiling, Rosen, & Edwards, 2012). Nurses and other healthcare providers must understand the complexities of PTSD before they can adequately assess and care for victims of traumatic events.

PTSD has been considered one of most common mental health diagnoses of returning combat veterans in the current Gulf War II (Cohen et al., 2009; Hoge, Terhakopian, Castro, Messer, & Engel, 2007; Jakupcak et al., 2009; Seal et al., 2009).

PTSD can develop in those who experience or witness "an event or events that involve actual or threatened death or serious injury or a threat to the physical integrity of self or others" (American Psychiatric Association, 2000, p. 209). PTSD is an anxiety disorder that is marked by the development of symptoms following exposure to a traumatic experience. These symptoms can develop from a range of experiences that may include war, natural disasters, rape, assault, and serious accidents. Reactions to traumatic experiences may include symptoms of avoidance, intrusion, and hyperarousal (Tilley, Tilton, & Sandel, 2009). Victims of traumatic events may re-experience the trauma in dreams, nightmares, and flashbacks (Feczer & Bjorklund, 2009). Other symptoms may include depression, insomnia, irritability, difficulty concentrating, and an exaggerated startle response. Anger, hostility, and aggression are also symptoms reported by those with PTSD (Jakupcak et al., 2007).

PTSD is one of the most impairing mental health disorders (Hermann et al., 2012). If left untreated, PTSD can have devastating and unbearable consequences for the veteran's functioning and relationships, their families, and society. These veterans have the risk of having co-morbid mental conditions including depression (Haskell et al, 2010), alcohol abuse (Zinzow, Grubaugh, Monnier, Suffoletta-Maierle, & Frueh, 2007), and physical health consequences such as impaired immune function, obesity, and increased risk of diabetes (Tilley et al., 2010). Depression diagnoses were more common in female veterans and alcohol abuse was more common in male veterans from Gulf War II (Maguen, Luxton, Skopp, & Madden, 2012; Maguen, Ren, Bosch, Marmar, & Seal,

2010; Seal et al., 2009). Despite extensive assessments following deployment, many military members are returning home with undetected PTSD and other mental conditions (Boyd et al., 2013).

Dunn and colleagues (2011) report in their study, the diagnosis of PTSD is often missed in primary care settings. Their sample consisted of 42 male military members from OIF/OEF who sought treatment for neck or back pain within a specialty clinic addressing musculoskeletal pain. Otis, Keane, and Kerns (2003) reported that chronic pain and PTSD occur together frequently. A PTSD self-report screening was given to the participants during their neck and back pain consultation. A clinical psychologist reviewed the records and confirmed a diagnosis of PTSD with 37 of the 42 participants. This highlights that assessing for PTSD with other co-morbid conditions may effectively lead to detecting PTSD and thus, administering needed interventions. However, the limitations include lack of female participation, use of self-report instruments, and a small sample size that limits generalizability.

Qureshi and colleagues (2010) found that older veterans who were diagnosed with PTSD were twice as likely to develop dementia. Veterans from the Gulf War II who screened positive for PTSD were four times more likely to endorse suicidal ideation (Jacupcak et al., 2009). Female veterans between the ages of 18 and 34 are three times more likely to commit suicide than their civilian counterparts (McFarland, Kaplan, & Huguet, 2010).

Veterans from the Gulf War II may experience financial difficulties that could ultimately lead to homelessness (Elbogen, Johnson, Wagner, Newton, & Beckham, 2012). One out of five female veterans is out of a job postdeployment, with an unemployment rate of 19.9% (Briggs, 2012). Female veterans are two to four times more likely to be homeless than their civilian counterparts (Gamache, Rosenheck, & Tessler, 2003).

Significant economic consequences exist as well. As of 2005, over 200,000 veterans were receiving compensation for PTSD disabilities for a cost of $4.3 billion dollars. This represents an increase of 80% in number of military members receiving PTSD disability benefits. It also represents an increase of 149% in the amount of payments paid for disability compared to the same numbers five years prior (Edwards, 2009). Excluding disability, Geiling et al (2012) reported that medical costs of treating OIF/OEF veterans could total up to $54 billion by 2020. PTSD is one of mental health conditions that are likely to cause the greatest long-term medical and disability costs. Ways of containing these costs include screening and treating PTSD proactively with refined screening instruments (Geiling et al., 2012).

Combat experiences are drawing increased attention from military officials and scholars in healthcare. Much of the literature has focused on male military members which has created a disparity for females who have unique needs. While there has been an increase in research that includes females, more is needed regarding the phenomenon of combat experiences that can lead to PTSD.

A limited number of empirical studies addressing combat experiences in female veterans were found and few are reflected in the nursing literature. Street, Vogt, and Dutra (2009) conducted a literature review to highlight emerging issues of stressors faced by females deployed to the Gulf War II so that providers may better understand female veterans' unique experiences. The authors of that review stated they were unable to identify a single study where there were sufficient numbers of females to ensure adequate representation of females.

What was not found in the research arena is exploration of the experiences of female veterans and combat through qualitative research. Investigating the lived experience of female veterans who have experienced combat will enhance the understanding of the impact of combat on their lives. It will also aid in detecting and assessing both mental and physical health problems of female veterans who deployed to Gulf War II by nurses who are at the forefront when patients seek health care.

Feczer and Bjorklund (2009) suggest that further qualitative research is important to illuminate the unique experiences of female combat veterans. Other gaps in the literature include the lived experience of female veterans with PTSD who have served in Gulf War II, the lived experience of female veterans after re-deployment or multiple deployments to Gulf War II, the lived experience of female veterans from the different forces (Air Force, Army, Marines, Navy, Coast Guard, and Reserve units), research concerning screening tools for nurses in all healthcare settings to evaluate and assess for combat stressors, and research regarding training for caring for combat veterans is also

missing in nursing curricula. While the current war is ongoing and other hostilities are brewing in the world, combat experiences are poised to be a substantial threat to the health of our female veterans whose numbers continue to grow in war zone areas.

CHAPTER III

DEPLOYMENT AND PTSD IN THE FEMALE COMBAT VETERAN: A SYSTEMATIC REVIEW

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Posttraumatic stress disorder (PTSD) is one of the most prevalent mental health disorders that has evolved from combat experience in the current Gulf War II (Hoge, Terhakopian, Castro, Messer, & Engel, 2007; Cohen et al., 2009; Jacupcak et al., 2009). Since 2003, the United States (US) has been involved in the Gulf War II which included Iraq and Afghanistan. Over 1.6 million military men and women from the US have served in the Gulf War II (Cohen et al., 2009; Seal et al., 2009). The prevalence of new PTSD cases increased from 0.2% in 2002 to 21.8% in 2008 (Seal et al., 2009). The military today is composed of a much smaller force and is all-volunteer, because there is no draft. Therefore, military members are facing multiple and longer deployments resulting in an increased exposure to trauma (Seal et al., 2009) and other stressors. This alone creates an unstable environment for active duty military members because many are returning home with the clock ticking to go back to combat. Potentially, two factors contribute to the increased prevalence of new PTSD cases, no current draft and multiple deployments.

Background

The number of female service members serving in the Gulf War II has risen and continues to be a rapidly growing group. To date, 15% of active military, 17% of National Guard and Reserves, and 20% of new recruits are female (Haskell et al., 2010). Approximately half of those female service members have deployed to Gulf War II in support of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) to Iraq and Afghanistan, respectively (Dutra et al., 2011). In 1948, President Harry S. Truman signed the Women's Armed Services Act and since then female service members have served in armed units during peace time and served as medical personnel and support staff during Vietnam (Dutra et al., 2011). In today's conflicts women's role in the military has changed. The Department of Defense does not permit assignment of females to combat infantry or special operations (Luxton, Skopp, & Maguen, 2010), however, there are no battle lines in Gulf War II as experienced in previous wars (Seal et al., 2009) therefore female service members are exposed to war-zone experiences.

Female service members occupy a wide range of roles in the military and face a myriad of challenges. Serving in combat-exposed areas is a new role for female service members. For the first time in United States history, many female service members are serving alongside their male counterparts in almost every capacity in combat (Katz, Bloor, Cojucar & Draper, 2007; Cohen et al., 2009). Expansion in roles for female service members while deployed to combat areas include being pilots, military police, serving aboard a combat ship (Luxton et al., 2010), convoy transportation, intelligence,

medics, and mechanics (Street, Vogt, & Dutra, 2009). Female service members deployed to Gulf War II are exposed to hostile situations and military attacks that include suicide bombings, ambush attacks, sniper attacks, car bombs, and improvised explosive devices (IEDs) (Katz et al., 2007) even while performing regular noncombat duties (Luxton et al., 2009). Exposure to other traumatic events includes participating in or witnessing atrocities (torturing prisoners of war, mutilating enemy bodies, or harming civilians), witnessing injury or death of fellow military members, going on special missions or patrols, sexual trauma, and noncombat trauma such as training accidents (Fontana, Rosenheck, & Desai, 2010). Health care implications include results of training accidents, hazardous exposures, infectious diseases, and direct combat injuries (Trego, Wilson, & Steele, 2010). Female service members who are nurses or other healthcare providers not only have the sensory exposure to those who are dying or dead, but also may have personal and emotional conflicts inherent to caring for others that are sick and wounded in a combat zone (Crompvoets, 2011).

Approximately one hundred and forty-four female service members have been killed and over eight hundred and fifty have been injured during their deployments to the Gulf War II (Department of Defense, 2012) thus reflecting the dangers associated with deployments. The number of female service members who suffer from mental health problems that result from stressors during their deployments to combat is unknown. However, there has been an increase in the number of suicides among female service members. According to McFarland, Kaplan, and Huguet (2010), female service members

between the ages of 18 and 34 are approximately 3 times as likely to commit suicide as nonmilitary females.

Female service members' leaving their children behind to serve in war occurred first in the Gulf War I (Vogt, Pless, King, & King, 2005) and continues through the current Gulf War II. Female service members may have additional family responsibilities such as caring for elderly parents or other family members. In addition to concerns at home, stressors worth noting include excessive heat and cold, boredom, and inadequate availability of supplies or equipment (Booth-Kewley, Garland, & Gaskin, 2010). Operationally, female service members are faced with the same possibilities of extended tours and multiple deployments as their male counterparts. The problem is that female service members are facing many stressors of war and each extended tour or multiple deployments may be putting them more at risk of PTSD. If left untreated, PTSD can have devastating and debilitating consequences for the veteran's functioning and relationships, their families, and society. Female service members with PTSD have the risk of having other mental conditions including depression and anxiety, along with an increased risk of suicide (Jakupcak et al., 2009). They are also more likely to experience a variety of preventable health problems such as obesity, hypertension, smoking, and asthma (Dobie et al., 2004). Other unique experiences of female service members in combat may include lack of privacy, lack of personal hygiene facilities, and serving in predominately male units (Katz et al., 2007).

As nurses and other healthcare providers seek knowledge to reduce the psychological toll of deployment on our military veterans, it is important to review the literature for research. The aim of this systematic review to is identify, appraise, and summarize studies of relevance to deployments (Webb & Roe, 2007). The objective of this study is to examine the research over the past ten years to determine if there is a relationship between deployments and the incidence of PTSD in female combat veterans as compared to male combat veterans. By studying this factor in combat veterans, this may lead to addressing the gender differences and thus, the unique needs of female combat veterans and to improved assessments, implementation of effective evidence-based interventions to promote recovery, and prevention strategies for an invisible wound of war, PTSD.

Research Question

The question guiding this systematic review was developed using the population, intervention, comparison, and outcomes (PICO) model (Fineout-Overholt & Johnston, 2005).

The variables of interest included female combat veterans (population), deployments to Gulf War II (intervention), compared to male combat veterans (comparison) on the incidence of PTSD (outcome). Does deployment increase the risk of PTSD in female combat veterans compared to male combat veterans?

Inclusion criteria included military combat veterans serving a deployment(s) in the Gulf War II which began in 2001. A deployment is defined as any current or past

activity that involves an operation, location, command, or duty that is different than the military member's normal duty assignment (National Center for PTSD, 2011). For this systematic review, the Gulf War II is represented by the names of the combat operations Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) in Iraq and Afghanistan, respectively. Additional inclusion criteria included the variable of interest, deployment, to be included in the research studies identified in Table 1. Articles included in this review needed to focus on combat veterans and the correlation of PTSD and deployments, thus bringing awareness of issues related to all deployments including those that are extended and/or multiple, and increased risk of developing PTSD as a result of those deployments. This is helpful as the focus of the review is to determine effects of deployment on military combat veterans, especially females who are serving in combat-exposed areas and have unique needs. Articles excluded from this systematic review are those that do not give statistics specific to deployments and the correlation with PTSD.

Search Strategy

A systematic literature review was the method used for this study. Databases used to search for the most up-to-date and recent primary articles over the past 10 years included *Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, Cochrane, Health Sciences (Sage), Proquest,* and *Published International Literature on Traumatic Stress (PILOTS).* The *PILOTS* database was accessed from the National Center for PTSD through the United States Department of Veterans Affairs. No limiters were used to restrict the search. Search words included female veterans and deployment,

and then gender differences and deployment. Research was furthered narrowed to the Gulf War II (Iraq and Afghanistan) era because of the unique characteristics of multiple deployments and the increase of female service members in combat exposed areas. Several peer-reviewed journals were hand-searched for relevant studies. A total of 285 articles were found. An initial screening of title and abstract was used to determine relevance that met the pre-determined inclusion criteria. Of those articles, 36 were relevant. The reference lists of relevant articles were also searched. An additional screening of the articles included study design and variability applicability (using deployment as a variable in the empirical study). This resulted in 10 potential studies. These studies can be found in Table 1 which provides an overview of the articles including the authors and dates, sample size with deployment statistics, instruments used for data collection, and a brief discussion of the findings and limitations of the study.

The evolution of research and published manuscripts about PTSD in veterans began shortly after the beginning of the Gulf War II and continues to emerge at a rapid pace. Most research has focused on male veterans or included small subsets of females in the samples as seen in several studies in this review. While there were no systematic reviews concerning this topic found in *Cochrane,* there have been several articles on reviewing the literature on the topic of female veterans. Zinzow, Grubaugh, Monnier, Suffoletta-Maierle and Frueh (2007) reviewed the literature for articles discussing traumatic experiences, trauma-related mental and physical health problems, and service use among the female veteran population. Street, Vogt, and Dutra (2009) reviewed

stressors relevant to the development of PTSD by female combat veterans. Also, Suris and Lind (2008) reviewed the literature documenting the prevalence of military sexual trauma (MST) and the associated mental and physical health consequences for both male and female veterans. No current literature was found that focuses on the female veteran and the specific effects of extended or multiple deployments on PTSD.

The articles included in this review are quantitative studies with the exception of one qualitative study. The retrospective nature of the studies included warrant investigation. A retrospective study is one in which a group of people are identified who have experienced a particular event (Burns & Grove, 2009). In this systematic review, participants were combat veterans who have experienced deployment to Gulf War II in Iraq and Afghanistan.

Table 1
Overview of Literature Regarding Deployment and PTSD

Authors	**Study Objectives Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Shen, Arkes, & Pilgrim, 2009	Examines whether location and duration of deployment affects positive screening of PTSD. Retrospective Quantitative Deployment duration; Past deployments	Navy Males -99,194 Females – 13,526	Self-report PDHA	Findings: Deployment to Iraq increased the possibility of screening positive for PTSD by 6.3 and 1.6 percentage points than those deployed on ships. For those deployed long than 180 days, the probability increased by 2.2 percentage points. Limitations: Under-reporting in PDHA responses due to stigma associated with mental health issues in the military. The PDHA may be administered fairly soon after return from deployment and mental health issues may not manifest that early. Deployments were identified by looking at pay records which may eliminate past deployments. For example, single service members are not eligible to get family separation pay and are unidentifiable. Those deployed to non hostile areas in a particular month or those deployed less than 30 days were also not identified.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Kline et	To assess the	National	Self-report	Findings: Nearly 25%

al., 2010	effects of prior deployment to Iraq or Afghanistan on the health of New Jersey Army National Guard members preparing for deployment to Iraq. Retrospective Quantitative No previous deployments; One or more deployments; Deployments	Guard Males -2223 Females – 300	Surveys with portions of PCL and PHQ	of National Guard members reported at least 1 previous deployment. Those members that previously deployed were more than 3 times more likely to screen positively for PTSD and major depression. Limitations: Reliance on self-report screening instruments may not reflect actual PTSD rates. The findings may not generalize to all New Jersey National Guard members or to other conflicts. Also National Guard members may have higher rates of mental health conditions due to family, employment, and financial stressors contributing to a more difficult readjustment post deployment. National Guard members also lack the military support that is available to active duty members who are connected to military bases.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Booth-	To identify factors	Marines	Self-report	Findings: 17.1% of the

Kewley et al., 2010	such as combat exposure and general deployment stressors associated with possible PTSD in Marines deployed to Iraq and Afghanistan. Retrospective Quantitative Deployments	Males – 1490 Females - 79	PCL CES Deployment-Related Stressor Scale	Marines screened positive for possible PTSD. Deployment-related stressors, combat exposure, marital status, and education were significantly associated with PTSD. Limitations: Unable to conduct separate statistical analyses for females due to the small sample. There was no data for the onset of PTSD symptoms; therefore some of the Marines' symptoms may have been due to noncombat experiences. There was likely under-reporting due to the nature of self-reports and the stigma related to mental illness in the military.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**

Eisen et al., 2012	To examine mental and physical health symptoms along with alcohol and drug use in veterans within 1 year of returning from deployment and also by gender, service component, service branch, and deployment operation in Iraq or Afghanistan. Retrospective Quantitative Most recent deployment	All four branches of service, National Guard and Reserves. Males – 254 Females - 343	Self-report PCL VR-12 BASIS-24 Audit-C DAST (mailed survey)	Findings: 13.9% of veterans from Iraq and Afghanistan screened positive for probable PTSS, 39% for probable alcohol abuse, and 3% for probable drug use. There were no statistically significant gender differences on PTSD measures or drug use. Males reported more alcohol use; Iraq veterans reported more depression, alcohol and drug use that Afghanistan; Army and Marine veterans reported more mental and physical problems than did Air Force or Navy veterans. Limitations: There were concerns about under-reporting in the self-report instruments due to the stigma of mental health issues in the military. Because of the retrospective design, some of the pre-deployment variations may be due to post deployment differences. Response rate was 33% of eligible participants.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Kimerling	To examine	All four	Electronic	Findings: Military

et al., 2010	military-related sexual trauma among veterans deployed to Iraq and Afghanistan who received Veterans Health Administration (VHA) primary or mental health care. Retrospective Quantitative Multiple deployments; Most recent deployment > 6 months	branches of the service. Males – 142,679 Females – 21,834	health records	sexual trauma (MST) was reported by 15.1% of the females and 0.7% of the males. Those who reported MST were significantly more likely to receive a mental health diagnosis including PTSD, other anxiety disorders, depression, and substance use disorders than those veterans who did not report MST. The relationship between MST and PTSD was stronger among females compared with males. Limitations: There were concerns about under-reporting due to the stigma of MST and mental illness issues in the military. The analyses were cross-sectional and therefore the timing of MST, deployment, and onset of mental health conditions could not be determined and thus no conclusions can be made about casual relations between MST and mental health.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Vogt et	To examine gender	Males – 252	Self-report	Findings: Females

al., 2011	differences in different dimensions of combat-related stress and their associated relationship with mental health post deployment in Iraq and Afghanistan veterans. Retrospective Quantitative	Females - 340	DRRI PCL VR-12 BASIS-24	reported slightly less exposure than males to most combat-related stressors, but higher exposure to other stressors such as prior life stress and deployment sexual harassment. Gender differences regarding the impact of combat-related stressors were minimal. Limitations: Cross-sectional reporting of both deployment experiences and postdeployment raises concerns about the association between the two. Use of Self-reports may also lead to underreporting of mental health issues in the military. The conclusions of this study were restricted to one year following return from deployment. Postdeployment symptoms can increase over time.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Seal et al.,	To investigate	All four	VA OIF/OEF	Findings: During the

2009	longitudinal trends and risk factors for mental health diagnosis among veterans from the war in Iraq and Afghanistan. Retrospective Quantitative Multiple deployments Yes or No	branches of the service. Males-147,998 Females – 21,407	Roster	study period, new mental health diagnoses increased 6-fold from 6.4% in 2002 to 36.9% in 2008; 21.8% had PTSD, while 17.4% had depression. Veterans younger than 25 years had higher rates of PTSD, alcohol use, and drug use disorder diagnoses as compared with veterans over 40. Females were at higher risk for depression while males were at higher risk for drug use disorders. Greater combat exposure was associated with a higher risk of PTSD. Limitations: The results of the study may not generalize to all Iraq and Afghanistan war veterans. In determining prevalence of mental health diagnoses, all veterans were retained with mental health diagnosis despite the possibility of spontaneous remission and full recovery. All veterans entering the VA were also retained despite possible subsequent deployments and the receipt of care outside of the VA.
Authors	**Study**	**Participants**	**Instruments**	**Findings/Limitations**

	Objectives/Study Design/Variables			
Maguen et al., 2010	To examine gender differences in sociodemographic, military service, and mental health characteristics among veterans from the war in Iraq and Afghanistan. Retrospective Quantitative Number of Deployments 1 or > 1	All four branches of the service, Coast Guard. Males – 288,348 Females – 40,701	Electronic health records & Veterans records	Findings: Female veterans were more likely than males to be young, Black, and diagnosed with depression. Males were more frequently diagnosed with PTSD and alcohol use disorder than females. Older age was associated with a higher prevalence of PTSD and depression among female, but not males. There were significant correlations of receiving PTSD diagnoses among both female and male veterans of the Iraq and Afghanistan war who had served multiple deployments versus 1 deployment. Limitations: Results of this study cannot generalize to all veterans of the Iraq and Afghanistan war. The data was abstracted from health records and the diagnoses were not verified with standardized diagnostic measures. There was no detailed information

				on levels of exposure within deployments.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Maguen et al., 2012	To examine gender differences in combat exposure, MST, and their associations with mental health screening results among veterans of the Iraq and Afghanistan war. Retrospective Quantitative Number of Deployments: 1,2, 3, or 4 or more	Males – 6697 Females - 554	PDHR	Findings: Approximately 12% of females reported MST as compared to less than 1% of males. Females are experiencing combat at higher rates than observed in previous cohorts. Females are more likely to have depression while males are more likely to have alcohol problems. Females were more likely to be Black, and more likely to be unmarried and less likely to have children than males. There were no gender differences in PTSD. Limitations: Results may not generalize to other locations, military branches, veterans of other wars, or the entire Army population. Self-report measures used were for mental health screening rather than diagnostic tools. Data was collected at 3 to 6 months and may reflect

				acute rather than long term response to deployment. Findings of significant interactions of injury and gender needs to be replicated in a larger study.
Authors	**Study Objectives/Study Design/Variables**	**Participants**	**Instruments**	**Findings/Limitations**
Feczer & Bjorklund, 2009	To examine the experience of PTSD in a female veteran of OIF, including the barriers to treatment she encountered in an outpatient psychiatry clinic. Retrospective Qualitative Extensions of deployment	Females – 1	Review of records Interview	Findings: Although gender differences in PTSD are controversial, PTSD is a significant problem in female military veterans. Limitations: Generalizability to other female veterans.

Review Results

This review of the literature sought to understand issues regarding deployment and PTSD in female combat veterans whose numbers are increasing and whose roles are changing. Following an overview of the 10 studies, several components emerged from the research which include demographics, important factors regarding deployments, screening inconsistencies and potential bias, military sexual trauma, and new mental health diagnoses. However, the proposed research question of this review was not answered, therefore indicating the need for further research. The components will be discussed below.

Some of the demographics that surfaced were that female combat veterans were more likely to be young, black, approximately 30% from other ethnicities, (Maguen, Luxton, Skopp, & Madden, 2012; Maguen, Ren, Bosch, Marmar, & Seal, 2010), and less likely to be married than males (Seal et al., 2009; Maguen et al., 2012; Maguen et al., 2010). These results also mirror those found by Fontana, Rosenheck and Desai (2010). These results may aid healthcare providers with assessments post deployment of combat veterans for mental health conditions such as PTSD.

Deployments are physically and psychologically demanding on both male and female combat veterans (Trego, Wilson, & Steele, 2010). With continued deployments, the rates of PTSD have steadily increased (Shen, Arkes, & Pilgrim, 2009). Location of deployment has had an undesirable effect on combat veterans due to combat exposure intensity. It is not surprising that one would expect combat veterans who experience more combat trauma to report a higher level of PTSD (Booth-Kewley et al., 2010).

Veterans who have deployed to Iraq and Afghanistan have a 6.3 and 1.6 percentage higher probability to screen positive for PTSD as compared to those who have deployed on a ship (Shen et al., 2009). A longer deployment also has an adverse affect the probability of being screened positively for PTSD (Shen et al., 2009). Many of the deployments are extended unexpectedly (Fezcer & Bjorklund, 2009). Specifically, when comparing those with a deployment under 60 days with those who had deployments lasting between 61 and 180 days, those with the longer deployment were 1.1 percentage points more likely to be screened positive for PTSD. Furthermore, those whose deployment lasted more than 180 days are 2.2 percentage points more likely to be screen positive for PTSD (Shen et al., 2009). Repeated deployments also negatively affect combat veterans. In one of the review articles, 54% of respondents had been deployed once, 28% had been deployed twice, and nearly 18% had been deployed three of more times (Booth-Kewley et al., 2010). Seal et al. (2009) reported 33% of respondents served multiple deployments and those who deployed more than one were associated with higher risk of PTSD. Kline et al. (2010) reported 25% of respondents reported at least one previous deployment. Those previously deployed were more than three times more likely to screen positive for PTSD (Kline et al., 2010). Multiple deployments have adverse effects on work performance of those while deployed. Combat veterans with multiple deployments reported limitations in their ability to work effectively, 16.6% versus 9.7% of other combat veterans (Office of the US Army Surgeon General, 2008).

Screening inconsistencies and potential bias was another component that emerged from the research. Kline et al. (2010) reports that there is no clear standard designating who is medically fit for deployments and PTSD does not disqualify one for military service. Furthermore, symptom reporting does not substitute for a diagnostic assessment by a healthcare provider. According to Zoroya (2008), Pentagon records between 2003 and 2008 report that 43,000 troops were deemed medically unfit and still deployed to Iraq. In the Kline et al. (2010) study, 59% of combat veterans previously deployed who screened positive for PTSD did not report symptoms of PTSD after the deployment to avoid a medical hold. Also 58% of combat veterans previously deployed reported that they had not received a post deployment mental health screen (Kline et al., 2010). Kline et al. (2010) did not differentiate genders in their study.

Military sexual trauma (MST) has been found to be one of the traumatic stressors resulting from deployments to the Gulf War II. The Gulf War II has seen an unprecedented number of female service members serving in different roles. Certain military characteristics such as high male to female ratios, traditional male environments, and predominance of male supervisors may be factors that contribute to adverse sexual behavior (Kang, Dalager, Mahan, & Ishii, 2005). Other contributing factors unique to female combat veterans include lack of privacy with close proximity to males and lack of personal hygiene facilities. Kimerling et al. (2010) conveyed that 15.1% of female combat veterans and less than 1% of male combat veterans reported military sexual trauma. Maguen et al. (2012) stated that 12% of female combat veterans and less than

1% of male combat veterans reported military sexual trauma. Combat veterans who reported MST were significantly more likely than those who did not to be given a mental health disorder including PTSD and other anxiety disorders, depression, and disorders involving substance abuse (Kimerling, 2010). This is reflected by Kang et al. (2005) study which reported that MST was significantly related to PTSD for both male and female combat veterans. MST is widespread and is an important post-deployment mental health issue in combat veterans, especially females who are affected most often.

Gulf War II combat veterans had an increase six times of new mental health diagnoses from 2002 to 2008 (Seal et al., 2009). In the Seal et al. (2008) study, 21.8 % were diagnosed with PTSD and gender differences of other mental health diagnoses were that females had a higher risk for depression (Fontana et al., 2010; Haskell et al., 2010; Luxton, Skopp, & Maguen, 2010) while males had a higher risk of substance use (Fontana et al., 2010). Other studies have found that there were few gender differences in post deployment mental health but indicated that substance abuse was higher for males than females (Eisen et al., 2012; Vogt et al., 2011). Veterans returning from deployments in the Gulf War II with mental health disorders had 42-146% greater utilization of health care at Veteran Administration (VA) medical services than those without mental disorders (Cohen et al., 2009). Those with PTSD had the highest utilization of health care at the VA at 71-170% (Cohen et al., 2009; Jakupcak et al, 2009). This underscores the need for mental health care services for combat veterans returning from the Gulf War II.

Limitations

This systematic review has limitations that warrant consideration. In order to generalize the findings, larger and more representative samples of female combat veterans are needed for further research. Two of the quantitative studies (Eisen et al., 2012; Vogt et al., 2011) had ample representation of females that was more than 50%. The other quantitative studies ranged from 12 - 13% of females with the exception of the Maguen et al. (2012) study at .07% and the Booth-Kewley et al. (2010) study at .05% . The last two inadequately represent female combat veterans. The case report by Feczer and Bjorklund (2009) is a sufficient sample size for the qualitative research design. The results of this systematic review may not generalize to all combat veterans, other military branches, or veterans of prior wars.

All of the quantitative studies in the review involved convenience sampling and were not drawn randomly. The studies in the review articles are correlational which examine the relationship between demographic variables or inherent characteristics of a study's participants (Norwood, 2010). This design cannot lead to causality (Polit & Beck, 2012), however exploration of relationships may help determine hypotheses and to discover associations and predictions within the data. Strengths of the correlation design include the feasibility of time and cost.

Other limitations, such as self-report instruments, screening instruments, and stigma regarding reporting mental health issues, deserve examination. The studies in the review articles were also limited by the reliance on self-report instruments which may not

reflect actual PTSD prevalence rates (Kline et al., 2010). Two of the studies (Eisen et al., 2012; Kline et al., 2010) collected data from their own surveys while the other articles collected data from electronic medical records, rosters, and other veteran records. While the screening instruments used in the review articles have been validated and deemed reliable in other studies, there were multiple screening instruments used for data collection in different studies in the review. In one of the review studies, the screening instruments were not verified (Vogt et al., 2011).

The data collected in the review articles are from instruments used to screen PTSD rather than diagnostic instruments. The screening process of PTSD merits investigation. There were several screening tools used rather than a standard screening tool. There may be inconsistencies throughout the forces as to when the appropriate instruments used to screen PTSD are administered. The screening process could take place too soon before symptoms of PTSD have manifested. Symptoms of PTSD may not fully surface until several months after returning from deployment (Katz, Cojucar, Davenport, Pedram, & Lindl, 2010). Hoge, Auchterloine, and Milliken (2006) found that less than 10% of Gulf War II veterans who presented with PTSD symptoms were identified and referred to treatment through the screening process, thus under representing the prevalence of the problem. Caution should be taken when generalizing the results until replicated with clinician diagnostic tools (Maguen et al., 2012). The diagnosis of PTSD should be made by an experienced psychiatric health care provider using the approved criteria by the *Diagnostic and Statistical Manual of Mental*

Disorders, (4th ed., text revision) (DSM-IV-TR) with the proper amount of time allotted for the interview.

An important notation is that there is a stigma in the military associated with reporting mental health issues and receiving health care, and therefore there may be underreporting. Some of the barriers include embarrassment and reluctance to disclose symptoms, the fear of being perceived as weak, not knowing where to go for help or poor access to services, the eagerness to return to life as it was before deploying, fear of stigmatization, and possible impact on military career or military discharge (Hoge et al., 2004). In addition, many of the returning combat veterans come from different cultural backgrounds and face other challenges such as differences in coping mechanisms as well as support systems.

Conclusion

The findings of this systematic review show that stressors of extended and/or multiple deployments can be detrimental to the health of combat veterans. Nursing is a profession that is committed to protecting patients against stressors that impact health. PTSD is a growing threat to health in the United States, particularly among our military veterans. While the current Gulf War II is ongoing and other conflicts around the world are threatening, it is expected that the numbers of female service members deployed will continue to increase, thus subjecting them to the hardships of deployments. Increased awareness of screening for PTSD as well as issues resulting from deployment is paramount. It is also vital that differences between male and female veterans are

identified and understood in order to evaluate properly and provide the best care for all veterans. As more and more of military veterans are leaving the military and entering the civilian world, nurses in all settings should consider their patients at risk for trauma and therefore PTSD. Nurses need to be informed about PTSD and associated co-morbidities to empower themselves to educate not only their patients, but also other healthcare providers about PTSD. Curriculum addressing trauma issues and PTSD should be implemented in nursing schools. Current knowledge is important for policy makers to aid in planning for optimal deployment policy. The crucial goal is to preserve the health of combat veterans which is dependent upon the knowledge that is gained and dissemination of research.

Implications for Future Research

Clearly more studies are needed to determine the effects of multiple deployments on the health of military personnel. Issues concerning deployments are potentially modifiable by the military (Booth-Kewley et al., 2010) and are therefore important for researchers to address in order to seek remedies by the military. Additional studies using larger subsamples of females to allow for sufficient power to analyze gender differences are needed in future studies. More research is also needed specifically for female service members to address their unique needs and to improve services for this growing population. A vital issue that is not known is how combat veterans are faring with PTSD and other mental health diagnoses after deployment. Therefore, longitudinal studies are needed to examine changes over an extended period post-deployment in combat veterans

with the invisible wound of PTSD. Perhaps those veterans with PTSD should have quarterly mental health assessments by mental health professionals for the first year and then yearly, provided the veteran is progressing well. Strides need to be made to decrease the stigma to reporting mental illness which is a barrier to the health of the veteran as well as this research.

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CHAPTER IV

Methodology

Research design refers to the many ways that research can be conducted to answer the proposed research question (Marcyk, DeMatteo & Festinger, 2005). The research design to be used in this study of female veterans who have deployed to the Gulf War II and experienced combat is qualitative, or nonexperimental, which means information provided will not be used to draw causal inferences. Qualitative research is inductive and requires flexibility of the researcher. Qualitative research is holistic and the purpose is to strive for an understanding of the whole rather than parts (Polit & Beck, 2012). The qualitative design was selected because rich, in-depth data was desired to describe and document female veterans' experiences of combat.

In terms of settings, researchers using the qualitative design usually collect their data in real-world naturalistic settings (Polit & Beck, 2012). This study will take place in a setting determined by the participant and the researcher to be most comfortable, convenient, safe, and private. Another issue regarding research design is the timeframe which may be cross-sectional with one data collection point, or longitudinal with multiple data collections over time (Polit & Beck, 2012). This study will be cross-sectional with one data collection point or interview.

Research methodology refers to the entire process of conducting research, such as planning and conducting the research, drawing conclusions, and disseminating the findings (Marcyk et al., 2005). The most appropriate method to guide this study on

combat as experienced by female veterans is phenomenology, specifically descriptive phenomenology.

Research Question

The guiding question for this research is "What is the lived experience of female combat veterans deployed to Gulf War II?"

The purpose of this study was to explore experiences of combat that female combat veterans consider important in their lives. The specific aims of the study are to determine: (a) the issues of greatest concern to female veterans deployed to Gulf War II, (b) the impact of combat on the life of female veterans deployed to Gulf War II, and (c) the perceived health factors of female veterans deployed to Gulf War II.

Sample

There is a guiding principle to selecting a sample in a phenomenological study: All participants must have experienced the phenomenon and be able to talk about what it was like to have lived the experience (Polit & Beck, 2012). Purposive sampling will be used to recruit participants. This involves selecting participants that meet a predetermined criterion of significance (Rudestam & Newton, 2007). This criterion is experience with combat by female veterans. Maximum variation will be used which involves purposely selecting participants with a wide range of variation on the topic of combat experiences of female veterans. For example, female veterans may be officers or enlisted, be from different branches of the service, serve different roles in combat, and serve in different geographic areas during deployment.

Sample sizes in phenomenological studies are typically fewer than 12 participants (Polit & Beck, 2012; Rudestam & Newton, 2007). Although the sample size tends to be smaller, the intent is to collect extensive detailed data from the participants (Creswell, 2013). It is anticipated that this study would have approximately 8 to 12 participants (Billhult, Stener-Victoria, & Bergbom, 2007; Lauver, 2010; Sloan & Pressler, 2009); however, data will be collected until saturation is achieved. Saturation refers to the collection of data until the information elicited is redundant of previous information (Polit & Beck, 2012).

The population for this study is female combat veterans who have experienced combat. Inclusion criteria for the sample include: (a) female veterans who have deployed to Gulf War II; and (b) age 18 or over;. Exclusion criteria include: (a) male veterans, and (b) female veterans who have not deployed. Following Institutional Review Board (IRB) approval, participants will be recruited via flyers posted at the USO at a naval air station located in South Texas. An email inviting participants will be sent through the Veterans Office listserv through Texas Woman's University (TWU). Female combat veterans who voluntarily contact the Principal Investigator (PI) and agree to participate will be informed about the study. Participants can voluntarily decide after full disclosure of the study whether or not to take part in the study without prejudicial treatment. They will have the right to ask questions, to refuse to answer questions, or withdraw from the study at any time. After the informed consent is obtained, the PI and participant will agree on a convenient time and place for the face-to-face interview to take place. For

those living in the Denton area, a time will be set up where the PI will be in the Denton area to conduct the interviews. The participants will receive a $35 Target gift card after the interview even if they withdraw from the study. Participants will be asked by the PI if they can be contacted near the conclusion of the study to confirm the accuracy of the results, known as member checking. The consent form will have an area specifically for the participants to add an email, telephone number, or address for the purpose of receiving the results as recommended by Colaizzi's data analysis method. The signed consent form will be locked in a cabinet in the PI's locked office.

Snowball sampling will also be used when participants are asked if they are aware of others who might be participants for the study (Polkinghorne, 2005). Those interesting in participating will contact the Principal Investigator. Snowball sampling is sometimes referred to as network sampling (LoBiondo-Wood & Haber, 2010). It is a strategy where the researcher may ask early informants or participants to refer other participants who meet the inclusion criteria of this study (Polit & Beck, 2012).

Data Collection

Data collection occurs simultaneously with data analysis in qualitative studies (Burns & Grove, 2011). This inductive and ongoing process involves continual reflection about the data gathered throughout the study. Data collection for this study will consist of in-depth interviews and field notes with female veterans who have experienced combat during deployment to the Gulf War II. Interviews consist of communication between the researcher and the participant to obtain information for a study (Burns & Grove, 2009).

These interviews will be conducted face-to-face in a comfortable, convenient, safe, and private location determined by the PI and participant.

The participants will be asked to verbally describe their experiences of a phenomenon, i.e., combat. An interview guide with five semi-structured open-ended questions written by the researcher will be used to yield rich descriptions of the experiences of combat by female veterans (See Appendix A for Interview Guide). The interview questions were developed using Creswell's (2009) recommendations. Creswell (2009) suggests focusing on a single phenomenon such as combat experiences and using exploratory words such as *describe.* Using the word *what* conveys an open and emerging design. The responses to the questions are usually fairly brief and the research may use prompts such as *Tell me more* or re-word the question to encourage discussion. The interview questions were modified after completion of a pilot study. Questions will be ordered from general to specific. The researcher's job is to encourage participants to talk freely and described their experiences in their own words. Interviews will last approximately 1 hour. The PI will be alert for discomfort displayed by the participants and will provide support, breaks, and resources as needed.

The interviews will be audio recorded to ensure the researcher captured the participants' words verbatim and to facilitate analysis. The recordings will contain the exact words of the interview, including questions asked by the PI, so that the PI does not forget important answers and words. Audio recording also allows the PI to have eye contact with the participants and to pay attention to what the participants say, along with

nonverbal cues such as gesturing. The recordings will be digitized using a secure password-protected computer. Only the PI, the advisor, and the person who transcribes the interviews will hear the tapes or read the written interview. The person transcribing the interview will sign a confidentiality agreement found in the TWU IRB resources. There will be no identifying information in the recordings as code names will be used. The audio recordings will be deleted from the digital recorder after the interviews have been transcribed and verified.

Creswell (2013) suggests using good interviewing procedures by staying with the designated interview questions based on the research purpose, completing the interview in the time specified, being a good listener, being respectful and courteous, and offering little to no advice. Researchers need to practice reflexivity which refers to being conscious of the part they play in the study and reflect on how their behavior can affect the data they acquire (Polit & Beck, 2012). Demographic data, such as age, rank, ethnicity, number of deployments, military service component, marital status, and number of children, will also be collected from each participant prior to the interview (See Appendix B for Demographic Tool).

Researchers also rely on observational data during data collection. Field notes and reflective notes are the most common form of record keeping. Field notes record objective observations such as nonverbal behaviors including facial expressions and gesturing. A reflective note details subjective observations from the researcher such as

consistencies noted that were found in the literature (Norwood, 2010). The researcher will refer back to the field notes when analyzing the interview data.

Data Analysis

Colaizzi's (1978) descriptive phenomenological method of data analysis will be used to guide discovery of the lived experience of female combat veterans. Each of the 7 steps of Colaizzi's method will be used to analyze the data. First of all, the PI will record each of the participants' interviews. After transcription, the PI will read the transcript of each participant and listen to the audio recorded interview to acquire a feel for descriptions from them. The PI will return to each description to underline and extract significant statements pertaining to combat. The PI will then formulate and write the meanings of each statement. The next step is to organize the formulated meanings into clusters of themes while referring back to the descriptions to validate and note discrepancies.

The PI will integrate the exhaustive descriptions of combat experiences and formulate them into a statement. The last step is asking the participants to verify the findings, thus validating the findings. This step, also referred to as member checking, will also provide credibility for the research findings.

Colaizzi's method does not emphasize bracketing as advocated by Husserl. Burns and Grove (2009) report that when analyzing phenomenological data, several variations may be used. Nieswiadomy (2012) states it is only possible to see the experience from the perspective of the person who lived the experience when the researcher attempts to

put aside his or her own ideas about the phenomenon under study. Therefore, bracketing from the Husserlian method will also be used in this study.

Colaizzi's method of data analysis is congruent with descriptive phenomenology because the basic outcome is the description of the meaning of a lived experience (Polit & Beck, 2012). The difference is the lack of emphasis on bracketing and the inclusion of validation of findings by participants. There are many important components of data analysis which should be considered when selecting a data analysis method. The steps of Colaizzi's method can be easily replicated as evidenced by the many studies that have used this method.

Treatment of the Data

Data storage for this study will conform to the TWU IRB to protect human research participants. Confidentiality will be protected to the extent that is allowed by law. Code names, not real names, will be used during the study. Personal identifying information of the participants will be stored in a secure place separately from the coded material to prevent identification. Research records, including written informed consents, IRB approval, and the records obtained through observations and interviews will be stored in locked cabinets in the researcher's locked office. Research data in electronic form (audio recordings) will also be stored in locked cabinets.

Personal identifying information will be kept separate from the data collected. Data stored in computers will be in encrypted format. Only the PI will have access to the stored data and records. Per TWU IRB policy, the consent forms will be mailed to TWU

IRB at the close of the study. The audio recordings will be deleted after transcription and verification. The transcripts will be shredded after the study has concluded. The codebook will be kept securely for no longer than 5 years and will then be disposed of properly by shredding.

Scientific Rigor

To help make the study findings as trustworthy as possible, Lincoln and Guba's (1985) framework of quality criteria will be used to assess rigor for this qualitative study of female veterans experiencing combat. The four constructs proposed to develop the trustworthiness of the study are credibility, dependability, confirmability, and transferability. Polit and Beck (2012) state "these four criteria represent parallels to the positivists' criteria of internal validity, reliability, objectivity, and external validity, respectively" (p. 584). Authenticity was added as a fifth criterion which is more distinctive within the constructivist paradigm (Polit & Beck, 2012).

Credibility

Credibility refers to the truth of the findings and is consistent with validity in quantitative studies (Lincoln & Guba, 1985). The first issue in credibility is for the researcher to plan and carry out a philosophically congruent and effective study to have credible results. Credibility ensures that the phenomenon of combat was accurately identified and described. Activities that will be used to demonstrate credibility in this study included prolonged engagement and persistent observation. The researcher also will maintain comprehensive field notes and audio-taped the interviews to ensure that the

participants' words were verbatim. Data will be collected from participants until saturation occurred through detailed interviews. A reflexive journal will be utilized. The literature will be searched for confirming evidence. Member checking will include sharing the information with each participant to confirm the results. The researcher will document evidence of using quality criteria and used thick, vivid description in the presentation of findings. The credentials of the researcher will be also disclosed.

Dependability

Dependability refers to the stability of the data over time and over conditions which is referred to as reliability in quantitative studies (Lincoln & Guba, 1985). If the findings of a study are dependable, they should be consistent and accurate. This will be accomplished by the researcher maintaining an audit trail that demonstrated how she achieved the conclusions. Throughout this study there will be careful documentation of the data along with member checking at the end. The data will consist of raw data, summary of data analysis, coding schemes, themes, and a reflexive journal. Lincoln and Guba (1985) assert that there can be no validity without reliability, thus there can be no credibility without dependability.

Confirmability

Confirmability refers to the effort to maintain objectivity or neutrality. This criterion is concerned with establishing that the data represent what the participants said and does not represent any bias from the researcher (Lincoln & Guba, 1985).

Confirmability will be enhanced in this study by careful documentation, member checks, and an audit trail as well as a reflexive journal by the researcher.

Transferability

Transferability refers to the generalizability or applicability of the findings to other situations and other people (Lincoln & Guba, 1995). Qualitative research is not designed to make generalizations as in quantitative research (Tappen, 2011). However, comprehensive notes, saturation of data by participants, development of a codebook, thick and vivid description along with documentation of quality enhancement criteria for the study enables others to make comparisons across settings and people. The researcher will attempt to find negative cases where analysis shows patterns or categories that do not seem to fit and explore the reasons for this. The researcher will also discuss the limitations of this study.

Authenticity

Authenticity refers to the extent that the researcher fairly and faithfully reports the participants' thoughts and conveys the tone of the participants' experiences as they are lived (Polit & Beck, 2012). Strategies that demonstrate authenticity include prolonged engagement, persistent observation, audio-taping for verbatim transcription, development of a codebook, thick description, and impactful writing. The researcher will practice reflexivity in a journal. Colaizzi's method of data analysis suggests that the participants be asked to verify the interpretations of the data obtained which contributes to authenticity of the study. The goal of this researcher is to have accurate and fair

reporting of female veterans describing their combat experiences. This study may be considered authentic because if it brings new insight into the phenomenon of combat as experienced by female veterans.

CHAPTER V

THE LIVED EXPERIENCE OF FEMALE VETERANS DEPLOYED TO THE GULF WAR II

A paper submitted to *Nursing Forum*

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Introduction

Currently over 2.2 million male and female military members have served in the war in Iraq (Operation Iraqi Freedom [OIF] and Operation New Dawn [OND]), Afghanistan (Operation Enduring Freedom [OEF]), and surrounding regions (Institute of Medicine [IOM]. 2013). These wars fall under the umbrella term *Global War on Terror* which began after the attacks on United State (US) territory on September 11, 2001 and are commonly referred to as the Gulf War II. Female veterans serving in OEF/OIF represent the largest cohort of females who have been actively involved in combat operations (US Department of Veterans Affairs, 2011). As a result of their combat experiences, many are returning with post deployment mental and health problems. Understanding a female veteran's experience in combat is crucial to understanding these health issues when she returns to rebuild her live after deployment.

Background

For more than 12 years, the United States (US) has been involved in the war in Iraq and the current ongoing war in Afghanistan. In 2010, the war in Afghanistan surpassed Vietnam as the longest war in American history (Nagorski, 2010). The

operations in Iraq, OIF and OND, ended in 2011. The operation in Afghanistan is scheduled to end in 2014, but there will be continued training and advising of Afghan troops by US military personnel (Burns, 2012).

Military veterans serving in Iraq and Afghanistan experience asymmetric warfare, such as suicide bombings, sniper attacks, car bombs, improvised explosive devices (IEDs), and mortar firings (Katz, Bloor, Cojucar & Draper, 2007). Thus, no battle lines exist as in previous eras.

Although most military members return from war unscathed, many are returning with complex mental and physical health problems that present life-long challenges as well as hindering successful reintegration post deployment (Institute of Medicine [IOM], 2013). Female veterans serving in these wars will be affected by their traumatic experiences for years to come. This article reports on the lived experience of female veterans who have deployed to the Gulf War II.

Review of the Literature

Reviewing the literature contributes to better understanding of the unprecedented attributes and unique characteristics when female veterans spoke about their experiences in the Gulf War II. The unique characteristics of the wars in Iraq and Afghanistan will be discussed to better understand the unprecedented attributes of female combat veterans.

The Selective Service Act ended the all-male draft in 1973 (Reeves, Parker, & Konkle-Parker, 2005). Thus, the military today consists of an all-volunteer force. The size of the military today is smaller and more diverse than previous eras (Reeves et al.,

2005). Therefore, military members are facing re-deployment, multiple deployments, and/or extended amounts of time during the deployment resulting in an increased exposure to combat experiences (Seal et al., 2009). Deployments are not only longer, but infrequent breaks in between deployments is common (Hosek, Kavanagh, & Miller, 2006). This deployment pattern creates an unstable environment for military members as the clock may be ticking for their return to war (Conard & Sauls, in press). There may not be enough time to resolve stress issues before coping with an additional deployment.

Another important unique characteristic associated with the Gulf War II comprises female active duty members. More females are serving in the military than ever before and the numbers are increasing. Females represent approximately 28% of the military population serving in the Gulf War II (US Department of Veterans Affairs, 2013a). Haskell and colleagues (2010) report that approximately 15% of active duty military, 17% of National Guard and Reserves, and 20% of new recruits are female. Approximately 50% of these females have deployed to the wars in Iraq and/or Afghanistan (Dutra et al., 2011). These numbers represent the largest activation and deployment of female service members to date (IOM, 2013).

For the first time in US history, many females are serving in combat roles alongside their male counterparts (Katz et al., 2007; Cohen et al., 2009). Females serve in roles such as pilots, military police (Luxton, et al., 2010), intelligence personnel, medical personnel, and mechanics (Street, Vogt, & Dutra, 2009). Females also serve roles in convoys and aboard ships.

Combat exposure for females is amplified by the enemy's use of guerilla tactics (Vogt et al., 2011). They are exposed to the hardships of asymmetric warfare even while serving in noncombat roles (Katz et al., 2007). The perils of deployment have resulted in approximately 152 deaths (Stewart & Alexander, 2013) and over 850 injuries to female veterans (Department of Defense [DOD], 2012). Although female veterans are barred from direct combat, they are serving in combat-support roles and in greater numbers (Fontana & Rosenheck, 2008). Recently, the ban on females serving in front-line combat was lifted by the Pentagon (Stewart & Alexander, 2013). As more occupational opportunities unfold, the numbers of female veterans will continue to increase at unprecedented rates.

The war in Iraq also represents the first time females have deployed who were mothers (Vogt, Pless, King, & King, 2005). These current conflicts also represent the first time males and females deployed have lived in close quarters (Vogt et al., 2005) and are integrated into the same units, battalions, and platoons (Katz et al., 2007). These unique characteristics highlight the need for further research regarding the lived experience of females who have deployed. Females face a myriad of challenges and stressors while deployed.

Females are exposed to an array of both stressful and traumatic experiences during deployment to the Gulf War II (Street et al., 2009). Females in the military have served valiantly over the years; however, the war in Iraq represents the first time females

have served in combat settings (Fitzgerald, 2010). Combat stressors experienced by female veterans may be extrapersonal, interpersonal or intrapersonal.

Female veterans of the current wars have witnessed injuries, deaths of other military members, and noncombat trauma such as training accidents (Fontana, Rosenheck, & Desai, 2010). Other extrapersonal stressors include a difficult work environment. Some austere conditions of deployment include living with extreme temperatures, ubiquitous sand, heavy battlefield gear, supply deficiencies, and equipment not functionally effective. Other unique experiences of females in combat may include lack of privacy and lack of personal hygiene facilities while serving in predominately male units (Katz et al., 2007).

While being integrated into male-dominated units, battalions, and platoons (Katz et al., 2007), many females may experience isolation as well as a lack of support from their male colleagues (Society for Women's Health Research, 2009). Hermann, Shriner, and Friedman (2012) report social support may function as a protective factor from stressors during deployment. In addition to gender harassment from their male counterparts, females may also experience military sexual trauma. According to the US Department of Veteran Affairs (2012) approximately 1 in 5 females who seek healthcare from the Veterans Administration (VA) health care system report sexual assault during their deployment.

Female veterans experience interpersonal stressors of the current wars with family disruptions when leaving the children behind to deploy to war. They also may

experience guilt when missing major milestones in the lives of their family (Kelley et al., 2001). Reintegration is a concern as the parent-child attachment is challenged during prolonged separation. Furthermore, female veterans may have other familial responsibilities such as caring for aging parents or other family members.

Unfortunately, some female veterans may have endured traumatic experiences prior to their military service. Some may have been victims of child sexual abuse (Suris, Lind, Kashner, Borman, & Petty, 2004) or victims of domestic violence (Sadler, Booth, Mengeling, & Doebbeling, 2004). These intrapersonal stressors combined with stressors of war may be putting females at higher risk for PTSD.

Most female veterans who have faced war zone experiences will return from deployment and readjust to life back home successfully. However, a substantial number of females will return from deployment with issues related to their deployment experiences. The most prevalent mental health disorder that is resulting from the combat experiences of the current war is PTSD (Cohen et al., 2009). One out of every five females who return from the current war has been diagnosed with PTSD (US Department of Veterans Affairs, 2012). These prevalence rates emphasize the need for early detection and assessment of PTSD which is essential to providing early interventions to not only promote recovery, but also increase quality of life for victims of traumatic experiences (Geiling, Rosen, & Edwards, 2012).

PTSD is considered an impairing mental health disorder (Hermann et al., 2012). If not treated, the consequences can be devastating and unbearable for the female

veteran's functioning and relationships, their families, and society. There is a risk of having co-morbid mental conditions that include depression (Haskell et al., 2010) and alcohol abuse (Zinzow, Grubaugh, Monnier, Suffoletta-Maierle, & Frueh, 2007). Physical health consequences of PTSD may include impaired immune function, obesity, and increased risk of diabetes (Tilley, Tilton, & Sandel, 2009). Those who screened positively for PTSD were four times more likely to be affected by suicidal ideation (Jacupak et al., 2009). Between the ages of 18 and 34, female veterans are three times more likely to commit suicide as compared to their civilian counterparts (McFarland, Kaplan, & Huguet, 2010).

The unemployment rate of female veterans post deployment was 19.9% (Briggs, 2012) and female veterans are two to four times more likely to be homeless than their civilian counterparts (Gamache, Rosenheck, & Tessler, 2003). Another significant economic consequence includes medical costs of treating veterans returning from war. Geiling et al. (2012) report that PTSD is one of the medical conditions that is likely to cause the greatest long-term medical care and disability costs. By 2020, the medical care cost for treating veterans from the Gulf War II, excluding disability, could total up to $54 billion (Geiling et al., 2012).

Many military members still do not receive evidence-based assessment and treatment methods despite the use of validated PTSD screening and diagnostic tools by healthcare providers (Wisco, Marx, & Keane, 2012). Many returning veterans may decide to separate from the military after deployment. Their eligibility for healthcare

through the military or VA may be limited or they may not live near these healthcare facilities (Peterson, Luethcke, Borah, Borah, & Young-McCaughan, 2011). Therefore, health care providers in civilian settings will see an increase in numbers of veteran patients.

The problem for this study is that the totality of female veterans' experiences in combat is not known. Female veterans may be represented in all military forces (Air Force, Army, Marines, Navy, and Reserve units) whose missions may differ. Female veterans may be officers or enlisted members who occupy an array of roles while deployed. They also may be serving in various geographical regions throughout Iraq, Afghanistan, and neighboring countries such as Kuwait. Much of the current literature is based upon knowledge gained from the war in Vietnam and Desert Storm in Iraq. This literature has been beneficial to the understanding of combat in the current wars; however more studies are needed to focus specifically on the Gulf War II. The exploration of the lived experience of female veterans and combat through qualitative research is limited.

Combat experiences have the attention of military officials as well as scholars in healthcare. Understanding the impact of combat on the lives of female veterans will be enhanced by investigating their lived experiences in combat. This study will aid in the detection and assessment of both mental and physical problems post deployment by nurses who are at the forefront when female veterans seek care. This may ultimately reduce the consequences of PTSD and increase quality of life for female veterans post deployment. It is crucial for all healthcare providers to become familiar with the

experiences and challenges that veterans face because these veterans may be presenting to healthcare facilities outside the military or VA for care. The study of the lived experience of female combat veterans who deployed to these wars is timely, relevant, and important because of continued post 9/11 threats and other hostilities brewing throughout the world.

Philosophical Framework

Transcendental, or descriptive, phenomenology is the most appropriate framework to guide discovery of the lived experience of female veterans and combat. Phenomenology is a philosophical perspective that helps researchers to explore and understand everyday experiences while being open to what presents as a phenomenon (Converse, 2012). The phenomenon in this study is the combat experiences of female veterans deployed to the Gulf War II. The theoretical underpinnings of phenomenology originate from the disciplines of both psychology and philosophy and convey the experiences of individuals within their lifeworld (McConnell-Henry, Chapman & Francis, 2009). Husserl is considered by many as the father of phenomenology (as cited in Converse, 2012). Husserl developed transcendental phenomenology which is one of the main schools of thought of phenomenology (as cited in McConnell-Henry et al., 2009) and introduced the concept of lived experience (as cited in Koch, 1995). Thus, the researcher using Husserl's phenomenology asks about the meaning of human experience. Bracketing, intuiting, analyzing, and describing are four steps commonly involved in descriptive phenomenology studies (Polit & Beck, 2012).

Methodology

Design

A qualitative design was used for this study. The qualitative approach was selected because rich, in-depth data was desired to describe and document female veterans' combat experiences. The most appropriate method to guide this study of the lived experience of female veterans in combat is phenomenology, specifically transcendental or descriptive.

Research Question and Specific Aims

The guiding question for this study is "What is the lived experience of female combat veterans deployed to the Gulf War II?"

Exploring the experiences of female combat veterans deployed to the Gulf War II is the purpose of this study. The specific aims include exploring: (a) the issues of greatest concern to female veterans while deployed; (b) the impact of combat on the life of deployed female veterans; (c) the perceived health impact of female veterans during their deployment; and (d) to shed light on future research.

Sample

A guiding principle in selecting a sample in a phenomenological study is that all participants must have experienced the phenomenon and to be able to convey what it was like to have lived the experience (Polit & Beck, 2012). The phenomenon in this study is combat experiences of female veterans who deployed to the Gulf War II. After a university Institutional Review Board (IRB) approval was obtained, purposive sampling

was used to select participants with experience of the phenomenon of interest to allow for discovering rich descriptions of the lived experience of combat. Maximum variation sampling was used to select female veterans with a wide range of variation of combat experiences. Snowballing sampling was also used where volunteer participants were asked if they knew any others who would be interested in the study. Participants were given flyers to give to other female veterans who served in Gulf War II and may be interested in participating in this study.

The population consisted of female veterans who deployed to the Gulf War II. Inclusion criteria included female veterans who are aged 18 or older and who have deployed to the Gulf War II. Exclusion criteria included male veterans and female veterans who have not deployed to the Gulf War II.

Data Collection

Invitational flyers were placed at an organization at a naval base located in South Texas. Another invitation to participate was sent via email to a veterans' organization at a North Texas university. To collect data in as naturalistic settings as possible, the settings were determined by both the participant and researcher to be safe, comfortable, private, and convenient (Polit & Beck, 2012). Locations included private rooms at the military base and university.

Explanation of the study, consent forms, and resources for the volunteering participants were given prior to the interview. Participation was voluntary and the participants were informed that it would not impact their standing with the military or the

school. They were also advised that they could ask questions at any time, refuse to answer questions, and withdraw from the study without penalty. Written informed consent for participation was obtained by all participants. Confidentiality was maintained by giving the participants code names and not using their real names.

Demographic data collected included age, rank, ethnicity, number of deployments, military service component (such as Navy, Army, Air Force, Marines, National Guard or Reserve Unit), military status (active duty, reserve, retired, or veteran), role while deployed, marital status, and number of children. Five interview questions were generated in advance which were semi-structured and open-ended to guide and elicit rich descriptions of the combat experiences of female veterans. The face-to-face interviews were audio recorded by the researcher and transcribed verbatim by a transcriptionist to ensure accuracy and to allow subsequent data analysis. Password-protected computers were used. Detailed field notes were also kept by the researcher. Interview times ranged from thirty minutes to one hour. Interviews were conducted until saturation was achieved after twelve interviews. Three interviews with female veterans from a previous pilot study were included in this study. Upon conclusion of the interview, the participants were given a gift card for their time and participation.

Data Analysis

Data were analyzed using Colaizzi's (1978) descriptive phenomenological method. Each of the 7 steps of Colaizzi's method was used in the analysis. The researcher recorded each of the participants' interviews. After transcription, the

researcher read the transcript of each participant and listened to the audio recorded interview to acquire a feel for descriptions from them. The researcher returned to each description, and underlined and extracted significant statements pertaining to the phenomenon of combat experiences. The researcher formulated and wrote the meanings of each statement. The next step organized the formulated meanings into clusters of themes while referring back to the descriptions to validate and note discrepancies.

The researcher integrated the results into exhaustive descriptions of combat experiences from female veterans deployed to the Gulf War II. The last step was providing credibility by asking the participants to verify the findings and assure that the findings represented their experience of combat. Colaizzi's method of data analysis and descriptive phenomenology are congruent because the description of the meaning of a lived experience is the basic outcome (Polit & Beck, 2012). The difference is the lack of emphasis on bracketing as in the Husserlian method and the inclusion of validation of findings by participants. Six participants verified the findings. Some agreed that although not all of themes pertained to them, they saw them as valid themes.

Data storage for this study conformed to the IRB to protect human research participants. The audio recordings, demographic data, and field notes were stored securely and separately from consent forms in locked cabinets in the researcher's office. Audio recordings were destroyed after verification of transcripts by the researcher. At the conclusion of the study, consent forms were sent back to the IRB. All other information was destroyed by shredding.

Methodological Rigor

To help make the study findings as trustworthy as possible, Lincoln and Guba's (1985) framework of quality criteria was used to assess this qualitative study of female veterans and their lived experience of combat. The four constructs proposed to develop the trustworthiness of the study are credibility, dependability, confirmability, and transferability. Polit and Beck (2012) state "these four criteria represent parallels to the positivists' criteria of internal validity, reliability, objectivity, and external validity, respectively" (p. 584). Authenticity was added as a fifth criterion which is more distinctive within the constructivist paradigm (Polit & Beck, 2012).

Credibility

Credibility refers to the truth of the findings and is consistent with validity in quantitative studies (Polit & Beck, 2012). The first issue regarding credibility was for the researcher to plan and carry out a philosophically congruent and effective study to have credible results. Credibility ensures that the phenomenon of combat stressors was accurately identified and described. In this study, prolonged engagement and persistent observation were used. The researcher also maintained comprehensive field notes and audio recorded the interviews to capture the participants' words were verbatim. The researcher collected data from participants through detailed interviews. A reflexive journal was kept. The researcher searched the literature for confirming evidence. The researcher documented evidence of using quality criteria and used thick, vivid description in the presentation of findings. The researcher also disclosed her credentials.

Dependability

Dependability refers to the stability of the data over time and over conditions which is referred to as reliability in quantitative studies (Polit & Beck, 2012). If the findings of a study are dependable, they should be consistent and accurate. This was accomplished by the researcher maintaining an audit trail that demonstrated how she achieved the conclusions. Throughout this study there was careful documentation of the data. The data consisted of raw data, summary of data analysis, coding schemes, themes, and a reflexive journal. Lincoln and Guba (1985) assert that there can be no validity without reliability, thus there can be no credibility without dependability.

Confirmability

Confirmability refers to the effort to maintain objectivity or neutrality (Polit & Beck, 2012). This criterion is concerned with establishing that the data represent what the participants said and does not represent any bias from the researcher (Polit & Beck, 2012). Confirmability was enhanced in this study by careful documentation and an audit trail as well as a reflexive journal by the researcher.

Transferability

Transferability refers to the generalizability or applicability of the findings to other situations and other people (Polit & Beck, 2012). Qualitative research is not designed to make generalizations as in quantitative research (Tappen, 2011). However, comprehensive notes, development of a codebook, thick and vivid description along with documentation of quality enhancement criteria for the study enables others to make

comparisons across settings and people. The researcher tried to find negative cases where analysis shows patterns or categories that do not seem to fit. No negative cases were found. The researcher also discussed the limitations of this study.

Authenticity

Authenticity refers to the extent that the researcher fairly and faithfully reports the participants' thoughts and conveys the tone of the participants' experiences as they are lived (Polit & Beck, 2012). Strategies to improve authenticity included prolonged engagement, persistent observation, audio recording for verbatim transcription, development of a codebook, thick description, and impactful writing. The researcher practiced reflexivity in a journal. The goal of the researcher was to have accurate and fair reporting of female veterans describing their combat experiences. This study may be considered authentic because it brings new insight into interpersonal stressors of combat as experienced by female veterans with concerns of military career after deployment. Combat experiences were described concerning intelligence that was not found in the literature. Additionally, combat experiences were portrayed from a transgender female veteran's perspective.

Findings

All of the participants were enlisted active duty female military members who had deployed to the Gulf War II. Six participants were from the Navy, two from the Army, two from the Air Force, and two from the Marines. Seven participants deployed twice while the others deployed once. Each of the participants' deployment lasted one year or

less. Ten participants were single and the other two were married with children. One of the participants divorced prior to her second tour, and one was married during her second tour. Ten participants had no children, one had one child, and one had two children. The participants' ages ranged from 19 to 41. Six participants were corpsmen, two were combat medics, one was a surgical technician, one was a translator, one served in intelligence support, and one served in financial and accounting support. Post deployment, four participants remain active duty, six are veterans, one is in the Reserves and is now an officer, and one was medically discharged. There was one transgender participant in the group.

Several themes emerged from the data analysis of the participants' interviews. The themes captured the essence of the lived experience of females deployed to Gulf War II.

Theme 1: Living in Constant Fear while Deployed

This important theme echoed across all the interviews and describes the participants' stories about how they felt being deployed in a combat zone. The participants served in a variety of roles while deployed to the Gulf War II such as in hospitals, clinics, transportation and convoys, and air crews. Several participants recalled having mortars fired at them regularly. One participant had been on 364 patrol missions and two air patrol missions. During those missions, she was involved in six IED explosions and three firefights. Three participants' roles were in convoy transportation where they left the military base on a regular basis to aid activities such as refueling or

transporting supplies. One stated that the scariest time of her deployment was having to do a sweep, or drive around the vehicle that had exploded from an IED. She said, "I just kept thinking that it was going to go boom and it was going to be me." Two participants worked in a hospital setting and were involved in occasional convoys to transport patients. Two participants served in a clinic settings on a military base and rarely went outside the base. When they did leave the base, they were required to carry weapons. One said, "For me to leave my base or get on the road gives you so much anxiety."

All participants articulated that during deployment they lived in harm's way. One participant recalled, "You were always scared, always on edge, whether today was the day you'd get blown up or one of my Marines would get blown up." Another participant recollected, "It is just not knowing. Anything could happen out there. It keeps you worried." One participant expressed that there was always a sense of harm and it did not necessarily mean you had to be "up front and holding the gun and shooting."

Several of the participants did not experience any combat exposure while on base. However, one recalled that two days after she left Afghanistan, the base was bombed and killed many American military members. One participant remembered arriving on an airplane and the next day it was blown up. Another participant recalled that after leaving her deployment, a Taliban member with a suicide bomb vest was smuggled onto the base where she lived. The American military members detected it and were able to remove it before it exploded. These experiences were reminders for female veterans that they were not safe, even on the base.

Theme 2: Combat has Different Meanings

In addition to the combat experiences discussed above, one participant recounted, "I didn't see combat. I saw stress-related combat. Those guys going over every night to Kuwait City…I saw the anxiety they had, the frustration and the pressure. That's the part I was seeing when they want to kill themselves and they're depressed. This is mental combat on these guys. My first casualty I saw was a suicide."

Another participant stated, "It is not just combat, but friendly problems with your own people. Women have a different problem when they deploy, not just dealing with weapons and things like that, but with sexual harassment." She recalled that sexual assaults were more frequent when a unit was ready to leave because the members of the unit felt they would not get caught. Another participant stated she used deployment as an escape from a sexual assault that occurred four months prior by her direct supervisor.

Theme 3: Bringing the War Home

"You kind of go crazy. When I got back I turned into a big sap…just crying all the time," recanted a participant as she cried through the interview. Another stated, "It matured me more than the average 23 year old. It made me kind of insensitive to people. I don't show a lot of empathy, I am not very emotional anymore." Another recalled, "I'm not very sympathetic, I'm not very empathetic. I stress out about a lot of things I don't need to stress out about." One participant said, "I have severe time anxiety. I stress out about being late for things, on time for things, I really overanalyze." Another participant recalled, "I saw combat up close. We had very good magnification. I could see people

receiving gunshots; I could see a gunshot to the head and the effects of that. I still live with those intrusive memories."

"Honestly, I think I did pretty well afterwards, but do I wait for things to explode around me? I do all the time! Do I observe my surroundings now? All the time!" was another comment from a participant. One participant states that she picks where she is going to sit in restaurants because she knows "the weak spots." Another said she sits with her back toward the wall and faces the door so she can get out easily. Several participants said they avoid crowds because they do not want to be targets. One recounted, "As far as making me immobile with life and unable to get out and about, I don't think so. I just make sure I have a plan." Another participant said she could not drive upon returning from deployment and did not want to be in a car. Yet another participant said the war gave her more compassion and wanting to be there to help people.

Theme 4: Fear of Being Forever Changed

Several participants spoke about issues regarding fear of having PTSD after returning home. Many commented on how they have many friends or fellow military members who have been through traumatic experiences in the Gulf War II and their lives have changed from PTSD. Many used the word *trigger* to refer to activities that may evoke hyperarousal, which is a symptom of PTSD. One participant stated, "The thing that stays in the back of my mind is PTSD. I think it is always going to be a fear when I am around my family or my daughter now, like is anything going to come that might

trigger something?" Another participant conveyed, "We still have all the triggers that make you think about what you have gone through and it brings back the feelings of the things that scared you all the time." Loud noises and fireworks were triggers that were discussed. One participant said she hopes she is never in a car accident because the sound of metal, like the sounds of trucks in convoys, would definitely trigger panic in her.

Many participants had their first experiences with death during deployment. One participant said, "Sometimes we would have 10 dead bodies at once. You would have to clean them, tag them, and bag them to get them ready to fly them to Germany." Another said, "There are so many things that go wrong for people over there that when they get back, you have time adjusting and you don't have your rifle with you and sometimes there is instant panic." One participant reported, "You come back damaged and you don't even know the magnitude of it. You have so much hatred." A participant who worked in intelligence support recollected, "I may not have pulled the trigger, but I still hold myself responsible for the deaths of a lot of people." She also said she has compulsions to patrol buildings before entering.

One participant referred to herself as a "true wreck". She said, "It puts so much mental anguish on you and you can't do anything about it." Two of the participants had been diagnosed with PTSD upon return and many expressed concerns that they might have or develop PTSD. Most of the participants continue to have trouble sleeping and nightmares. One participant referred to her dreams as "interesting."

Theme 5: Disrespect from Fellow Military Members

Disrespect from military members was another theme discussed. One participant said males had a bravado attitude. Another participant said females overall are looked down upon in the military. She said, "I had to prove myself a lot and not a lot of females could do that." Another participant recalled, "If the female could not pull her own weight she would not be accepted by the males in the platoon." She reported, "Before every convoy, I'd be the one setting up my gun in the turret, getting ammo, setting up the ammo, stocking the truck, just doing everything the Marines were doing, and they saw that." Therefore, she was accepted in the group and felt a bond to them. She also said, "Once in a blue moon, another female would join us in the convoy. If she did not pull her weight, she was an outcast." Another participant reported, "They (females) were talked down to so much and discriminated against so much and were never seen as equal." Yet another description by a participant included, "My Chief was always after me and always picked on me for some reason. He gave me bad evals (evaluations) even though I worked very hard and I did more than the other people equal to my rank and he still gave me the lowest grade." This participant felt embarrassed when she returned home to her duty station with a low evaluation. She continues to have problems sleeping due to worry about her work performance during deployment. She is also concerned with the effects it may have on her promotion to the next rank.

One participant was sent to war as an Individual Augmentee (IA) which meant she was a supplement to a team already in place. She said she never felt she fit in. The

team took care of their own, not her. She also recalled that different ethnic groups would "look out for each and take care of their own." She said she always felt like she was an outsider during that deployment.

Some participants discussed disrespect from females as well. One participant recalled, "Women were hard to work with. Even in the military, there are cliques. Those were practically impossible to disband and make everyone get along." Another participant said, "Females don't like give you or want to give you responsibility."

Theme 6: Physical Health – For Better or Worse.

Many participants say they returned from deployment in the best physical shape of their lives. One participant said, "You did your work and then you have the opportunity to relieve your stress by working out." In some areas there were excellent facilities; while others reported not having proper facilities and having to run on gravel and mud which hurt their knees. One participant said she was still able to run 2 miles in 14 minutes even after having children. Others said they were too busy to exercise.

Many talked about joint, neck, back, and knee issues and attributed those ailments with training, carrying heavy gear, and lifting. One participant said she had a torn tendon in her neck, her lumbar spine was two inches out of alignment, and she had three ankle reconstructions. She referred to herself as semi-broken. Others told of hearing loss and even hair loss. Several participants returned with coughs and ascribed it to burning trash during deployment and the ubiquitous sand. One said, "With the air out

there, they were always burning, and they would burn all sorts of things." Others had concerns about malaria because of standing water around.

There were a variety of eating patterns described by the participants. Some had to eat Meals Ready to Eat (MREs) at least twice a day. Hot meals might include Yakisoba or "mystery meat" with gravy. Fruit might be served on a big "slop tray." Some gained weight because they would get bored with the food and go to the Post Exchange (PX) and purchase chips and candy. One participant described her eating situation, "First we started with C-rations, then MREs, and then we had cooks. They quit on us several times because we got hit all the time. Our chow hall always got blown up." She said she ate when there was food around. There were times when they were being hit so much that they were tired of having their meals interrupted; therefore, they put on their Kevlar (body armor) and continued to eat.

Theme 7: Combat has Rewarding Experiences

Although most of the participants had haunting experiences in combat, many had rewarding experiences. One said, "The thing I really took the most away from it was helping people." She also commented, "When I was in the ER, and the only thing you can do when someone has a gunshot to the chest that happened to either miss their body armor or get through and they are bleeding out of their heart, the only thing you can do is comfort them. I was there for them." Another participant stated, "I'm touching millions of lives. I'm preventing kids from committing suicide. You're there to listen to every moan and groan and that made me realize my problems were much less." A Navy

participant stated that the 75% of corpsmen have deployed to the Gulf War II and that represents a community of people who understand and provide support to each other. She said, “The support you get is like an unspoken bond.” One participant said she enjoyed working with the Afghan Americans.

Discussion

Several themes emerged from the interviews with female veterans who had deployed in Gulf War II. The major theme that emerged from this study was a constant fear of being in harm’s way. PTSD has been associated with a high perceived threat to life (Bolton, Gray, & Litz, 2006). Whether these female veterans served in actual combat or not, they felt a constant fear of attack. This was supported by findings from the Katz et al (2007) study. Even while performing noncombat roles, females are exposed to hostile situations and military attacks such as suicide bombings, sniper attacks, car bombs, and improvised explosive devices (Katz et al., 2007). Some conveyed that combat had different meanings. One participant described problems such as sexual assault by fellow military members. Those who endure military sexual trauma are nine more likely to have PTSD (Kimerling et al., 2008).

All of the participants have brought the war home with them and noted changes in themselves. They also feared they would be changed forever. Many discussed the behavioral symptoms of anxiety, re-experiencing, avoidance, and hyperarousal that stems from exposure to a threatening traumatic experience that resulted in a response of fear, helplessness, or horror (Dunn, Julian, Formolo, Green, & Chicoine, 2011). The course of

PTSD differs across individuals, with some recovering quickly while others experience symptoms for years or even decades (Rosen et al., 2012). Post deployment, assessments need to be performed at different times and interventions for symptoms of PTSD need to be tailored for this unique population who have lived in constant fear during their deployment to the Gulf War II. Despite many advancements in screening tools, diagnostic assessments, and treatment for PTSD, many military personnel and veterans do not receive evidence-based practices in clinical settings today (Wisco, Marx, & Keane, 2012).

Disrespect from fellow military members needs to come to an end. Cohesive relationships within a military unit have been demonstrated to improve the association between stressors and PTSD among military personnel (Brailey, Vasterling, Proctor, Constans, & Friedman, 2007). Thus for female veterans, the experience of exposure to combat may be exacerbated by perceived lack of support by their male (Street et al., 2009) and female counterparts. Vogt, Pless, King and King's (2005) study of Gulf War I veterans showed that females reported lower perceptions of support from their peers and superior personnel than males. Supportive relationships among the military personnel have been shown to be a major resilience factor for stressors in the military (Bliese, 2006). In addition, positive relationships among unit members are crucial to maintaining the safety of the entire unit (Street et al., 2009).

Physical concerns attributed to training and gear was expressed by many participants. Dunn et al. (2011) revealed in their study that there was a 46.8% prevalence

of PTSD among veterans from the Gulf War II seeking care for the neck or back pain in a specialty clinic. Nurses and other healthcare providers should assess those veterans with these issues for PTSD. In addition, the military should employ the use of equipment and gear crafted for females.

Despite the horrific experiences by most females, they did express rewarding experiences of combat. They conveyed that helping others was gratifying. Some said it minimized their own issues while deployed.

New insight was derived from the career concerns of the deployed female veteran upon return due to a poor relationship with her male supervisor. Ethnic concerns were also illustrated. Efforts need to be made to educate military personnel being deployed on the importance of positive relationships for the well-being and safety for all.

Conclusion

Trauma from combat experiences is a significant concern for female veterans who are returning from deployment to the Gulf War II. As female veterans return, many of them will be unharmed, while others present with mental and physical health problems that will not only hinder successful reintegration but may also present with possible life-long challenges (IOM, 2013). Several reasons are present for why the civilian sector of nursing needs a better understanding of the returning female veterans' experience. First, medical care for active duty personnel has historically been provided by the military treatment facilities. If military members get out of the military, many are eligible for care in the Veteran's Administration (VA) system; however only about 25% take advantage of

this benefit (US Department of Veteran's Affairs, 2013b). While this continues, the surge of discharged Gulf War II veterans is having more community health services and providers incorporated in their care (Allen et al, in press). Deployed Reserve and National Guard veterans, most comfortable with their local providers, will also continue to seek civilian resources for their health care. Additionally, returning veterans may decide to separate from the military after deployment so their eligibility for healthcare through the military or VA may be limited or they may not live near these healthcare facilities (Peterson et al., 2011).

Secondly, while knowledge of female veterans' immediate health issues are important as they rebuild their life after deployment, often the veteran's needs do not always surface immediately (IOM, 2013; US Department of Veterans Affairs, 2011). Historically, veteran follow-up care research documents that most of the major problems "peak several decades after the war in which they served" (IOM, 2013, p. 3). Inherent in this reason is also the large amount of challenges and higher than usual anticipated medical costs from the Gulf War II. By 2020, the medical care cost for treating all these veterans could total up to $54 billion, excluding disability benefits (Geiling et al., 2012). Thus, early interventional health promotion programs will be essential, no matter where and when female veterans obtain their health care (Allen et al, in press). This current study not only has the potential to guide evidence-based practice, but it also has implications for public policy concerning our female combat veterans.

Inherent limitations are always present and with this study there is no exception when trying to study the totality of female veterans' combat experiences. One limitation includes a variation in the duration of time post deployment. Some had returned back as recent as three months where others had returned six years ago. These females were in various stages of handling their experiences. Females were deployed at different times and geographical locations with different services whose missions differ. Another limitation is that although the interviews took place in two different areas in Texas, it is not representative of the larger population of female veterans of Gulf War II.

There is an increased need for awareness of the myriad traumatic challenges female veterans face during combat; therefore there is a need for more research for this unique population. Future research could branch out into several pathways. It may include the lived experience of female veterans from each branch of the service (Army, Navy, Marines, Air Force, National Guard or Reserve units) who deployed to the Gulf War II. Other research may include the lived experience of female officers or female enlisted who deployed to the Gulf War II. Studies may include those serving on ships, with joint forces (Army, Marine, Navy, or Air Force), or in health care settings.

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CHAPTER VI

OVERVIEW AND RECOMMENDATIONS

Female veterans have important combat roles in the Gulf War II. Their numbers are increasing and their roles are expanding. The purpose of this study was to describe the lived experience of female veterans who deployed to the Gulf War II. The goal was to learn more about their combat experiences. The problem of the study is that the totality of their experiences is not known. The Gulf War II has been ongoing for more than 10 years now in Iraq, Afghanistan, and neighboring countries such as Kuwait. Missions of the Gulf War II have changed during those years. Female veterans may be enlisted or officer with varying responsibilities. They also may be serving in different roles while deployed. They also may be located in different geographical areas of the war areas.

Overview

The essence of combat experiences of female veterans deployed to the Gulf War II was identified through their stories told during semi-structured interviews. A total of 12 female combat veterans in two areas of Texas voluntarily participated in this study. The interview questions were open-ended and were used to elicit rich descriptions about the combat experiences of these females while deployed to the Gulf War II. Prompts such as *Tell me more* were utilized to garner more information. The interviews were audio recorded to ensure capture of the experiences verbatim and also to facilitate analysis of the data. Each of the 7 steps of Colaizzi's (1978) descriptive

phenomenological method of data analysis was used to guide discovery of the lived experience of female combat veterans. After recording and transcription, the transcript of each participant was listened and compared to the audio recorded interview to acquire a feel for descriptions from them. Significant statements pertaining to combat were extracted. The meanings of each statement was formulated and written. The meanings were articulated into clusters of themes while referring back to the descriptions to validate and note discrepancies. The themes were integrated into exhaustive descriptions of combat experiences. The last step was verifying and validating the findings with participants. Six participants participated in the last step which helped provide credibility for the research findings.

Themes

The participants of this study were all female veterans of the Gulf War II. The following themes are those described by these females.

1. Theme 1: Living in constant fear while deployed.
2. Theme 2: Combat has different meanings.
3. Theme 3: Bringing the war home.
4. Theme 4: Fear of being forever changed.
5. Theme 5: Disrespect from fellow military members
6. Theme 6: Physical health: For better or worse.
7. Theme 7: Combat has rewarding experiences.

Implications for Nursing

Nurses are at the forefront when patients seek care from a medical facility. Female veterans will increasingly pursue care in civilian settings. Nurses should assess females for their participation in the military, particularly deployment to combat. Nurses need to be informed of the myriad of traumatic challenges that females face during deployment to war.

Not all injuries from combat are obvious; many suffer from psychological trauma (Allen et al., in press). Some females return from war and are able to reintegrate successfully back home, while others are not. The findings from this study include that females deployed to the Gulf War II feel they are in harm's way for their entire tour. The war is asymmetric and one never knows when they will be involved in mortar firings, IEDs, sniper attack, or other guerilla warfare tactics. Females also worry about fellow military members being traumatized. Yet others worry about MST. Once they come home, many bring the war home with them. They may have symptoms of PTSD, physical ailments, or are constantly aware of their surroundings. They see other military members around them that are suffering and fear they too will continue to suffer. Because symptoms of PTSD show up at varying times, there needs to be early interventional health programs with continuing assessments tailored for females.

The leadership in the military need to address the disrespect from other military members and ethnic groups to deployed female veterans and it needs to end. A positive relationship among fellow military members has been shown to be crucial to maintaining

the safety of the unit (Street et al., 2009). In addition, a supportive relationship among the military personnel is a major resilience factor for stressors in the military (Bliese, 2006). Education about these issues is imperative for all military members.

The physical health issues about deployment to the Gulf War II are also a concern of females. Nurses need to be aware of these concerns. While many were able to exercise a lot, they felt they were in the best physical shape of their lives. However, many complained of respiratory issues from the ubiquitous sand and the burning of trash everywhere around them during deployment. Other issues that were a major distress were neck, back, and joint issues attributed to training and heavy gear. Education is vital for dealing with these issues. Proper gear tailored for females should be advocated for them.

On a more positive note, most female veterans described rewarding combat experiences. Most of these experiences dealt with helping others. Several communicated that they helped save lives; either from medical care, stopping suicides, or conveying intelligence to save lives. Many gratifying stories of aiding others were shared with smiles. One participant said it inspired her to be a nurse and is now in nursing school. An additional benefit for female veterans describing their experiences is that it may help educate other female veterans prior to deployment.

Conclusion

Combat stressors are a significant concern for female veterans who are returning from deployment to the Gulf War II. As the number of females veterans deployed to war continues to escalate, they will be many presenting for health care both in military and civilian health care settings. While nurses are at the forefront of seeing clients in health care settings, it is very important that they deepen their understanding of female veterans by learning more about their combat experiences and readjustment concerns. Nurses can begin their assessment by asking their clients about traumatic experiences. If the clients are veterans, they should be asked if they have deployed to the war. Those deployed to war have a risk of PTSD. Early detection and assessment is crucial to providing interventions to military veterans to reduce the invisible wound of war, PTSD and ultimately increase quality of life.

Recommendations for Further Research

Although the voices were heard from 12 female veterans of the Gulf War II, there is an increased need for awareness of the myriad of traumatic challenges female veterans face during combat. It is highly recommended that further research continue that addresses the combat experiences of this unique population. A paucity of research exists; however, most have inadequate samples of females and few qualitative studies. Although this study did reveal insights into combat experiences, there is more yet to be discovered. This study giving females a voice for their thoughts and experiences, and has opened the door for more research. Future research could branch out into several pathways. It may

include the lived experience of female veterans from each branch of the service (Army, Navy, Marines, Air Force, National Guard or Reserve units) who deployed to the Gulf War II. Other research may include the lived experience of female officers or female enlisted who deployed to the Gulf War II. Studies may include those serving on ships, with joint forces (Army, Marine, Navy, or Air Force), or in health care settings.

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APPENDIX A

Interview Guide

Appendix A

Interview Guide

1. Tell me about your experience with combat.
2. Tell me about the issues regarding your deployment to combat that are of greatest concern to you.
3. Tell me about triggers that you may have from combat experiences.
4. Tell me about the impact of combat on your mental health.
5. Tell me about the impact of combat on your physical health.

APPENDIX B

Demographic Tool

Appendix B

Demographic Tool

Age_____

Ethnicity_____

Rank_____

Service Branch_____

Military status (Active duty, reserve, retired, or veteran)_____

Number of deployments to Gulf War II_____

Role while deployed to Gulf War II_____

Marital status_____

Number of children_____

APPENDIX C

Agency Letters

Appendix C

Agency Letters - USO

USO South Texas

February 15, 2013

Patricia L. Conard, RN, MSN
Doctoral Candidate – Texas Woman's University
5901 King Trail
Corpus Christi, TX 78414
Dear Patricia,

I am pleased to know that you are planning a study that is aimed at describing the experiences of female veterans while in combat. This topic is of interest to myself and USO South Texas because of the female veterans we serve. We would be pleased to assist you with accessing our veterans to determine if they would like to participate in your study. Our Program Manager, Renee Powell will serve as a liaison to work out the procedures with you.

Prior to beginning your recruitment of participants, please provide us with a copy of the human subject's approval letter. We look forward to working with you.

Sincerely,

Nancy Allen

Nancy Allen, President & CEO

Post Office Box 7 Corpus Christi, TX 78403 ~ 320 Fifth Street, STE 2-B, NASCC
361.961.2391 nancy.allen@usosouthtexas.org

TWU
TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

Office of the Registrar
P.O. Box 425559, Denton, TX 76204-5559
940-898-3036 FAX 940-898-3097

2/1/2013

To: Texas Woman's University Institutional Review Board

From: Alex Alvarado, TWU VA Certifying Official

RE: Combat in the Gulf War II: The Lived Experience of Female Veteran
Patricia Conard, Principle Investigator

Mrs. Patricia Conard has requested access to Texas Woman's University veteran students as potential subjects in a research project. Her research focuses on understanding the combat experiences of women veterans. I will assist her to access appropriate subjects upon Texas Woman's University veteran and dependent Blackboard organization.

Sincerely,

Alex Alvarado
Texas Woman's University
U.S. Army (R)
TWU VA Certifying Official
940-898-3069 phone
940-898-3053 fax

APPENDIX D

IRB Documents

TWU
TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

Institutional Review Board
Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378 FAX 940-898-4416
e-mail: IRB@twu.edu

July 22, 2013

Ms. Patricia L. Conard
5901 King Trail
Corpus Christi, TX 78414

Dear Ms. Conard:

Re: Combat in Iraq and Afghanistan, 2001-2013: The Lived Experience of Female Veterans (Protocol #: 17344)

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and appears to meet our requirements for the protection of individuals' rights.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. A copy of the approved consent form with the IRB approval stamp is enclosed. Please use the consent form with the most recent approval date stamp when obtaining consent from your participants. A copy of the signed consent forms must be submitted with the request to close the study file at the completion of the study.

This approval is valid one year from July 12, 2013. Any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any unanticipated incidents. If you have any questions, please contact the TWU IRB.

Sincerely,

Rhonda B Buckley

Dr. Rhonda Buckley, Chair
Institutional Review Board - Denton

cc. Dr. Gayle Roux, College of Nursing
Dr. Donna Scott Tilley, College of Nursing
Graduate School

INSTITUTIONAL REVIEW BOARD

940-898-3378 (Denton & Dallas)
713-794-2480 (Houston)

http://www.twu.edu/research/irb.asp

RECEIVED
SEP 11 2013
RESEARCH & SPONSORED PROGRAMS
TEXAS WOMAN'S UNIVERSITY

STUDY MODIFICATION REQUEST

Principal Investigator: Conard, Patricia **Protocol #:** 17344 **Campus:** Denton

Title of Study:
Combat In Iraq and Afghanistan, 2001-2013: The Lived Experience of Female Veterans

Description of Modification Requested:

I request the title to be changed to original title, Combat in the Gulf War II: The Lived Experience of Female Veterans. The Gulf War II is the title used by the military and is seen in the literature to designate the wars in Iraq and Afghanistan in the years 2001 through 2013. For example, if I reference the Iraq war in my writings, this will help the reader distinguish which war and time frame I am referring to.

List of Attachments:

No Attachments

Approved Brenda R. Buckley 9/11/13

Appendix E

Consent Form

TEXAS WOMAN'S UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: Combat in the Iraq and Afghanistan, 2001-2013: The Lived Experience of Female Veterans

Investigator: Patricia L. Conard, MSN.....pconard@twu.edu 910/546-3306
Advisor: Donna Scott-Tilley, PhD.....dtilley@twu.edu 940/898-2425

Explanation and Purpose of the Research

You are being asked to participate in a research study for Mrs. Conard's dissertation at Texas Woman's University. The purpose of this research is to understand experiences of combat by female veterans who have deployed to the war in Iraq and/or Afghanistan between the years 2001-2013. You have been asked to participate in this study because you are a female and have identified yourself as having deployed to the Iraq and Afghanistan war during that time period.

Description of Procedures

As a participant in this study, you will be asked to spend approximately 1 hour of your time in a face-to-face interview with the researcher and then approximately 1 hour of your time verifying the findings after the study. The researcher will ask you questions about your combat experiences while you were deployed to war, such as issues of greatest concern to you during deployment as well as impacts to your life and health. You and the researcher will decide together on a private place where and when the face-to-face interview and verification of the findings after the study will happen. You and the researcher will decide on a code name for you to use during the interview. The interview will be audio recorded and then typed so that the researcher can be accurate when studying what you have said. In order to be a participant in this study, you must be 18 years of age or older, and have been deployed to the war in Iraq and/or Afghanistan sometime between the years 2001-2013. Your total time commitment should be no more than 2 hours.

Potential Risks

The researcher will ask you questions about your experiences with combat. The researcher will also ask how combat has affected your life and health. A possible risk in this study is emotional discomfort. If you become tired or upset, you may take breaks as needed. You may also stop the interview at any time and withdraw from the study. If you feel you need to talk to a professional about your discomfort, you should contact one of the resources provided to you by the researcher along with your signed copy of this consent form. Resources that you have access to for mental health care are readily available at the Naval Air Station Corpus Christi Health Care Clinic located at 10651 E Street in Corpus Christi. The phone number is 361/961-6000. For female veterans, the Veterans Administration (VA) Outpatient Clinic has resources available at 4646 Corona in Corpus Christi. The phone number is 361/854-9961. For those participants in the Denton area, Denton Community-based Outpatient Clinic is located at 2223 Colorado Boulevard in Denton.

_____Initials

A resource for all military veterans is the Veteran Crisis Hotline at 800/273-8255, press 1. If you would prefer to find a counselor who is not connected with the military, please go to http://locator.apa.org

Another risk in this study is loss of confidentiality. Confidentiality will be protected to the extent that is allowed by law. There is a potential loss of confidentiality in all email, downloading, and internet transactions. A password protected computer will be used. The interview will be held at a private location that you and the researcher have agreed upon. A code name, not a real name, will be used during the interview and study. No one but the researcher will know your name. The audio recordings and the written notes will be transported in a locked briefcase and stored in locked cabinets in the researcher's office. Only the researcher, her advisor, and the transcriptionist will hear the audio recordings or read the typed interview and notes. The audio recordings will be deleted after transcription and verification. Emailed transcripts will be deleted. Any remaining information, such as written transcripts, field notes, and the code list will be shredded at the end of the study approximately 1 year from the date of data collection . The results of the study may be reported in scientific magazines or journals, but your name or any other identifying information will not be included. The informed consents will be stored in another locked area (not the same as the tapes and written transcripts) and will be submitted to the TWU IRB at the conclusion of the study.

There is a possible risk of coercion because you may view your participation as mandatory since you are associated with the military and recruitment will be done via military-associated organizations and installations. You have the right to ask questions, refuse to answer questions, or withdraw from the study without penalty. Your participation is voluntary and will not impact your standing with the military, USO, or TWU.

There is a possible risk that you may disclose illegal activities. If you disclose abuse to a child or elder, intent to harm yourself or others, the researcher must report it to the proper authorities.

There is a possible loss of anonymity. Because the interviews are face-to-face, anonymity cannot be guaranteed.

The researchers will try to prevent any problems that could happen because of this research. You should let the researchers know at once if there is a problem and they will help you. However, Texas Woman's University (TWU) does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

_____Initials

Participants and Benefits

Your involvement in this study is completely voluntary and you may withdraw from the interview and study at any time. Following the interview you will receive a $35 gift card for your participation and can keep it even if you withdraw.

Questions Regarding the Study

The researcher will give you a copy of the signed and dated consent form to keep at the predetermined location before the interview begins. If you have any questions about the research study, you should ask the researchers. Their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940/898-3378 or via email at IRB@twu.edu

_____
Signature of the Participant

_____
Date

*To confirm the accuracy of the results, please tell us how you want to be contacted:

Email:_____

Address:_____

Phone:_____

Appendix F

Email Invitation for Research Study

Appendix F

Email Invitation for Research Study

I am Patricia Conard, a PhD student in the College of Nursing at Texas Woman's University in Denton, Texas. I would like to invite you to participate in my dissertation research study which is to discover the experiences of female veterans while deployed to the Iraq and/or Afghanistan wars to understand the impacts of combat on female veterans' life and health. You may participate if you are female, age 18 or over, and have been deployed to the wars in Iraq and/or Afghanistan from 2001-2013. Your participation is voluntary and you may withdraw from the study at any time.

As a participant, you will be asked to participate in an interview which will last approximately 1 hour. I will ask you about your experiences in combat and how it has affected your life and your health. As a participant, you will also be asked to meet again after the study to confirm the accuracy of the results which will also take approximately 1 hour. The total time commitment should be no longer than 2 hours. The interview and meeting will be held in a private, safe, and convenient location determined by you and I.

There is a potential for loss of confidentiality in all email, downloading, and internet transactions. A password-protected computer will be used.

In appreciation for your time, you will receive a $35 Target gift card at the end of the face-to-face interview. If you would like to participate in this study or have any questions, please contact me on my cell phone 910/546-3306 or my email pconard@twu.edu You may also contact my Advisor, Dr. Donna Scott-Tilley at 940/898-2425 or email dtilley@twu.edu

Thank you very much for your consideration,

Patricia Conard

Appendix G

Journal Correspondence

Appendix G

Journal Correspondence

Manuscript # 1

20-Apr-2013

Dear Mrs. Conard:

It is a pleasure to accept your manuscript entitled "Deployment and PTSD in the Female Combat Veteran: A Systematic Review" in its current form for publication in Nursing Forum. The comments of the reviewer(s) who reviewed your manuscript are included at the foot of this letter.

Thank you for your fine contribution. On behalf of the Editors of Nursing Forum, we look forward to your continued contributions to the Journal.

Your article cannot be published until the publisher has received the appropriate signed license agreement. Within the next few days the corresponding author will receive an email from Wiley's Author Services system which will ask them to log in and will present them with the appropriate license for completion.

Sincerely,
Dr. Patricia Yoder-Wise
Editor-in-Chief, Nursing Forum
psywrn@aol.com

Appendix G

Manuscript # 2

Decision on Manuscript ID NF-09-13-OA-0425 - Nursing Forum

17-Sep-2013

Dear Mrs. Conard:

Your manuscript entitled "The Lived Experience of Female Veterans Deployed to the Gulf War II" has been successfully submitted online and is presently being given full consideration for publication in Nursing Forum.

Your manuscript ID is NF-09-13-OA-0425.

Please mention the above manuscript ID in all future correspondence or when calling the office for questions. If there are any changes in your street address or e-mail address, please log in to Manuscript Central at http://mc.manuscriptcentral.com/nf and edit your user information as appropriate.

You can also view the status of your manuscript at any time by checking your Author Center after logging in to http://mc.manuscriptcentral.com/nf.

Thank you for submitting your manuscript to Nursing Forum.

Sincerely,
Nursing Forum Editorial Office