

WELL-BEING IN MILITARY RESERVE HEALTH CARE PROVIDERS POST
DEPLOYMENT OR MOBILIZATION

by

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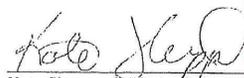
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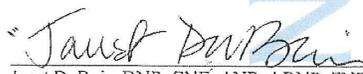
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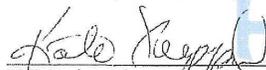

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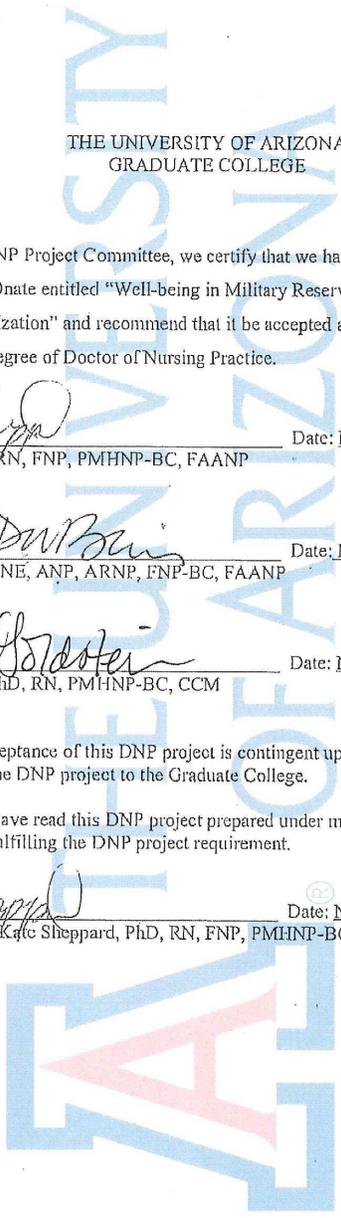

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Final approval and acceptance of this DNP project is contingent upon the candidate's submission of the final copies of the DNP project to the Graduate College.

I hereby certify that I have read this DNP project prepared under my direction and recommend that it be accepted as fulfilling the DNP project requirement.


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STATEMENT BY AUTHOR

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DEDICATION

I dedicate this DNP Project to the United States military health care providers, who willingly raised their right hand to become something greater than themselves. Each military journey is unique and difficult at times. It is my hope that this project paves the way in acknowledging military health care provider well-being and implementing successful strategies to help military health care providers maintain a high level of well-being during their service to our great country.

I would like to give thanks to the families of military members, those who have made the ultimate sacrifice, those who are currently serving and those who aspire to serve. Together, we are stronger!

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ABSTRACT

Purpose: To describe well-being in military reserve health care providers post deployment or mobilization

Background: A comprehensive literature review exhibited that during a deployment or mobilization, military health care providers endure stressful and uncomfortable situations, spend time away from their family, friends and usual home comforts leaving them feeling completely changed. These circumstances can negatively affect a provider's well-being. Moreover, although the literature outlines military and psychological symptoms including combat stressors, mental health concerns such as depression and anxiety, job stress, work performance and resiliency, there is a gap in the literature regarding well-being among military health care providers post deployment or mobilization.

Methods: This project used a qualitative descriptive methodology with face-to-face interviews to describe the phenomenon of well-being among three United States reserve military health care providers post deployment or mobilization. Data was collected using semi-structured, open ended questions, allowing the participants an opportunity to discuss and further elaborate on their experiences, perspectives and feelings. Each interview began with pre-established questions and further questions and discussions were guided by the participants' earlier responses. Interviews were audio recorded and transcribed into text, allowing me to identify commonalities of experiences, perspectives and feelings among the participants.

Results: Analysis of the interview data revealed information associated with transitions and can be grouped into five categories. The categories that impacted the participants' well-being post deployment or mobilization include: separation from family and friends, austere living

conditions, exhaustion from long work hours, consecutive work days without days off and being unprepared for what was to come.

Implications: This project describes well-being in military reserve health care providers post deployment or mobilization. Findings from this small project may be used to develop research studies to describe and understand the concept of well-being among military health care providers. Armed with better understanding, we could then develop interventions to prepare our military health care providers to deliver high quality care during overseas deployment or mobilization while also maintaining their physical and mental well-being.

INTRODUCTION

Military health care providers are often exposed to traumatic, stressful, and dangerous situations whether the assignment entails war zone or non-war zone duties. War zone stresses include treating patients with trauma from gunshot wounds, injuries from explosions, and even death. Although different, non-war zone stresses can be equally intense. For example, many injured soldiers are treated immediately in the field and then flown to the nearest hospital, which may or may not be located in a war zone (Owen & Wanzar, 2014). These frequently stressful patient encounters can greatly compromise the overall well-being of the provider.

Although multiple definitions of well-being exist, commonalities include five key concepts: spirituality, self-regulation, work, love and friendship. Well-being emphasizes personal responsibility for making the lifestyle choices and self-care decisions improving one's quality of life (Ayala & Camero, 2013). In the last decade or so, the military has increasingly recognized the emotional distress in military health care providers and even the negative impact on the provider's well-being (Owens & Wanzar, 2014). The preventative route of well-being lies largely in reorienting a substantial amount of energy toward raising the overall levels of well-being (Ayala & Camero, 2013). The demands of modern and military life are steadily increasing for military health care providers with limited corresponding readjustment and strengthening of the inner self (Tillery, 2013). The purpose of this project is to describe the well-being of military reserve health care providers post deployment or mobilization.

Background Knowledge

The military is a unique culture requiring a great amount of commitment, loyalty, time and energy (Segal & Segal, 2014). Ideals of being strong, self-sufficient and tough are

considered the norm and ensure that military members are “mission-prepared” and capable of surviving difficult situations (Greene et al., 2010; Momen, Strychacz, & Virre, 2012). Over two decades ago, experiences of emotional and/or psychological distress were viewed as a sign of weakness forcing military health care providers to avoid exposing their distress to evade the associated stigmatism (Momen, Strychacz, & Virre, 2012). However, in the last decade there has been more recognition for the emotional distress in military health care providers (Owen & Wanzar, 2014).

Mental health disorders should be considered as significantly compromising an individual’s well-being. In a study of military health care providers (N=726) researchers identified that 9% had symptoms of post-traumatic stress disorder (PTSD) while 5% had symptoms of depression (Grieger et al., 2007). In a more recent study exploring the psychological effects of deployment in health care providers (N=6,116) , psychiatric disorders were identified including PTSD, anxiety, depression and alcohol abuse (Hickling, Gibbons, Barnett, & Watts, 2011).

Key Concepts and Definitions

A large part of the military culture includes deployments, mobilizations, and/or frequent relocations. A deployment is known as entering the “war-zone.” Typically, military members who are deployed are in the front lines ready to engage in combat; any military personnel can be deployed, but is typically experienced by active duty military members. A mobilization frequently requires military members to relocate from their home station to another semi-permanent home station elsewhere in the United States, also known as “state-side.” A mobilization is initiated when coverage is needed for active duty members who are deploying.

Relocation refers to moving from one duty station to another temporary duty station, depending on the needs of the military. A mobilization is typically experienced by a Reservist or National Guard member whereas relocation is experienced by an active duty member. A deployment, mobilization or relocation can be made with one's assigned unit or individually depending on the needs of the military.

There is a slight difference in cultures among active duty members and reservists. Active duty members see and work with their comrades daily, whereas reservists see and work with their comrades once a month, possibly creating different experiences and stressors between the two. It is possible for a reservist to be mobilized and then deployed at a later time. Active duty members typically experience multiple deployments and relocations throughout their military career (Segal & Segal, 2014).

It is estimated that the average military health care provider (both active duty and reservist) deploys, mobilizes or relocates every 2-3 years (Department of the Army, Office of the Surgeon General, 2008). For the purposes of this study, a health care provider includes nurse practitioners, physician assistants, and medical doctors. The deployment, mobilization, and relocation cycle and the transitions involved are significant. During these transitions, health care providers experience a myriad of challenges and adjustments to include family separation, loneliness, learning new skills, dealing with problems on their own, housing arrangements and financial difficulties between their current and new living situations (Devoe & Ross, 2012). These situations may all negatively impact the health care provider's well-being.

Significance

The effects of war on military health care providers are multi-dimensional and continue to plague the lives of military health care providers (Cieslak et al., 2013). Since the war began in 2001, nearly 2.6 million service members have deployed, mobilized or relocated and nearly 8% of these were military health care providers (Lester, Taylor, Hawkins, & Landry, 2015). As military health care providers deploy, mobilize or relocate, there is an increase of exposure to the traumatic effects of caring for wounded soldiers which could negatively impact well-being. Decreased levels of well-being increases the health care provider's risk for development of many ailments including depression, anxiety, sleep deprivation, problems with relationships and a deterioration psychological and physical well-being (Linnerooth, Mrdjenovich, & Moore, 2011).

Because negative well-being places health care providers at increased risk for psychological and physical deterioration, it is essential to further explore well-being in military health care providers post deployment or mobilization to ensure health care providers are in a healthy physical and psychological state. In doing so, health care providers will be able to deliver optimal health care while preserving his or her own well-being.

Purpose and Aims

The purpose of this project was to describe well-being in military reserve health care providers, post deployment or mobilization. Aims included: 1) describe current knowledge about the well-being of military health care providers, 2) describe the self-perception of well-being among military reserve health care providers post deployment or mobilization, and 3) compare the knowledge from the literature with descriptions from the participants to identify aspects of well-being that are unique to reserve health care providers. Armed with a better understanding of

the well-being of military reserve health care providers post deployment or mobilization, we can then develop interventions to help improve their well-being.

Theoretical Framework

The Neuman Systems Model is an open system, which views each person as an individual entity that interacts with other individuals and the environment. This model is acknowledged for its continuous flow of input, output and feedback. This system is an organized complexity with all elements interrelating (Neuman, 1982). Neuman's model identifies two major concepts, which include human beings and the environment. Neuman's (1982) model focuses on holistic measures aiming towards optimal wellness while also encompassing the individual's perception and motivation (Neuman & Fawcett, 2011). Though Newman's (1982) model identifies individuals as a separate entity from their environment, it is important to appreciate that this system is inter-reliant on all parts.

This model considers five important variables that make up the "client system," referring to each individual. These variables are defined as physiological, psychological, sociocultural, developmental and spiritual. It is understood that each individual possesses these variables, which operate simultaneously to maintain balance. The Neuman System model recognizes that each individual's genetics, innate features, strengths and weaknesses make up their central core, making each individual and their relationship with the environment unique (Neuman et al., 2011). Neuman defines these five variables as the basic structure.

The basic structure of the model is surrounded by the "lines of defense." The lines of defense concept consist of a three parts that include flexible line of defense, the normal line of defense and lines of resistance. The outermost line of defense is termed the flexible line of

defense and it serves as a protective barrier responsible for defense against invasion by stressors, otherwise known as maintaining stability. The flexible line of defense is fluid in that it stretches as necessary to provide greater or lesser protection based on the individual's stressors. The flexible line may stretch rapidly or slowly depending on the severity of stressors perceived by the basic structure. Once the flexible line of defense breaches the normal line of defense, the individual demonstrates signs of instability (Neuman et al., 2011).

The flexible line of defense shields the normal line of defense. The normal line of defense is considered as the usual wellness level that is established over time (Neuman et al., 2011). The normal line of defense is the physiological and psychological modifications related to stressors that affect the individual over time. Several factors impact the normal line of defense. These factors include spirituality, culture, coping patterns, lifestyle and developmental influences. The lines of resistance are protection factors, which activate when stressors have breached the normal line of defense causing a reaction.

The environment is a vital part of the system and its function. The environment influences all factors that both affect and are affected by the system. Internal and external factors exist ultimately affecting the system. The internal environment is what exists within the individual, such as interactive influences solely within boundaries within the individual system. The external environment is everything that exists outside the individual system, such as health and nursing. Health is the condition on a spectrum ranging from wellness to illness. As system needs are met, optimal wellness is achieved. As system needs are not met, illness results. The nursing aspect is important as it provides appropriate actions aimed at assisting the system

adjust, restore or maintain stability between the individual and environment (Neuman et al., 2011).

To further understand Neuman's model, the following sub-concepts will be defined: Stressors, stability, degree of reaction, entropy, negentropy, input/out, reconstitution and prevention as intervention. Stressors are defined as any phenomenon, which may penetrate the flexible and normal lines of defense, causing a positive or negative outcome. Stressors can be intrapersonal, interpersonal or extrapersonal. Intrapersonal stressors correlate with the internal environment and stay within the "client system" boundaries. Interpersonal stressors impact the system because they occur outside the "client system" boundaries and are proximal to the system. Extrapersonal stressors occur outside the "client system" at a greater distance than interpersonal stressors (Neuman et al., 2011). Stressors may arise from events brought on by deployment, mobilization, or relocation such as family separation, loneliness, learning new skills, dealing with problems on their own, housing arrangements and financial difficulties between their current and new living situations (Devoe & Ross, 2012).

Stability is the state of balance that requires energy exchanges to cope with stressors in order to maintain an optimal level of health so as to preserve system integrity (Neuman et al., 2011). Degree of reaction accounts for the amount of system instability resulting from the stressor of the normal line of defense (Neuman et al., 2011). Entropy is the process in which energy depletion moves the system towards illness (Neuman et al., 2011). Negentropy is the process in which energy is conserved increasing the system towards stability or higher degree of wellness (Neuman et al., 2011). Input/output is the information and/or energy exchanged between the individual and environment that is either entering or exiting the system (Neuman et

al., 2011). Reconstitution is the return and maintenance of system stability from a stressor, which could affect the system in a higher or lower level of wellness (Neuman et al., 2011).

Primary prevention focuses on health promotion and maintenance of wellness, therefore prevention occurs before the system encounters a stressor. This level of prevention focuses on strengthening the flexible lines of defense by reducing risk factors and preventing stress. Risks may be identified but a reaction has not occurred during this phase (Neuman et al., 2011).

Secondary prevention is when the system reacts to a stressor. This level of prevention focuses on strengthening the internal lines of resistance protecting the basic structure via treatment of symptoms. The focus is to recover optimal stability and to conserve energy in doing so. If reconstitution does not ensue during this stage, the basic structure is unable to support the system leading to illness (Neuman et al., 2011). Tertiary prevention occurs after the system has received multiple secondary prevention treatment strategies. The purpose of this level of prevention is to maintain wellness and to protect the system reconstitution through supporting existing strengths and continuing to preserve energy. This level of prevention occurs any time reconstitution has begun and often leads back to primary prevention (Neuman et al., 2011).

Neuman's model provides essential framework to support this study in that every military member comes from different walks of life and will each have a unique experience impacting their level of well-being despite sharing an alike environment and working toward the same military mission. Repeated military mission exposure combined with physical and psychological wounds creates a recipe for a myriad of problems for health care providers including decreased well-being, burnout, compassion fatigue and decreased resilience (Lester, Taylor, & Hawkins, 2015). Until recently, there was little focus on the preventive mental health needs of military

health care providers as it was always the culture to be strong, self-sufficient, tough, “mission-prepared” and capable of surviving difficult situations (Greene et al., 2010; Momen, Strychacz, & Virre, 2012). As these ideals were considered “normal,” there were no “lines of defense” or prevention to mitigate the state of decreased well-being. Neuman’s model offers vital framework to optimize well-being by considering each individual, their experiences, and environment and how an individual can recognize when coping mechanisms are compromised and how to restore wellness.

Literature Review

A literature review was conducted using several databases including National Library of Medicine (PubMed), Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Google Scholar. Keywords used in the literature search include *quality of life, well-being, mental health, military medicine, military nursing, military healthcare, military health, military healthcare provider, stress, psychological stress, and provider burnout*. Of the three databases combined, the search yielded 127 articles. Inclusion criteria of the literature search included: publication within 10 years, English language, military and healthcare population, and human species. Articles selected for this project are included in Appendix C.

Definitions of Well-Being

Different disciplines may have unique definitions of well-being, but commonalities include the presence of satisfaction with life, positive emotions, fulfillment and positive functioning and the absence of negative emotions. Simply, well-being can be described as living life positively and feeling good (CDC, 2016). Additional concepts within the construct of well-being include physical well-being, economic well-being, social well-being, emotional well-

being, psychological well-being, life satisfaction, relationships, and engaging activities and work (CDC, 2016).

As the state of well-being is subjective, there is no sole determinant of individual well-being. Subjective well-being has been described as a broad phenomenon, which includes emotional responses, satisfactions and global judgements of life satisfaction (Bell et al., 2014). In general, well-being is dependent upon basic needs being met, which were discussed earlier and include spirituality, self-regulation, work (economic well-being), love (social and emotional well-being) and friendship (social and emotional well-being).

Spiritual well-being in the military is defined as the ability to adhere to beliefs, values and principles in order to persevere and prevail in accomplishing the mission. Spiritual well-being may come in many forms to include belief in transcendent meaning and purpose, self-transcendence, spiritual practices and/or behaviors, or engagement with a community with similar values. For many people, including atheists, being spiritually fit influences their outlook on life, offering solace in turbulent times, and receiving support from a like-minded community. Spiritual fitness contributes to resilience and well-being resulting in improved performance and mission readiness (Yeung & Martin, 2013).

Psychological Distress

Currently, well-being in the military focuses on psychological symptoms, combat stressors, mental health concerns such as depression and anxiety, job stress, work performance and resiliency (Pflanz & Ogle, 2006) rather than the presence of satisfaction with life and fulfillment. Military health care providers are not immune to stressors of deployment, mobilization or multiple re-locations which places them at risk for diminished well-being

(Gibbons et al., 2012; Barnes, Nickerson, Adler, & Litz, 2013; Leners, Sowers, Quinn-Griffen, & Fitzpatrick, 2014; Elnitsky et al., 2013). Military healthcare providers have an increased probability of experiencing burnout and adverse psychological symptoms following deployment or mobilization due to the following risk factors: separation from friends and family members, austere living conditions, exhaustion from long work hours, consecutive work days without days off, lack of social support, inability to maintain relationships, lack of maturity with regard to age, and personal danger. All of these situations may lead to diminished well-being.

Lang and colleagues (2010) examined the level of burnout of 364 Army and civilian nurses through a large hospital setting. The study found that military health care providers worked longer hours compared to civilian healthcare providers and military health care providers were expected to perform additional duties outside of their duty description. Military health care providers were scheduled to work on their day off, engage in mandatory physical fitness as well as attend mandatory training whereas their civilian counterparts did not. The authors identified that high patient volumes and heavy workloads of military health care providers may contribute to fatigue, negative emotions and burnout and ultimately a decrease in well-being (Lang et al., 2010).

Self-regulation refers to the conscious effort of personal management, which involves the process of managing one's thoughts, behaviors and feelings to achieve personal goals (Muraven & Baumeister, 2000). The military focuses on this aspect through resiliency training which focuses on strengthening resilience, well-being, and optimism. The resiliency program is designed to equip military members with a set of practical skills, which may be applied in everyday life to strengthen their ability to overcome adversity, challenges, manage stress, and

thrive in their personal and professional life (Merideth et al., 2011). Self-regulation is a strength necessary for emotional well-being and destruction of such results in feelings of guilt, ultimately undermining well-being (Muraven & Baumeister, 2000).

The level of economic stress in the general population may affect well-being. Military members carry a heavier debt burden as evidenced in a recent study showing that 27% of military members reported incurring more than \$10,000 in credit card debt compared to 16% of its civilian counterparts (Bell et al., 2014). Other factors that place strain on military members economic well-being include frequent relocations in living arrangements forcing military spouses to terminate their jobs ultimately reducing the family income, lack of employment opportunities, marrying young and having children (Varcoe et al., 2003).

Regardless of being deployed or mobilized, military health care providers endure stressful and uncomfortable situations, spend time away from their family, friends and usual home comforts which many providers expressed feeling completely changed (Rivers, Gordon, Speraw, & Reese, 2013). Research shows that these circumstances can negatively affect a provider's well-being (Buckman et al., 2011). There is significant literature in regards to military and psychological symptoms, combat stressors, mental health concerns such as depression and anxiety, job stress, work performance and resiliency (Pflanz & Ogle, 2006) however; there is a lack in literature regarding the presence of satisfaction with life and fulfillment in military health care providers. Conducting such research will bring a better understanding of the well-being of military health care providers post deployment or mobilization, so we can then develop interventions to help improve the well-being during and after deployment/mobilization

METHODS

Design

Qualitative descriptive methodology with face-to-face interviews was utilized in this project to describe the phenomenon of well-being among U.S. Reserve military health care providers who have deployed or mobilized. I selected this method to best describe experiences from the perspective of the participant (Harrison et al., 2017). The objective of qualitative methodology is to understand or describe a problem from the perspective of the participants and getting close to them in their natural environment through interactions. Therefore, this project consisted of face-to-face interviews using semi-structured, open-ended questions. This project provides level VII evidence derived from participant's personal experiences.

Application of Framework

Neuman's system model (2011) was used as the guiding framework in this project because of its open system concept and its interrelatedness between elements, which focus on stability and wellness. Military health care providers are a moving system throughout many different environments, and describing experiences through the lens of stability and wellness enabled me to discuss the interrelatedness of these elements. Each health care provider is unique and comes from unique experiences and backgrounds. The project design and the semi-structured, open-ended interview can affect how participants respond (Kelly et al., 2003); therefore I developed the questions with the guidance and feedback from my project committee to minimize the potential for bias.

Sample Criteria

Project participants consisted of U.S. Reserve military health care providers who reside in the state of Arizona and either deployed or mobilized during their military career. Participants were included regardless of branch of service, duty status, marital status, ethnicity, religion or gender. Other inclusion criteria included 18 years of age or older, at least one deployment or mobilization, tour of duty for at least 90 days, and English speaking.

Recruitment

Following the approval of the University of Arizona Institutional Review Board (IRB), project recruitment fliers were posted at public venues which are known hang-outs for military personnel such as coffee shops, libraries, restaurants, and physical fitness places around Tucson, AZ. The recruitment flier included the project purpose, criteria for participation, approximate time commitment, benefits and risks of project participation and my contact information. Interested participants contacted me and I emailed them a project recruitment letter and the consent to participate in research, which outlined the project in detail. During initial contact, whether by email or telephone, participants were urged to ask questions and seek clarification about the project purpose and process. Once the participant agreed to proceed with participation, we discussed a place to meet for a one-hour face-to-face interview. In each case, we agreed on a location that provided privacy to maintain confidentiality. The consent process was formalized and finalized during the first physical meeting with each participant. At that time, I reviewed the project purpose and invited the participant to ask questions and seek clarification. Participants were given a copy of the signed consent document. At the conclusion of the interview, I invited the participants to share my recruitment flier with others (snowball sampling).

Three face-to-face interviews were conducted. All three participants are commissioned officers in the United States Army Reserves. Two participants are Physician Assistants and one is a Nurse Practitioner. All three participants had served more than 10 years in the military and ranged from 11-18 years of service. Two participants had experienced one deployment and several mobilizations while the third participant had experienced multiple mobilizations. Interviews ranged from 40-50 minutes. All interviews were audio-recorded and then transcribed verbatim into word format.

Ethical Considerations

To ensure that each study participant is treated in a fair, safe and ethical manner, three ethical principles were followed: respect for persons, beneficence and justice. I also reiterated at the beginning of each interview, that my role was not to diagnose or offer medical advice but to learn from the participants. Respect is an ethical principle about protecting a participant's autonomy (Polit & Beck, 2012). Project participants had the autonomy and decision making capacity to willingly participate in this project if they chose. Participants also had the right to withdraw at any time, for any reason, withhold any information, or decline to respond to any question (Polit & Beck, 2012). Beneficence protects the welfare of the participant through showing one's desire "to do good" while removing harm (Polit & Beck, 2012). Beneficence is an extremely important principle within this project population due to the vulnerabilities experienced by military members to include PTSD, trauma, anxiety, depression, secondary stress, etc. Participants might have been reluctant to participate, but it is possible their desire to help others might have overridden any reluctance. This ethical principle involves equal treatment and privacy protection. All research information must be kept confidential and private (Polit &

Beck, 2012). All who contacted me have the right to receive equality and fairness, and no individual would be judged negatively, even if one opted not to participate (Polit & Beck, 2012). The military population fears being judged or having information reach their commanding officers; ensuring that information is strictly for research purposes and will not be shared with their chain of command or unit ensures justice (Resick et al., 2009).

Data Collection

This project focused on describing commonalities among participants' perceived sense of well-being. Data was collected using semi-structured, open-ended questions, allowing the participants an opportunity to discuss and further elaborate on their experiences, perspectives and feelings (Creswell, 2014). Each interview began with an open-ended question such as "Tell me about your military career." A list of questions was used to guide the dialogue, and further discussion developed based on the participants' responses. Questions are included in Appendix A.

Participant interviews were audio recorded using a hand-held Sony ICD-BX140 4GB digital voice recorder; each interview lasted approximately on average 45 minutes (range: 40-50 minutes). The interviews allowed me to learn from the participants about their knowledge of well-being, how deployment or mobilization affected their well-being, and what training, if any, they received about how to maintain or increase their well-being during or after mobilization or deployment. During each interview, I took field notes regarding each participant's verbal and non-verbal cues to include tone, emotions, expressions and gestures. Upon completion of the interviews, audio files were transcribed by a professional transcriptionist.

Data Analysis

Data sources included audiotaped recordings and my written observational field notes. In descriptive qualitative studies, multiple methods of collecting data are encouraged and found to be mutually informative (Harrison et al., 2017). Though data is collected from multiple sources, I strived to integrate the observations and narratives with a holistic understanding of the participant's experiences, perspectives and feelings (Creswell, 2014).

Upon completion of each interview, data was immediately transcribed and synthesized. For this synthesis, I listened to the audio recording while reading my observational field notes. Harrison and colleagues encourage researchers to devote time immediately after the interview to synthesizing information upon completion of an interview not only to learn about the participant's experiences, perspectives, and feelings but to also evaluate or explore any positive outcomes that may influence subsequent interviews (Harrison et al., 2017). The objective is to discover commonalities between participant's experiences such as perceptions, feelings, emotional responses, events, short or long-term outcomes, or even training they might find helpful to help maintain or improve well-being. The grouped commonalities are presented in the Findings section of the paper. After analyzing the commonalities, I went back to the literature to identify how findings from this project fit within extant literature; this content is described in the Discussions section of the paper.

Trustworthiness

In order for a qualitative study to be credible, trustworthiness must be established. Qualitative studies do not use instruments or tools, which have established metrics about validity and reliability, thus it is pertinent to address the four components of trustworthiness.

Trustworthiness includes four components including credibility, transferability, confirmability, and dependability (Gorard, 2014).

Credibility is achieved when members of the same or similar population recognize the phenomenon or experiences being described. This can be established through prolonged engagement with the narratives, incorporating observations into analysis, and using member checks. Having at least an hour with each participant helped to provide a valid and meaningful encounter. By including my observations, I further address credibility of the study. One of the members of my DNP project committee is also a member of the population, and her review and recognition of the findings will help to establish credibility.

Transferability refers to the generalization of the study's findings to which are applicable to other contexts. As this study focuses on U.S. Army Reserves and military health care providers, the findings may only be applicable to other military health care providers. However, there may be some findings that emerged that could even provide understanding for other military caring or service personnel such as chaplains or psychologists.

Confirmability expresses a degree of neutrality, meaning study findings are based solely on the participant's responses while avoiding any potential personal biases. Confirmability was established through an audit trail, in that field notes, audio recording and reflecting on my own bias and experiences during the interviews and analysis. This process allows me to understand what I am observing, participating in, what is being learned and how to proceed with the project (Gorard, 2014).

Dependability refers to the extent of the project being reproducible and that the findings would be consistent. As this project is utilizing qualitative methods based on interviews,

dependability may be difficult to achieve. However, in qualitative research, dependability closely relates to credibility and will be accomplished as discussed above (Anney, 2015).

FINDINGS

The purpose of this project was to describe well-being in military reserve health care providers, post deployment or mobilization. Analysis of the interview data revealed information associated with transitions and can be grouped into five categories. The categories that impacted the participants' well-being include: separation from family and friends, austere living conditions, exhaustion from long work hours, consecutive work days without days off and being unprepared for what was to come.

Separation from Family and Friends

As the state of well-being is subjective, the leading contributing factor discussed by all three participants was their separation from family and friends as they served their country. Commonly, participants chose to spend their free time before deployment and mobilization, with their family and friends. One participant explained, "Almost always, I get together with friends or family to go places and do things. There is always something going on if you have someone to go with." Another participant explained, "I spend a lot of time with my family, particularly my [significant other]. Before I deployed, we would spend our time gardening together."

Sometimes the forced separation caused a substantial strain on relationships. Several participants described looking inward for a source of the strain, while others wondered if their partner had changed. In some cases, the participant worried that he or she had a mental health problem, and inevitably, the participants spent emotional energy trying to understand the changes in their relationships and in their families. As a participant articulated:

“For three years straight, we fought and couldn’t get along, but finally managed to work things out. I didn’t know what was wrong, I thought maybe I had PTSD or depression!”

Living in the new millennium affords several ways to communicate and keep in touch with family and friends during deployment or mobilization. In some cases, participants went to great financial length to maintain that family contact. However, while staying in contact through electronics was helpful, it was also seen as artificial. As one participant offered, “It’s just not the same compared to when you’re home.” One participant described the ability to communicate by phone everyday with family while being deployed to Kuwait. The participant said, “After about two months into the deployment, I bought a cell phone and called my family every day. It was very expensive and not the same as seeing them, but it was worth it.” The participant followed by saying that not everybody had the capacity to buy a phone and pay for the service, but that it was essentially necessary in order to maintain emotional well-being.

Austere Living Conditions

While deployment and mobilization create a multitude of stressors on military health care providers, all three participants shared that their living conditions were challenging and believed it impacted their well-being in some form. Participants described arriving to find no power, no water, working in extreme heat without air conditioning, or having to actually develop their living quarters, all while taking care of patients. One participant, who was assigned as a military health care provider to an engineering unit, explained that when he arrived in Iraq, he was first on site and given orders to build their living space. The participant described the living circumstances as “horrid.” Some participants arrived at a location before the patients, and necessities such as lights, electricity, or air conditioning were not allocated until the patients

actually began to arrive. In each case, the participants were not emotionally prepared for their living conditions. One participant described living conditions in Iraq during an early deployment:

“There was no place to live except underneath a tree on a cot, because we were the engineering unit, we were to build stuff and prepare for the incoming troops. I lived under the tree for months outside in the heat of a maximum temperature of 136 degrees and blowing dust. Once we established small buildings, I made sure all my soldiers were taken care of first with a place to live inside and then I moved into a bathroom and I remodeled the space to have a bathroom, shower, an office and sleeping quarters, with air conditioning.”

Several participants described being completely unprepared for what they would face during deployment. In some cases, they were not sure where to go upon arrival, and found that they had no actual place to stay. Arriving at a war zone was distressing, but having no place to actually stay or feel safe added a layer of stress to their mental state. One participant recalled:

“I had no idea where I was going to live. I drove over 2,000 miles to arrive at my assigned duty station and was told there are no barracks available and to stay in a hotel and begin looking for a place to live. I stayed in a low priced hotel, because that is what I was allotted, for about 2 weeks before I found an unfurnished apartment I could afford. I slept on an air mattress, used recyclable utensils and had a folding chair to sit in.”

Long Work Hours, Little Time Off

Military personnel often work long hours especially during deployment. When interviewing the participants about how many hours a day they worked while deployed or mobilized, every one of them deeply sighed and laughed, as described the pure exhaustion. One participant outlined the overseas deployment work schedule as 5:00 in the morning to 10:00 at night and those were on “good days.” Another participant who deployed experienced a varied working schedule, stating “I was available 24/7, but probably worked on average 16 hours a day.” All three participants worked on average 11-12 hours a day while on mobilization, totaling approximately 60-hour work weeks.

I asked the participants how they felt physically during their mobilization and deployment and each of the participants took a long pause before answering my question. One participant paused for about five seconds before saying “Let me think about that for a few more seconds” and then went on to explain feeling physically tired “because I put in a lot of hours.” Another participant said, “I was just completely exhausted, it was hard, you know?” Each participant expressed that despite the long hours, they felt like they were making a difference and that is what kept them motivated to continue to work the long hours.

In addition to the long hours each participant put in daily, their days actually off were rare, which further contributed to their physical and mental exhaustion. I asked the participants about how they spent their free time during deployment or mobilization, and each of them chuckled as they described that there was really no such thing as ‘free time.’ In some cases, time off meant working on required professional development courses. During deployments, there was no predictable time off. Those who mobilized had more “time off” but even during the official time off, there was work to be done. One participant explained, “While in Iraq, there was no free time. I had a total of two, one-half days off in a 14-month period, so that tells you that I worked the entire time. I was consumed by the work.” Another participant explained, “I didn’t have a ton of free time on either my deployment or mobilizations. When I did have free time, I worked on my Army professional development classes.” The participant who mobilized, explained the little free time allotted on the weekends was spent alone at a nearby lake, typically 6-8 hours.

Each of the participants held a health care provider position as a civilian before deployment or mobilization with the Army Reserves. I asked each of them how many hours a

day they worked at their civilian job and they each expressed having a consistent schedule. They all described knowing what hours they would work and what days they would have off. In each case, the unpredictability of schedules only became evident when they actually deployed. They were unprepared for the unpredictability and the intensity of their schedules.

Unprepared For What Was to Come

A commonality is that no participant felt emotionally prepared for what he or she was about to experience. Words and phrases included “dumbfounded,” “unprepared,” “on my own.” In some cases, feeling unprepared was also associated with feeling alone or even abandoned. There was a distinction between feeling physically prepared and feeling emotionally or mentally prepared. One participant who has been mobilized several times, shared her experience with mobilization:

“The first few, I wasn’t at all physically or mentally prepared. It was a shocker because I show up and I feel like I’m being treated as the substitute teacher. I was tasked with all the extra duties and my work schedule was 10 hours a day seeing 40 patients compared to my civilian job working 8 hours a day and seeing 15-20 patients a day.”

Some participants also had leadership roles, and described how a team member manifested the lack of emotional readiness. The lack of feeling prepared mentally or emotionally was a frequent source of stress, and significantly compromised the sense of well-being. A participant who was also an officer in charge of other military health care providers, describes a situation with a soldier that caused him great concern; in his estimation the soldier was not emotionally equipped for the living conditions, being away from family, or away from routine:

“Snapped at the near thought of leaving the home and spent the entire time spiraling out of control about the change in environment and work conditions Despite the unknown, a lot of it has to do with if you are mentally and emotionally fit prior to deployment or mobilization, which is not well measured or evaluated.”

Potential Improvements

Project participants were quick to offer suggestions that they thought would help maintain or improve well-being during and post deployment or mobilization. The participants believed that acknowledging one's well-being and integration of families into the military process would be beneficial to increasing or maintaining well-being.

Acknowledgment of Well-Being

I asked the participants what well-being meant to them. It appeared to be a difficult question for the participants to answer, as each had to reflect for a minute before responding. Frequently the question caused chuckles and some participants appeared even uncomfortable when they were unable to provide a clear or immediate answer. Interestingly, while some could not describe what well-being meant in themselves, they could recognize the absence of well-being in their patients. Common phrases used to describe well-being included a combination of physical and emotional health, feeling good about yourself and your life. The term "balance" was used as an indicator of well-being. As described by one participant, well-being means "waking up in the morning with energy, pain free, manageable stress to know that I'm still in touch with the rest of the planet."

At the end of each interview, I asked the participants if there was anything else they would like to add that we hadn't already discussed. Each of them mentioned something along the lines of "balance" and "staying mentally and emotionally strong." I asked how each achieved balance and mental and emotional strength. Unanimously, the participants declared that they relied on self-regulation measures of making conscious efforts of managing their thoughts,

behaviors, and feelings to accomplish the mission. The mission was always first and foremost, which appeared to even overshadow their individual needs.

Integration of Families

The culture between active duty military members and reserve military members differs as discussed earlier. The participants expressed their concerns with family members not being integrated into the military process, which they perceived as creating barriers to relationships and positive well-being. Commonalities included awareness that family members feel uncomfortable coming into a military setting, and that some family just avoid the military altogether. Inevitably, the family member's avoidance or discomfort with the military left the participants feeling torn between their personal beliefs and commitment to the military and their family. One participant mentioned a seven-day course available for spouses, and shared that although his spouse did not want to attend the course, it ended up being highly helpful; the spouse gained a holistic understanding of the military mission and her spouse's role within that. Participants explained that it is often times difficult to explain to family members to understand what we are doing, even after spending a decade in the service so integration would be "obscenely valuable."

The participants discussed the value of a family readiness group. This was described as a means to help integrate families into the deployment or mobilization process, and to keep the family informed and supported during their military member's deployment or mobilization. The participants felt the family readiness groups provide assistance with distributing relevant mission information, acts as a support and communication link, helps connect family members to community resources, helps family members solve problems that may arise while their spouse is deployed or mobilized and overall helps families feel as ready, resilient and connected as

possible. One participant who has mobilized numerous times described using the family readiness group with one deployment:

“I found it to be extremely helpful and the reason I believe there needs to be improvement. We need to do better to support and integrate our families.”

DISCUSSION

The findings of this project describe the experiences, symptoms and effects of well-being among three military reserve health care providers. The participants found it difficult to define well-being, much less assess their own well-being. Instead, they approached well-being objectively, through self-regulation efforts. The participants described their well-being mostly being impacted by separation from family and friends, austere living conditions, exhaustion from long work hours, consecutive workdays without days off and being unprepared for what was to come.

Separation from family and friends has been widely discussed in the literature and is a large contributing factor for a decrease in well-being. Military families struggle in the context of deployment and mobilization due to the myriad of challenges and adjustments including family separation, loneliness, learning new skills, dealing with problems on their own, housing arrangements and financial difficulties (Devoe & Ross, 2012). Those struggles reverberated within this project as all participants described the separation from family and friends as the most difficult part of their deployment or mobilization. Participants were most grateful to return from deployment or mobilization to be back with their families and friends. The Department of the Army (2008) estimates that the average military health care provider (both active duty and reservist) deploys, mobilizes or relocates every 2-3 years which presents a difficult transition often. The participants in this project had all been separated from their families more than four

times in their military career and indicated that each subsequent separation was just as difficult as the first; the repeated and sometimes prolonged separations compromised the participants' sense of well-being

While there has been an increase of literature on the impact of combat stressors, there has been little information examining the impact of military health care providers' well-being and their living conditions while deployed or mobilized (Gibbons, Hickling, & Watts, 2012). Much like military combatants, military health care provider exposure to austere living conditions and life-threatening situations increases adverse psychological disorders (Gibbons et al., 2012; Barnes, Nickerson, Adler, & Litz, 2013; Leners, Sowers, Quinn-Griffen, & Fitzpatrick, 2014; Elnitsky et al., 2013). Not only did the participants experience "horrid" living conditions, but they experienced limited resources and support to care for injured soldiers. Participants did "the best they could, with what they had." The participants in a command position ensured that their young soldiers received better living conditions than themselves, placing others' welfare before their own; they frequently sacrificed their own physical and emotional well-being in order to ensure the well-being of others.

Pure exhaustion was a common symptom shared between all participants. This exhaustion has been described among military health care providers, who worked longer hours compared to their civilian healthcare provider counterparts, ultimately contributing to fatigue, burnout and a decrease in well-being (Lang et al., 2010). Furthermore, military health care providers were expected to perform additional duties outside of their duty description (Lang et al., 2010). This paralleled very closely with the participants responses who on average worked approximately 16 hours a day, but were technically on duty "24/7" during deployment. One

participant who mobilized defined themselves as a “substitute teacher” who was tasked with every extra duty and essentially “dumped on.” The participants expressed that they could not get enough sleep, even if they wanted to, because their duty was to make sure that the soldiers were able to fight the fight and “everyone relied on medical” to make that happen.

During deployment, long workdays morph into multiple days without any days off. Participants in this project outlined working long days during deployments, and going for long stretches without any days off. This is similar to the Lang et al. (2010) study in which military health care providers were scheduled to work on their day off, engage in mandatory physical fitness training, and attend mandatory trainings. One participant outlined having two half-days off within a 14-month period of deployment.

On top of long workdays often without breaks, the participants described high patient volumes and heavy workload. Specifically, the participants outlined that deployment meant having additional duties and responsibilities, while providing for twice as many patients as they ever cared for in stateside settings. Inevitably, this left the participants feeling physically and mentally exhausted. Lang and colleagues (2010) identified that high patient volumes and heavy workloads of military health care providers may contribute to fatigue, negative emotions and burnout and ultimately a decrease in well-being; these findings echo those shared by the participants in this project.

One commonality that arose in this project that I could not locate in the literature is the sense of not feeling prepared for the upcoming deployment; in each case, this compromised the participant’s well-being. The literature review highlights the military focus on self-regulation through resiliency training, which includes strengthening resilience, well-being and optimism

(Muraven & Baumeister, 2000). However, the participants in this project shared that they were not at all prepared emotionally or mentally what they were about to experience for several reasons. The participants did not know what they would be doing once they arrived for duty. They were not prepared for the conditions they would be working under. Their biggest support system was thousands of miles away. The participants discussed mental, physical, and emotional resilience through self-regulation measures saying, “you just keep going and focus on the mission.” The participants explained having a sense of purpose when deployed or mobilized was the biggest reason they worked so hard. Self-regulation is a strength necessary for emotional well-being, and destruction of such results in feelings of guilt, ultimately undermining well-being (Muraven & Baumeister, 2000; Merideth et al., 2011).

Gleaned from this project, whether deployed or mobilized, well-being is compromised in some way, shape or form. As well-being is subjective and not well measured, self-regulation efforts are crucial. This project described the well-being of military reserve health care providers and compared the knowledge from the literature about military health care providers with descriptions from the participants to identify all aspects of well-being.

Strengths and Limitations

The project’s methods were grounded using Neuman’s system model (2011) because of its open system concept and its interrelatedness between elements which focus on stability and wellness. Military health care providers are a moving system throughout many different environments hence the advantage of using a qualitative descriptive method to interview participants. The qualitative descriptive method was chosen to maintain stability and wellness while minimizing a degree of reaction during the study process. Employing a qualitative

descriptive design also allowed for various experiences, perspectives, and feelings of the same phenomenon (Creswell, 2014).

In order to enhance rigor of this project while minimizing potential biases, the essential components of trustworthiness were engaged. Credibility was established through prolonged engagements while incorporating non-verbal observations. Additionally, one of the members of my DNP project committee is also a member of the sample population, and her review and recognition of the findings help to establish credibility. Confirmability was established through an audit trail, in that field notes, audio recordings and reflection allow me to understand what I am observing, participating in, and what is being learned (Gorard, 2014). Dependability closely related to credibility and was accomplished as discussed above (Anney, 2015).

Project limitations include transferability, limited participation, and the investigator being a member of the sample population. As this study focuses on U.S. Army Reserves and military health care providers, the findings may only be applicable to other military health care providers, however there may be some findings that emerge that could even provide understanding for other military caring or service personnel such as chaplains or psychologists. Another limitation of the project is the small sample size, and only conducting three interviews. Additionally, two of the three participants had experience with both deployment and mobilization with experiencing the deployment first. This could contribute to deployment experiences, perspectives and feelings overshadowing those during mobilization. Moreover, because I am a member of the sample population, participants may have been less willing to elaborate on experiences, perspectives and feelings because of presumed shared experiences.

Implications for Research

The results of this project may lead to further research of well-being within the military health care population post deployment and mobilization. As this project is only scratching the surface, further studies will need to be conducted to enhance knowledge about the well-being of military health care providers. Additionally, further research needs to be conducted describing the well-being of military reserve health care providers post deployment or mobilization. Armed with a better understanding of the well-being of military reserve health care personnel post deployment or mobilization, we can then develop interventions and proper training to help improve the military health care professional's well-being during and after deployment/mobilization.

Implications for Practice and Plans for Dissemination

The findings of this project will hopefully be useful for U.S. military reserve health care providers. This project is one of the first studies to describe well-being in military reserve health care providers post deployment or mobilization. The information gained through this project may be instrumental in improving military health care provider well-being and ultimately sustaining multiple deployments or mobilizations.

As a DNP with military experience, I am perfectly positioned to implement change. I intend to share the findings from this project with the participants and to submit an abstract to a conference such as the Western Institute of Nursing. I would like to grow this project by replicating this project with a larger population of health care providers, and even separate the project by describing well-being post mobilization and separately, post-deployment. As I begin

to develop an understanding of well-being among military health care providers, I can use my leadership to help develop and ultimately implement change through education and policy work.

Conclusion

The findings of this project may help to increase our understanding of the experiences, perspectives and effects of well-being in military reserve health care providers. The findings indicate that separation from family, austere living conditions, exhaustion from long work hours, consecutive work days without days off and being unprepared for what is to come with deployment and mobilization contribute to a decrease in well-being. The participants have volunteered a few ideas on how to maintain or improve well-being during deployment or mobilization to include acknowledging of their individual well-being and integration of families. Such efforts may improve well-being during deployment and mobilization and ultimately help military health care providers sustain multiple deployments and mobilizations throughout their military career.

APPENDIX A:
INTERVIEW QUESTIONS

Interview Questions

These questions will be used for research study purposes and will be kept confidential. There is no right or wrong responses. By answering the following questions, you are agreeing to use of information in this study.

1. Tell me about your military career.
 - a. How many years have you been a member of the military?
 - b. How many times have you mobilized or deployed from 2013-2016?
2. Tell me about your daily duties as a military member when you were mobilized or deployed.
 - a. How many hours a day did you work?
 - b. Did you have any additional duties when mobilized or deployed?
3. Tell me about your daily duties as a civilian before you were mobilized or deployed.
 - a. How many hours a day did you work?
 - b. Did you have any additional duties
4. Tell me about how you spend your free time when you are mobilized or deployed.
5. Tell me about how you spend your free time before you mobilized.
6. Tell me about anything you did to prepare for your mobilization or deployment.
7. Describe how prepared you felt for your mobilization or deployment.
8. Describe how you felt during your mobilization or deployment.
 - a. Describe anything that helped you continue with your mobilization or deployment.
9. Described how you felt after your mobilization or deployment.
10. Describe what well-being means to you.
11. Describe your well-being post mobilization or deployment.
12. What do you think would help maintain or improve well-being during and post mobilization or deployment?

APPENDIX B:
PARTICIPANT DEMOGRAPHICS

DEMOGRAPHICS

		Age	Gender	Deployments	Mobilizations	Years in Healthcare	Years in Military
Participant #1		60	Male	1	4	18	18
Participant #2		59	Male	1	3	16	16
Participant #3		55	Female	0	7	14	11

APPENDIX C:
EVIDENCE APPRAISAL

Reference	Research Question/Hypothesis	Study Design	Sample and Setting	Methods for Data Collection and Data Analysis	Findings
<p>Weidlich, C. P. & Ugarriza, D. N. (2015). A Pilot Study Examining the Impact of Care Provider Support Program on Resiliency, Coping, and Compassion Fatigue in Military Health Care Providers. <i>Military Medicine</i>, 180(3), 290-295.</p>	<p>The purpose of this study is to update what is currently known about the resiliency, coping, and compassion fatigue of military professionals and whether these factors can be improved over time. The care provider support program (CPSP) was developed to improve the resiliency of military health care providers.</p>	<p>Prospective Cohort Pilot Study</p>	<p>Sample: 93 military & civilian nurses, licensed practical nurses and medics</p> <p>Setting: Army medical center (location not disclosed) in the Continental United States</p>	<p>Data Collection: Participants were contacted through e-mail inviting them to volunteer to participate in the study.</p> <p>After participants gave consent, they were administered the following questionnaires: CD-RISC, WCQ, ProQOL, and a demographic questionnaire.</p> <p>Thirty days after completing CPSP training, follow-up assessments were mailed to the participants. The mailed questionnaires (CD-RISC, WCQ, and ProQOL) along with a demographic questionnaire included a self-addressed, stamped envelope to return the completed scales. Returned questionnaires were examined for completeness and secured in a locked filing cabinet.</p> <p>Data Analysis: T-tests and mixed ANOVAs were utilized to analyze data collected from each questionnaire.</p> <p>The psychometric properties of the self-reported instruments were evaluated by assessing internal consistency of</p>	<p>The study results suggest that CPSP is effective in reducing a provider's burnout level, which may lead to improved resiliency</p> <p>However, because there is no unifying definition of resilience, improved resiliency may be misinterpreted</p>

Reference	Research Question/Hypothesis	Study Design	Sample and Setting	Methods for Data Collection and Data Analysis	Findings
				instrument scales. Descriptive statistics were generated on the demographics of the subjects and scores/classification on the selected measures. Data was compared to assess for baseline differences that needed to be accounted for in the analysis. Distributions for tests were checked and nonparametric tests were used if data did not meet assumptions.	
Gibbons, S.W., Hickling, E.J., & Watts, D.D. (2012). Combat stressors and post-traumatic stress in deployed military healthcare professionals: An integrative review. <i>Journal of Advanced Nursing</i> , 68(1): 3-21.	There were two aims for this study: One was to identify exposures, experiences and other factors influencing stress responses in military healthcare providers previously engaged in a war effort. The second aim was to describe the incidence of post-traumatic stress and related mental health problems in military healthcare providers.	Integrative Review using Cooper's procedure for research synthesis	Sample: 38 articles Setting: Investigator's homes	Data Collection: Literature searches via CINAHL, PUBMED, PsycINFO databases were conducted by all investigators using the same key words: for stress reaction (post-traumatic stress, PTSD, combat stress), for healthcare provider (corpsman, paramedic, medic, nurse, nurse practitioner, physician, physician's assistant) and for military war effort involvement (active duty military, Desert Storm, military, Operation Enduring Freedom, Operation Iraqi Freedom, Vietnam War, World War II).	Military healthcare provider exposure to life-threatening situations will increase the probability of adverse psychological disorders following traumatic experiences. The presence of a strong sense of meaning and purpose, within a supportive environment appear to help mediate the impact of stressful events.

Reference	Research Question/Hypothesis	Study Design	Sample and Setting	Methods for Data Collection and Data Analysis	Findings
				<p>Data Analysis: Templates were used to record text that involved key concepts in accepted research articles. Concepts from Benight and Bandura's (2004) model and from the DSM-IV PTSD diagnostic criteria provided the framework for organizing the data for synthesis.</p> <p>Articles were reviewed by two team members to determine its validity</p> <p>A coding scheme was developed by the reviewers to assist with identifying and recording categories for units of analysis (e.g. military healthcare providers). As research results in relevant articles summarized the concepts for groups of healthcare providers participating in each study, the incidence rate for a category or theme was counted only once. This strategy lessens the ability to judge the importance of a category or theme in a particular study, but the number of times it recurred in other studies strengthens its validity with regard to combat stress in military healthcare providers.</p>	

Reference	Research Question/Hypothesis	Study Design	Sample and Setting	Methods for Data Collection and Data Analysis	Findings
<p>Varner, D.F. & Foutch, B.K. (2014). Depression and burnout symptoms among Air Force family medicine providers. <i>Journal of American Academy of Physician Assistants</i>, 27(5):42-46.</p>	<p>Investigation of the prevalence of depression and burnout among active duty Air Force family medicine providers</p>	<p>Cross-Sectional</p>	<p>Sample: 726 active duty Air Force family medicine providers—387 family medicine physicians, 278 PAs, and 61 NPs.</p> <p>Setting: Undisclosed location but in their local military treatment facility (clinics)</p>	<p>Data Collection: participants completed consent forms and then completed electronically encrypted anonymous self-directed surveys that combined the Maslach Burnout Inventory (MBI) and Patient Health Questionnaire 9 (PHQ-9)</p> <p>Data Analysis: Scores from each survey were collected and one-way analyses of variance with professional designation, sex, length of time practiced, and age as predictors of depression (PHQ-9) and the three burnout (MBI) scores.</p>	<p>84% of participants scored positive for some degree of depression. The mean PHQ-9 of 4.76 (95% CI, 4.03–5.49) indicated average reported depression symptoms.</p> <p>Overall burnout symptoms based on MBI scores showed that family medicine providers had negative burnout symptoms</p>
<p>Rivers, F.M., Gordon, S., Speraw, S., & Reese, S. (2013). U.S. Army nurses' reintegration and homecoming experiences after Iraq and Afghanistan. <i>Military Medicine</i>, 178(2): 121-125.</p>	<p>Evaluate and understand U.S. Army nurses' reintegration and homecoming experiences post deployment from Iraq or Afghanistan.</p>	<p>Phenomenology; Purposive sampling</p>	<p>Sample: 22 Active duty nurses</p> <p>Setting: Two undisclosed military installations</p>	<p>Data Collection: Verbal consent was obtained and digitally recorded. The individual interviews lasted from 30 to 90 minutes.</p> <p>Data Analysis: Field notes were recorded following the interview. The digitally recorded interviews were carried to a professional transcriber who had signed a confidentiality statement. Each recording was transcribed verbatim. When the transcript was returned it was verified with the digital recording for</p>	<p>Five themes emerged from this study: 1) aspects of command support were articulated as "No One Cares"; 2) fulfilling requirements for attendance at pre/postdeployment briefings were described as "Check the Blocks"; 3) readjustments from focusing strictly on duty requirements versus multitasking, such as family responsibilities and daily living, led to the</p>

Reference	Research Question/Hypothesis	Study Design	Sample and Setting	Methods for Data Collection and Data Analysis	Findings
				<p>accuracy.</p> <p>Data analysis was performed via the thematic analysis process outline by Thomas and Pollio.</p>	<p>"Stress of Being Home"; 4) nurses stated "They Don't Understand" when referring to anyone without deployment experience (family, friends, other soldiers); and 5) when referencing deployment experiences, nurses emphasized that, "It Just Changes You."</p>
<p>Barnes, J.B., Nickerson, A., Adler, A.B., & Litz, B.T. (2013). Perceived military organizational support and peacekeeper distress: A longitudinal investigation. <i>Psychological Services, 10</i>(2):177-185.</p>	<p>To investigate the temporal relationship between stress symptoms and perceived organizational support</p>	<p>Longitudinal Study</p>	<p>Sample 1,039 deployed service members</p> <p>Setting Peacekeeping time in Kosovo</p>	<p>Data Collection: Participants completed self-report questionnaires before deployment (T1). The same self-report measures were then completed near the end of a 6-month deployment (T2), 3 to 4 months postdeployment (T3), and 8 to 9 months postdeployment</p> <p>Data Analysis: The analytic approach used was latent difference score (LDS) structural equation modeling for dynamic change. The software package Mplus version 6.11 with full information maximum likelihood estimator (FIML) was used to conduct the analysis.</p>	<p>Prior stress symptoms are influential in service member's perceptions of their organizations supportiveness such that increased prior stress is associated with worsening perceptions of support. These results illustrate that targeting stress directly may potentiate the positive influence of organizational support and that institutional support programs should be adapted to better account for the negative biases increased distress may encourage.</p>
<p>Owen, R.P. & Wanzer, L. (2014). Compassion fatigue in</p>	<p>To develop a proposed definition for compassion fatigue as there is no</p>	<p>Systematic Review</p>	<p>Sample 25 articles</p>	<p>Data Collection: A research librarian was consulted to establish the most</p>	<p>Several key terms and concepts identified the phenomena of</p>

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military healthcare teams. <i>Archives of Psychiatric Nursing</i> , 28(1): 2-9	current standardized formal definition, and this lack of clarity can inhibit intervention.		<p>Setting Electronic database</p>	<p>appropriate search strategy using PubMed, Cochrane, PsycINFO, CINAHL, and Google Scholar. An electronic literature search was conducted using the key terms and concepts. Key terms included Afghan Campaign, Iraq War, military medical personnel, social work, patient care team, chaplaincy service, psychologist, patient care team, physicians, nurses, social work, military nursing, military medicine, aerospace medicine, deployment, war, compassion fatigue, stress, adaptation, professional burnout, and empathy. The article search was filtered within the past 5 years, to include 2009 to 2013.</p> <p>Data Analysis: A search algorithm was developed using the inclusion and exclusion criteria and key words. An article evaluation form guided the data extraction process. Following the evaluations of articles, each study was placed in a summary table with identified key terms and concepts and level of evidence ratings using the hierarchy of evidence ratings established by Fineout-Overholt</p>	<p>compassion fatigue. These included: burnout (22%, n = 4), vicarious trauma (33%, n = 6), secondary traumatic stress (50%, n = 9), and provider fatigue (11%, n = 2). Seven themes emerged: occupational hazard, psychological distress, empathy, sense of helplessness, fear, loss of purpose, and inability to recognize own needs.</p>

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				et al (2010). By using manifest and latent content analysis, a critique, contrast, and comparison of the content within the study sample was completed.	
<p>Leners, C., Sowers, R., Quinn-Griffen, M.T., Fitzpatrick, J.J. (2014). Resilience and professional quality of life among military healthcare providers. <i>Issues of Mental Health Nursing</i>, 35(7): 497-502.</p>	<p>To examine the relationship between resilience and professional quality of life and to explore differences among providers who had been deployed and those who had never been deployed.</p>	<p>Descriptive, correlational, quantitative design.</p>	<p>Sample: 548 nurses (including APNs) & 339 physicians</p> <p>Setting: Convention of the American Military Surgeons of the United States (AMSUS) in San Antonio (includes active duty and reserve personnel from Navy, Air Force, Army, Marines)</p>	<p>Data Collection: Approval to conduct the study at AMSUS was granted by the convention education coordinator. Institutional Review Board (IRB) was obtained; anonymity and confidentiality were assured. Individuals were approached at the conference, and if they met inclusion criteria for the study, they were asked to complete the Resilience scale (RS) and professional quality of life (ProQoL) instrument questionnaires.</p> <p>Data Analysis: Data was entered and coded into the Statistical Package for the Social Sciences (SPSS) through the Survey Monkey integration and Excel spreadsheet. Descriptive, univariate analysis was performed on the data Cronbach alpha coefficients were computed for the RS and ProQoL subscales. Bivariate, correlational tests</p>	<p>Results showed high resilience scores among all providers, and significant relationships between dimensions of professional quality of life and resilience. There were significant differences in professional quality of life based on deployment. Those not deployed had a higher resilience scores.</p>

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				<p>were used to determine the relationships among resilience and the professional quality of life subscale scores.</p> <p>Analyses using analysis of variance (ANOVA) were undertaken to determine differences between groups based on deployment status.</p>	
<p>Ayala, E., & Carnero, A.M. (2013). Determinants of burnout in acute and critical care military nursing personnel: A cross-sectional study from Peru. <i>PLoS One</i>, 8(1):e54408.</p>	<p>To study the relationship of burnout and selected socio-demographic and occupational factors in military acute/critical care nursing personnel</p>	<p>Cross-Sectional</p>	<p>Sample: 93 nurses & nurses assistants</p> <p>Setting: Acute and critical care units of a military hospital in Lima, Peru</p>	<p>Data Collection: Participants engaged in an anonymous, structured, self-administered, paper-based survey between May-June 2011. Surveys were comprised of two parts: an initial socio-demographic/occupational questionnaire and the Maslach Burnout Inventory.</p> <p>Data Analysis: Statistical analyses were performed using Stata/ICH 11.0</p> <p>For the descriptive analysis, central tendency and dispersion statistics for each variable was calculated</p> <p>For the bivariate analysis, mean scores for each subscale by socio-demographic and occupational characteristics were calculated using Student's</p>	<p>Higher emotional exhaustion scores were merely with having children and inversely associated with the time working in the current department. Higher depersonalization scores were solely associated with being single compared with being divorced, separated or widowed, working in the emergency room/intensive care unit compared with the recovery room, and inversely associated with age. Higher personal achievement scores were independently associated with having children.</p>

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				<p>t test</p> <p>For the multivariable analysis, linear regression was used to estimate the mean difference in the MBI subscale scores.</p>	
<p>Planz, S.E. & Ogle, A.D. (2006). Job stress, depression, work performance, and perceptions of supervisors in military personnel. <i>Military Medicine, 171</i>: 861-865.</p>	<p>This study examined the relationship among job stress, depression, work performance, types of stressors, and perceptions of supervisors in the military.</p>	<p>Cross-sectional</p>	<p>890 Active duty Air Force stationed at F.E. Warren Air Force Base in Cheyenne, Wyoming.</p>	<p>43-item survey on work stress, physical and emotional health, work performance, perceptions about leadership, job stressors, and demographics.</p>	<p>27% of military personnel reported suffering from significant job stress and impaired work performance, had more days of missed work, poorer physical health, and negative perceptions.</p>
<p>Buckman, J.E., Sundin, J., Greene, T., Fear, N., Dandeker, C., Greenberg, N. (2011). The impact of deployment length on the health and well-being of military personnel: A systematic review of the literature. <i>Occupational Environment Medicine, 68</i>: 69-76.</p>	<p>Determine effects of length of deployment on the health and well-being of military personnel.</p>	<p>Systematic Review</p>	<p>Sample used 9 articles retrieved from databases to include NCBI, Ovid MEDLINE, EMBASE.</p>	<p>Online search used keywords to include: combat, military personnel, soldiers, armed forces, tour length, deployment length and operations tempo. The search yielded 367 articles and from the abstract read, a potential 131 were deemed relevant. Once the articles were read in full and met inclusion criteria (measured length of deployment, at least one outcome in terms of physical or psychological health, or well-being, and collected data on outcomes post deployment), nine articles were used.</p>	<p>As deployment length increases, the potential for personnel to suffer adverse health effects also increases</p>

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Muraven, M. & Baumeister, R. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? <i>American Psychological Association, 126</i> (2): 247-259.	To review evidence pertaining to self-control and if controlling one's own behavior requires the expenditure of some inner, limited resource that is depleted afterward.	Systematic Review	Sample used 40 articles retrieved from databases to include EMBASE, Ovid MEDLINE and NCBI	Online search used keywords to include: self-control, mood regulation, strength, coping, regulating, and stress. The search yielded 567 articles and from the abstract read, a potential 200 were deemed relevant.	There is limited ability to control and alter one's behavior and becomes vulnerable to depletion in the aftermath of strenuous use.
Lang, G. M., Pfister, E. A., & Siemens, M. J. (2010). Nursing burnout: Cross-sectional study at a <i>Journal of Nursing Scholarship, 44</i> (3):274-278.	Examine the levels of burnout amongst Army and civilian nurses in a large military treatment facility	Cross-sectional	364 nurses from a large military treatment facility. Location not disclosed	Participants took the Maslach Burnout Inventory-Human Services Inventory (MBI). The MBI is a 22-item instrument that assesses direct measures of emotional exhaustion (8 items), depersonalization (5 items), and reduced personal accomplishment (9 items). Analysis for the study was the group. Group differences between military and civilian were analyzed using the independent t-test and statistical analysis were performed using SPSS.	Findings from the study suggest that nursing personnel who work in a large Army teaching hospital are not immune to emotional exhaustion.

Reference	Research Question/Hypothesis	Study Design	Sample and Setting	Methods for Data Collection and Data Analysis	Findings
<p>Bell, M.M., Nelson, J.S., Spann, S.M., Molloy, C.J., Britt, S.L., Goff, B.S. (2014). The impact of financial resources on soldier's well-being. <i>Journal of Financial Counseling and Planning</i>, 25(1): 41-52.</p>	<p>Examine the impact of financial resources on soldier's well-being.</p>	<p>Cross-sectional</p>	<p>715 soldiers from a Midwestern Army installation were given assessments to include: subjective well-being using 5-point Likert scale asking participants to report their level of anxiety, difficulty sleeping, ability to concentrate on school/work and how often they worry about their financial situation. Measurements of these items were based on the Diagnostic and Statistical Manual of Mental Disorders, 4th edition.</p>	<p>Participants scores were reverse coded so that higher scores represent higher subjective well-being. A principal component factor analysis was conducted to obtain a factor score of subjective well-being, indicating good reliability</p>	<p>Study results suggest that soldiers with higher credit card debts and lower perceived net worth had lower levels of subjective well-being. In contrast, soldiers with greater perceived financial knowledge and larger savings accounts had higher levels of subjective well-being.</p>

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