GUIDELINES FOR NURSING CARE OF VETERANS WITH POSTTRAUMATIC STRESS DISORDER (PTSD)

By

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A Thesis Submitted to the Honors College

In Partial Fulfillment of the Bachelors degree
With Honors in

Nursing

THE UNIVERSITY OF ARIZONA

D E C E M B E R 2 0 1 4

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Abstract

This paper reviews Posttraumatic Stress Disorder (PTSD) in Veterans and military members primarily from Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). A literature review was conducted to explain symptom differentiation, treatments, and secondary health problems among Veterans with PTSD. This paper analyzed current literature and applied findings from the research to best nursing care recommendations for health care members that may not be knowledgeable about PTSD symptoms and needs of Veterans with PTSD when they are hospitalized in an acute care setting. With approximately 75% of Veterans seeking care outside of military based facilities, it is important to educate health care members on the evidence-based best care practices.

Chapter One: Introduction and Background

The purpose of this thesis is to propose evidence-based best practices for nursing care of Veterans with Posttraumatic Stress Disorder (PTSD). PTSD is defined as a disorder that may occur after a traumatic event, in which reactions do not go away over time and may disrupt one's life (Veterans Affairs [VA], 2007). The symptoms of PTSD include "reliving the event, avoiding situations that remind one of the event, negative changes in beliefs and feelings, and hyperarousal" (VA, 2007, p. 1) that lasts longer than four weeks after an event. Veterans of any age may have been diagnosed with PTSD, from young Veterans returning from recent conflicts in the Middle East to World War II Veterans in their 80s. Over 200,000 Veterans have been diagnosed with PTSD during the United States conflict in Iraq and Afghanistan following 9/11. These Veterans receive care through Veterans Affairs (VA) hospitals and clinics and also through civilian hospitals and clinics.

This chapter provides background about how PTSD is diagnosed, issues related to diagnosis, and differences in PTSD symptoms between men and women Veterans. The proposed guidelines are designed for contemporary acute care settings in which nurses may not be familiar with PTSD. The guidelines will help nurses to better care for patients with PTSD.

Diagnosis of PTSD

The diagnosis of PTSD is made using the DSM-5 Criteria. The criteria include a history of exposure to traumatic events that precipitate four symptoms: "intrusion, avoidance, negative alterations in cognitions and mood, and alteration in arousal and reactivity" (VA, 2013, p. 1). Duration of symptoms, ability to function and medical comorbidities are also included in the diagnosis. The stressors that the Veterans are commonly exposed to are threatened or actual death, serious injury, or sexual violence (VA, 2013). Some of the symptoms that the veteran may

suffer from include intrusive memories, nightmares or flashbacks, distress after reminders, and physiological reactions to exposure (VA, 2013). Patients with PTSD will often try to avoid situations or are physically unable to handle certain situations with hypervigilance, exaggerated startle response or problems in concentration. According to VA (2013), the symptoms persist for at least one month and affect function, whether it is social or occupational. However, there is some evidence that the diagnostic criteria may be more descriptive of women's experiences with PTSD symptoms than men.

King, Street, Gradus, Vogt, & Resick (2013) conducted a cross-sectional study to study the differences between the symptoms of PTSD that males and females exhibit and if they are different. This study consisted of 1,139 males and 1,209 females returning for deployments in support of OIF and OEF (King et al., 2013). Data analysis reveals that females are more likely to develop PTSD after traumatic experiences than males. Men were more likely to exhibit higher levels of nightmares, emotional numbing and hypervigilance; however, women were more likely to exhibit higher levels of reminder distress and difficulty concentrating (King et al., 2013). The researchers' (King et al., 2013) hypothesis that the DSM-IV definition of PTSD applies more to female symptoms than males was not supported. The researchers report that males have a greater severity of symptoms than females. Women are beginning to show increased levels of traumatic stress due to the military work becoming more equal between the genders (King et al., 2013). This is important for nurses to note because there are more females being diagnosed with military PTSD and there are more resources for women than before. Nurses should know not only about symptoms to expect, but also if there are gender differences in these symptoms. Nurses may be taking care of these patients in an outpatient or inpatient clinic and it is important

to know that males are more likely to have nightmares or that females are more likely to have difficulty concentrating.

Nursing Care of Veterans with PTSD

There is currently a limited amount of research on best nursing care for Veterans. Johnson et al. (2013) researched what nursing care is veteran-centered outside of the VA system and what needs to be done to improve. The researchers report that about 75% of, or about sixteen million, Veterans are receiving care outside of the VA system. The authors suggest that it is important for nurses to understand that there are differences when taking care of Veterans (Johnson et al., 2013). Veterans present different histories and medical problems than those from the regular community. Johnson et al. highlight that military culture also plays a large role in military members receiving care and how they seek care (2013). Johnson et al. (2013) suggest that providers develop an understanding of the military culture to develop a respect for the Veteran's military service, which may increase the Veteran's willingness to seek health care. Civilian nurses may be exposed to unusual scenarios when treating Veterans. Some of these issues include traumatic brain injury (TBI), polytrauma, chronic pain, PTSD, and military sexual trauma (MST) (Johnson et al., 2013). Research shows that 22% of Veterans from OEF and OIF have been diagnosed with PTSD, with women having a higher rate of diagnosis (Johnson et al., 2013). PTSD treatment often requires treating several medical conditions, and the nurse must ensure individualized care (Johnson, et al., 2013). Nurses are also responsible for medication reconciliation, therapeutic relationships, monitoring behaviors, and promoting wellness (Johnson et al., 2013). Johnson et al. (2013) suggest strategies to minimize PTSD symptoms by knocking before entering, avoiding loud or sudden noises, using caution with physical contact, and

offering opportunities to share feelings (Johnson et al., 2013). It is important for nurses to know these adaptations to ensure safe and proper care for the patients with PTSD.

Best nursing practice in caring for veterans with PTSD in acute care settings is significant to nursing because there are approximately 75% of Veterans seeking health care outside of the VA setting. Many civilian nurses do not understand the military culture and/or resources that the military and VA offer. It is important to educate nurses to provide the best care during hospitalization and to promote health upon discharge. Providing the best care for every patient is critical, and this paper will develop a guide to increase nurses' knowledge on caring for Veterans with PTSD.

Chapter Two: Review of Relevant Research

Chapter two provides a review of ten research reports about health care for Veterans with PTSD. PubMed and CINAHL were searched using keywords "PTSD" and "Veterans" to identify relevant articles published with the past five years. Ten articles met search criteria and are reviewed in this chapter as the basis for the proposed evidence-based guidelines presented in Chapter Three. The research about both pharmacological management of PTSD and psychotherapeutic treatments is presented first, followed by research focusing on secondary health problems associated with PTSD.

Pharmacological and Psychotherapeutic Treatment for PTSD

The first approach to treatment of symptoms of PTSD is often medication targeting the symptoms of depression and anxiety. The research presented in this section evaluated the effectiveness of medications commonly employed with Veterans with PTSD. Next, research about psychotherapeutic treatments currently used for Veterans with PTSD is reviewed.

Abrams, Lund, Bernardy, and Friedman (2013) conducted a cross-sectional study to analyze prescriptions written by primary care and mental health providers for 356,958 Veterans receiving care from the Veterans Health Administration. Most Veterans also see a mental health provider (in addition to primary care) unless their mental disorders are uncomplicated. The researchers found that the three most commonly prescribed medications were "selective serotonin-norepinephrine reuptake inhibitors (SSRI/SNRIs), second-generation antipsychotic medications, and benzodiazepines" (Abrams et al., 2013, p. 142). Current evidence-based agency guidelines recommend that serotonin-reuptake inhibiting agents should be the first-line of treatment, second-generation antipsychotic medications are the second choice, and benzodiazepines are discouraged (Abrams et al., 2013). Results of this study revealed that the

prescribing patterns of providers caring for Veterans with PTSD often fail to follow guidelines. For example, approximately 37% of Veterans with PTSD were prescribed benzodiazepines, and over half of these prescriptions were from mental health providers. The researchers suggested that a common barrier to providers not following the guidelines is a lack of knowledge (Abrams et al., 2013). They also suggested that the VA system was organized so that it is difficult for health care provider to discontinue a benzodiazepine medication, which was prescribed by a different provider (Abrams et al., 2013). Mental health providers initiated the majority of the prescriptions, which were contrary to guidelines, though they prescribe less than 50% of the prescriptions in the VHA (Abrams et al., 2013). Nurses should be aware of the different medications that many of the patients with PTSD are prescribed. Nurses should also be proactive in knowing the guidelines of each facility and advocate for the patients if the medications they are receiving do not meet guidelines.

Cook et al. (2013) conducted a study to evaluate treatment programs for Veterans' with PTSD with the U.S. Department of Veterans Affairs (VA). The study evaluated if the evidence-based treatments (EBTs) were being implemented. Researchers show that there are gaps between EBTs and actual clinical care (Cook et al., 2013). There are two main EBTs that the VA uses for first-line treatment of PTSD 1) prolonged exposure (PE) and 2) cognitive processing therapy (CPT) (Cook et al., 2013). PE is a trauma-focused therapy based on emotional processing theory that discusses emotions to treat symptoms. It includes sessions that focus on "education about reactions to trauma and PTSD; breathing training exposure to trauma-related distress; and exposure to trauma memories through repeated recounting out loud about their most disturbing events" (Cook et al., 2013, p. 56). CPT is a trauma-focused therapy that begins with trauma memory and thoughts from the memories (Cook et al., 2013). It can either be in an individual or

group setting and directly addresses feelings, beliefs, and thoughts that come from the trauma memories (Cook et al., 2013). Cook et al (2013) collected data through interviews from health care providers about treatments and leadership, observations on treatments, and notes on the programs offered. Analysis of data resulted in identification of six major themes in the programs: 1) treatment was not adopted, 2) some of treatment were offered, 3) treatment was offered on individual basis, 4) different treatment 'tracks' were developed and those in a particular track received treatment, 5) full-treatment protocol was given to all patients and 6) treatment was de-adopted" (Cook et al., 2013, p. 57). Additional findings were that the teams were interdisciplinary, including psychologists, social workers, psychiatrists, and nurses were a part of the treatment team. Nurses made up 14.2% of the care provided (Cook et al., 2013). The researchers learned that common reasons for the EBTs not being used were that there were not enough resources, patients had too short of a stay and patients were not ready for the treatment. They found that treatment programs often provided individualized care to the Veterans rather than referring them to the PE or CPT programs. Some of the providers said that they chose not to use the EBTs because they felt that there were better alternative treatments. Results of this study make it clear that nurses providing care to Veterans who have PTSD cannot assume that the Veterans received adequate treatment for their PTSD within the VA system.

Jakupcak, Wagner, Paulson, Varra & McFall (2013) conducted a study to evaluate the effectiveness of a Behavioral Activation (BA) treatment in reducing PTSD symptoms, including withdrawal and avoidance of social activities. Eight Veterans from a post-deployment primary care clinic received BA and received coaching to enable them to re-engage in rewarding and meaningful activities (Jakupcak et al., 2013). The researchers collected data with the Clinician Administered PTSD Scale (CAPS) to evaluate PTSD symptoms and severity and the Client

Satisfaction Questionnaire (CSQ) to evaluate their satisfaction with the treatment. Analysis of data showed that veteran's PTSD symptoms decreased, and they were very satisfied with the BA treatment. Participants reported improvements as early as five weeks into the eight-week BA program (Jakupcak et al., 2013). The treatment was eight weekly 45-90 minute sessions in individual sessions. Researchers suggested adding treatments, such as BA, to primary care settings due to the stigma of receiving mental health treatment at a mental health clinic. This may increase the training and knowledge needed by a wider variety of healthcare providers. Nurses may also receive this training due to their treatment of Veterans in many different healthcare settings. Results of this study suggest that Veterans may benefit from encouragement to re-engage in enjoyable activities, but that it may require formal coaching and at least 5 weeks before the encouragement or coaching produce noticeable changes.

Secondary Health Problems Associated with PTSD

This section presents research about the secondary effects of PTSD on veteran's health status. Results of these studies make it clear that PTSD manifests with physiological changes and greater risk for additional health problems, compared to other Veterans.

Wahbeh and Oken (2013) conducted a study to examine the cortisol levels of Veterans with and without a diagnosis of PTSD. They compared stress level Veterans with PTSD (n=86) and without PTSD (n=28) by examining the salivary cortisol levels. The researchers collected data for salivary cortisol levels at waking, 30 minutes after walking and at bedtime. Compared to the Veterans group without PTSD, the Veterans with PTSD had lower cortisol levels throughout each collection. The researchers describe that cortisol levels are significantly lower in those with traumatic exposure, including those with PTSD. Lower cortisol levels are associated with an HPA axis dysregulation (Wahbeh & Oken, 2013). In normal stress response, the levels of

cortisol increase to adapt to the stressor and then decrease to the prior levels (Wahbeh & Oken, 2013). The altered cortisol levels change the way that the Veterans react to stress. Cortisol levels usually rise with stress and help the body adapt to the stressor. It helps the body utilize nutrients and fight inflammation. This study is important for nurses to note because there are actual physiological differences in patients with PTSD that can affect normal physiological reactions to stress and susceptibility to illnesses due to decreased response. Nurses can evaluate patients for different stress responses and how the body acts differently to the stresses, such as infection or illnesses in the hospital.

Paulus, Argo and Egge (2013) conducted a retrospective cohort design study to evaluate the relationship between PTSD and mean resting blood pressure and heart rate. The study sample included 88 patients with PTSD and 98 patients without PTSD, none on medications for blood pressure. Participants were males under 55 years with two documented blood pressures and heart rates in the month prior to the study. The PTSD group was required to have had symptoms for at least three months and a history of trauma exposure. Data analysis showed that the blood pressures and heart rates were significantly higher in patients with a PTSD diagnosis, indicating greater stress on their cardiovascular (CV) system. Patients who were not diagnosed with PTSD but had prior trauma exposure also showed significantly higher blood pressures and heart rates than without the exposure, supporting the proposed relationship between past traumatic experiences and CV system stress (Paulus et al., 2013). A possible alternate explanation for this was that the elevated blood pressures and heart rates were related to the greater rate of smoking, alcohol and substance abuse- all associated with elevated blood pressure and heart rates and all found at higher rates for Veterans with PTSD than in other groups (Paulus et al., 2013). The researchers noted that these findings might be more appropriate for the primary care setting than

the mental health setting, as the primary care providers are responsible for managing hypertension and other cardiovascular issues as well as the associated smoking/smoking cessation and substance abuse problems. These findings are important for nurses to note because they are usually the first ones to see the vital signs of the patient (blood pressure and heart rate included). More research should be done to see if these results are important to include in teaching to notify all medical staff of the PTSD and trauma exposure ranges. Also, health care providers and medial staff should be alerted to the increased blood pressures early to prevent hypertension and cardiovascular disease. The vital signs also may be an indicator of how the patient is coping with the PTSD and stress. This also indicates how Veterans with PTSD may have increased risk for cardiovascular disease.

Frayne et al. (2013) conducted a cross-sectional study to compare the burden of medical illness for Veterans from OEF/OIF who had PTSD versus OEF/OIF Veterans without mental health diagnoses. Data from outpatient medical records of 90,558 Veterans were analyzed for 1) differences between Veterans with/without PTSD and 2) gender differences in medical illness and conditions common with a PTSD diagnosis (Frayne et al., 2013). Data analysis showed that 27.3% of women OEF/OIF Veterans were diagnosed with PTSD compared with 34.8% of men OEF/OIF Veterans (Frayne et al., 2013). Men had a higher average (7.0) of medical burdens or conditions with the PTSD diagnosis compared to women with 5.0 conditions (Frayne et al., 2013). The most common medical conditions for women with a PTSD diagnosis were "lumbosacral spine disorders, skin disorders, tendonitis/myalgia, dental disorders, allergies, vision defects, acute upper respiratory tract infections, and obesity" (Frayne et al., 2013, p. 34). The most common medical conditions for men with a PTSD diagnosis were "lumbosacral spine disorders, lower extremity joint disorders, hearing problems, hyperlipidemia, tendonitis/myalgia,

skin disorders, dental disorders, hypertension, sleep disturbances, and joint disorders" (Frayne et al., 2013, p. 34). Overall, women had a greater number of medical burdens than men. This is important to nurses because they may be able to apply early interventions, such as teaching or referrals to prevent medical burdens from becoming worse. Nurses should advocate for the best care for their patients to help take care of the immediate problem to address the PTSD symptoms. By identifying medical concerns soon after they begin, patients will be able to live a longer, healthier life.

A cross-sectional study by Nazarian, Kimerling, and Frayne (2012) was done to determine if patients suffering from PTSD also suffer from medical comorbidities. According to previous study findings, researchers reveal that PTSD affects medical conditions by increasing health symptoms (Nazarian et al., 2012). The medical comorbidities assessed were "infectious diseases, endocrine/metabolic, neurologic disorders, circulatory disease, respiratory diseases, digestive system, genitourinary diseases, skin diseases, musculoskeletal disease, injury/poisoning, and ill-defined conditions" (Nazarian et al., 2012, p. 221). Substance use disorders are also common among OEF/OIF Veterans. According to the Veteran Health Administration population, 11,224 women and 62,496 men were the participants in the study. Women with a PTSD diagnosis had a higher occurrence of another medical diagnosis than women without a PTSD diagnosis (Nazarian et al., 2012). Men with PTSD had higher occurrences of medical diagnoses than men without except for infectious and genitourinary diseases (Nazarian et al., 2012). Nazarian et al. (2012) summarized that a diagnosis of PTSD has a strong association with other medical issues. Comorbidities were more common with a PTSD diagnosis than with substance use disorders (Nazarian et al., 2012). The comorbidities are an extra burden to active duty OEF/OIF Veterans since they have to return to work right away and

must meet fitness standards (Nazarian et al., 2012). It is important for health care providers to recognize that the problems can directly affect the careers of the active duty members and there are requirements that they must be able to fulfill and treat them early.

Undiagnosed mental health issues and PTSD

Wieland, Hursey, and Delgado (2010) discuss the complications of mental health care, including PTSD, for Veterans. The researchers note that there are barriers to care that make many patients with PTSD go undiagnosed. Some of these barriers to care include stigma of mental health issues, not wanting mental health disorders on their record and worrying it will negatively impact their career and future (Wieland et al., 2010). Most patients did not seek help until they had significant relationship disruptions or increased levels of anger and irritability. General Peter W. Chiarelli, a leader in Army issues of PTSD, stated, "I think PTSD is a physical injury that causes an individual's frontal lobe to malfunction" (Wieland et al., 2010, p. 6). He also has started confidential mental health services that do not notify the patients' chain of command. Weiland et al. (2010) add that Veterans usually have trouble sleeping and/or flashbacks, and may respond as if they are in the traumatic situation again. The number of troops returning with PTSD from OEF/OIF continues to increase. Patients may not experience PTSD right after returning from deployment. Patients often dissociate from the traumatic experiences because of fear of the trauma (Weiland et al., 2010). Nurses are responsible for knowing about the pharmacological interventions for patients with PTSD. Some of the pharmacological treatments include serotonin, sertraline, paroxetine, carbamazepine, and others. The only two FDA-approved medications for PTSD are sertraline and paroxetine (Weiland et al., 2010). These findings are important to nurses to know that there are undiagnosed patients and that nurses should screen all patients returning from deployments.

Substance Abuse

Another medical issue that Veterans with PTSD may suffer from is a dependence of cannabis. Boden, Babson, Vujanovic, Short, and Bonn-Miller (2013) completed a cross-sectional study to study the use and dependence of cannabis among Veterans. The purpose of their research was to examine the reasons that Veterans were using cannabis and if it had an effect on PTSD symptoms. In a study from the VA Medical Center, 94 participants who were cannabis users were recruited. The participants were asked about PTSD symptom severity, cannabis use motives and problems, withdrawal symptoms, cannabis craving, and 90-day substance use. Boden et al. (2013) found that a majority of the participants also suffered from a substance abuse or dependence, such as alcohol, opiates, hallucinogens or inhalants. Some of the participants suffered from a mood disorder, such as bipolar disorder or depression. Participants used cannabis more than tobacco and alcohol due to cannabis helping cope more (Boden et al., 2013). Significant PTSD symptoms were associated with cannabis use to cope, severe withdrawal, and cravings (Boden et al., 2013). Coping was the number one reason for cannabis use in the Veterans (Boden et al., 2013). Discontinuation of cannabis leads to greater PTSD symptoms, cravings, and withdrawal (Boden et al., 2013). It is important for nurses to question Veterans about cannabis or other substance use and determine if there are underlying reasons why the patient is using the substance.

Risk and Protective Factors

James, Van Kampen, Miller, and Engdahl (2013) studied OEF/OIF Veterans who were registered with VA services. They studied correlations between different mental disorders in hierarchal regression analyses to determine the effects of neuroticism and the different phases of deployment on PTSD symptoms. James et al. (2010) define neuroticism as emotional instability,

anxiety, and depression. PTSD was more associated with deployment factors and neuroticism than with alcohol misuse (James et al., 2010). Depression also has similar risk factors and predictors to PTSD (James et al., 2010). Social support at home and post-deployment was found to have a protective effect on PTSD and depression (James et al., 2010). There are actual pathophysiological changes in some Veterans with PTSD due to changes in the connectivity between the amygdala of the brain and other regions (James et al., 2010). This suggests that some Veterans are predisposed to PTSD. This study helps nurses recognize who may be at higher risk for PTSD and what population needs to be screened. Nurses may recognize that patients are exhibiting signs of neuroticism, which may increase their likelihood for developing PTSD. Nurses can also encourage patients to talk about their traumatic history and encourage social support with family and friends.

Summary and Conclusion

There is a limited amount of research on nursing care and PTSD. An increasing amount of research is being done on Veterans after deployment in support of OEF/OIF. Researchers have found that there are barriers to care and being undiagnosed in the military and Veterans community. Social support is an important factor that nurses can try to promote to help protect against PTSD. Pharmacological treatments are frequently used to treat patients with PTSD (Abrams et al., 2013). Prolonged exposure and cognitive processing therapy are non-pharmacological psychotherapies used to help treat PTSD. Jakupcak et al. (2013) also used behavioral activation to help with PTSD treatment. Patients with PTSD also experience some medical variations. They experience increased blood pressure and heart rate and a decreased cortisol levels. Veterans also have medical comorbidities that they suffer along with PTSD. Civilian nurses should become familiar with the military culture and PTSD symptoms to help

better care for the Veterans. They have to be careful making sudden moves and suddenly touching Veterans. Gender differences are seen in the symptoms experienced, with males having more comorbidities and females having a higher severity of symptoms. Veterans may also suffer from addictions to substances, such as cannabis. Nurses should look deeper into the reason for the usage, as it may have to do what helps them cope. Health care providers must also be aware that a PTSD diagnosis is often accompanied by other medical comorbidities. More research needs to be done in this population to better understand how to best care for the Veterans and their perceptions of what helps. This guide is based on the literature and research done to date.

Chapter Three: Best Practice Protocols

Veterans diagnosed with PTSD may present with additional challenges to the nursing staff. Based on the current literature and research to date, recommendations can be made to provide the best care for this population. Some of the differences in care may include different comorbidities, responses to situations, and possible substance abuse.

Proposal for Best Care Recommendations for Military Members with PTSD

1. Purpose: The purpose of the recommendations is to provide the best evidence-based care for Veterans and military members. Military members are treated at military base hospitals, VA hospitals, and civilian hospitals. Health care professionals, especially nurses, should be aware of the best evidence based care and possible differences with the military population.

2. Target population: Veterans who have recently returned from deployment are the target population. This can include current military members or military members who have retired. The target military members have been diagnosed with PTSD or may be suffering from PTSD from an OEF/OIF deployment. The population includes both genders and of all ages, ranks, and military branches.

3. Nursing interventions:

a.) A class is proposed for nurses to learn about PTSD in Veterans, to include current protocols, best nursing practices, and the role nurses have. Education will also be provided about how veteran care may be different through military culture and the resources that they are offered. Nurses would be provided information on this specific population and their role. The class would be geared for nurses in the acute care settings, but any nurse could attend.

b.) A major nursing intervention for civilian nurses at civilian hospitals and VA hospitals would be to learn about the military culture. They should be required to take Continuing

Education (CE) classes or be included in training if there is a high population of military members in the community or hospital. Military culture is quite different than civilian culture. Johnson et al. (2013) found that Veterans did not feel that nurses always understood what the military member was feeling due to a culture misconnect due to many nurses not understanding the military culture and the difficulty of deployments. Nurses may never be able to understand what it is truly like to be in the military, but by taking some training or learning more, they will be aware of what military members undergo. Some factors unique to military members are frequent relocations, deployments, and a strong social stigma of receiving help, especially mental health care. Patients will feel that their nurses may be sympathetic to what they are dealing with if nurses have a greater understanding. Nurses should not tell patients that they "understand" what they are going through unless they actually do understand to help develop the patient's trust. Encouragement for enhanced social support can be included in teaching for the patient and family members (Johnson et al., 2013). Nurses can also refer patients to support groups after discharge.

c.) Another nursing intervention would be to understand the secondary health problems of Veterans (Wahbeh & Oken, 2013). They suffer from increased blood pressure, decreased cortisol and increased addiction rates (Paulus, Argo & Egge, 2013). Nurses often educate patients about how to overcome these diagnoses, but nurses caring for Veterans should understand that there may be underlying PTSD symptoms and should educate on PTSD or look further into the patient's history. Nurses are important in caring for patients and it is critical that nurses understand deviations from normality and that it may be due to underlying issues from possible physical or traumatic exposures during deployments. Nurses are recommended to use the nursing process by assessing the whole patient to understand the situation.

d.) Nurses should also be familiar with the psychotherapeutic treatments offered for PTSD. Currently, the VA hospitals use prolonged exposure (PE) and behavioral activation (BA) as their treatments (Cook et al., 2013). Nurses should understand the basic principles of these treatments and the possible side effects of these treatments, such as heightened emotions (Cook et al., 2013) and refer patients to the VA for treatment if needed.

e.) Other hospitals rely on medications and therapy to treat the symptoms, such as selection serotonin reuptake inhibitors (SSRIs) (Zoloft, Paxil, Prozac), selective norepinephrine reuptake inhibitors (SNRIs) (Effexor), second generation antipsychotic (Zyprexa, Seroquel, Risperdal) and benzodiazepines (Klonopin, Xanax, Valium) (Abrams et al., 2013). Different specialties of physicians will prescribe different medications. Nurses need to be educated on the medications because they will be administering medications to patients, and the nurse may not be familiar with the medications used in other settings. Nurses cannot prescribe medications, but they can help educate the patient who is prescribed the medications. The nurse should be familiar with their uses and adverse effects, such as suicidal thoughts or neuroleptic malignant syndrome, to notify the provider.

f.) Military members with PTSD should have a specific section or location on the unit. Johnson et al. (2013) write about caring for the veteran with PTSD. Certain protocols would be implemented to try to prevent the PTSD patient more stress. Many Veterans in this population suffer from insomnia. Nurses should try to promote a relaxing and safe environment to promote rest and cluster care to decrease disruptions to rest. Nurses should always knock or make a non-startling light noise to allow the patient to know that he or she is in the room. The nurse should not touch the patient without the patient being aware he or she is there. The nurse should avoid sudden, loud noises, and alarm volumes should also be decreased if possible. The room should

not be excessively bright, but it should not be dark either so the patient may see what is in the room. These measures will help promote a calm environment and help prevent an increase of severity of symptoms or anxiety from being activated.

Summary

Creating a protocol to understand and care for PTSD in Veterans will help establish better care for this population. Numerous health care settings may encounter Veterans and may experience caring for Veterans on their units. With the growing number of PTSD diagnoses, there may be more Veterans in the healthcare system. Education is the first step for nurses to understand the variations in care that this specific patient population may require. Nurses adopting this protocol may provide better care with a greater understanding of the needs of Veterans with PTSD when they are hospitalized in an acute care setting.

Chapter Four: Model of Implementation/Evaluation

For implementation and evaluation of the proposed interventions, the Diffusion of Innovation Model will be used. Diffusion of Innovation involves a five-step process, including knowledge, persuasion, decision, implementation, and confirmation (evaluation). The first four stages will be used to implement the educational presentation and the webpage on the PTSD information. This model uses the confirmation, or evaluation, stage to evaluate the implementations. An informative class on PTSD and the webpage for the healthcare providers are the two interventions that will be implemented.

Implementation

Class on PTSD

Johnson et al. (2013) recommends that health care workers are educated on PTSD to provide better care for the Veterans. Acute care nurses are often not aware that PTSD can factor into alterations in health in Veterans. The proposed class would be held at Tucson Medical Center (TMC) and will be open to all staff members from TMC and the community members. The presentation will facilitate learning about military culture, secondary health concerns, different treatments, and ways to provide an optimal environment for the patients. The leader of the presentation will be knowledgeable on TMC's protocols and follow-up care with the VA.

Webpage on PTSD

The webpage on PTSD is a resource that healthcare workers will have at the workplace as a guide on differences while caring for Veterans diagnosed with PTSD. The webpage also serves as a quick reference to the nurses for PTSD information. The page will be located on TMC's Intranet page that can be accessed by the staff members when needed. The webpage

includes the definition of PTSD, common treatments, medical comorbidities, questions to ask, and resources to contact for more information and care after discharge.

Diffusion of Innovation

Knowledge. Knowledge is the first step in the Diffusion of Innovation Model. The first step would be for the nurses to be exposed to information about the presentation and education that will be offered. Nurses will learn that there are 16 million Veterans receiving treatment outside of military hospitals or the VA system. Nurses will also discover the importance of PTSD knowledge to not only the psychiatric nurse but also to the acute care nurse. Nurses will receive emails and see flyers around the hospital advertising the presentation. There will be an advertisement on the homepage of the Intranet to alert nurses about the presentation and new webpage. The nursing director, unit managers and nursing educators will also be educated of the class to better educate the unit of the class.

Persuasion. Motivation may help increase the staff's participation in the education. The key point is for nurses to be educated on information that is not commonly presented to nurses. Another example of motivation would be to include the training and education under education pay for the nurses. The training will be applied to the required Continuing Education Units (CEU), which would also be a motivating factor. Also, the information would be presented a nurse knowledgeable about the evidence related to caring for Veterans with PTSD in the acute care settings. The motivation will help improve attendance to the class and visitation to the page.

Decision. During the decision phase, the staff will decide if the information will be beneficial to their clinical setting or if it is not relevant. The staff will weigh the advantages and disadvantages. The staff will learn about the date, time, and location of the presentation and/or webpage to visit. They will sign up for a presentation based on their decision to attend. Nurses

will make the decision to apply the intervention to their practice by learning more about caring for Veterans with PTSD.

Implementation. The staff will choose to either attend the presentation or visit the webpage to learn more about PTSD in the acute care settings. The staff will know the benefit of the added knowledge to aid in their care for the Veterans. The leader of the class will be knowledgeable on TMC's protocols and what TMC can offer Veterans. A nurse with military background could be an additional speaker. He/she will also be informed on the community resources that are offered for these Veterans.

The webpage will be implemented onto TMC's Intranet. An example of the webpage is the Appendix. It will be placed under "Policies/Procedures" and listed under "Evidence Based Practice Guidelines." Staff will be able to access the page through the main page. The page will be visited when healthcare providers have a question regarding PTSD care or VA resources. Nurses caring for Veterans with a PTSD diagnosis or possible PTSD symptoms who are unfamiliar with the current practices and protocols should visit the webpage to learn more.

Evaluation

Confirmation (evaluation)

The implementation of the proposed interventions will be assessed in two ways. Nurses attending the informational presentation will be given a survey asking about effectiveness of teaching, applicability to the unit setting, and the amount learned during the presentation. The survey will be anonymous so that participants can answer honestly. Nurses will be asked the unit where they work to assess if certain units are more in need of the training compared to other units. Unit educators will also assess the need of the training for the units. The number of views of the webpage with the protocol of PTSD will also be assessed to learn how many people are

using the page and receiving that information. This will be assessed at one week and one month after the launch of the new page. This will be with the assistance of the IT department to help upload the webpage and assess the page visitation. If the class is offered at a later time as a computer based training, a pre- and post-test model can be used to assess the increase in information.

Strengths/Limitations and Future Recommendations

Strengths

There are strengths to this method of implementation and evaluation. There is a step-by-step theory based model to follow to implement the interventions and then evaluate. Another strength is that the interventions are supported by strong research evidence that can be incorporated into information for the nurses. The presentation will educate many nurses at one time. All of the nurses will receive the same education. Nurses commonly transfer patients from one unit to another, so they will both be educated on the best care for that patient. The pro to having a webpage is that it can be continually reviewed at different times and those who cannot make the physical session can receive similar information. There are strengths to the interventions and implementation model.

Limitations

This project has some limitations. Some nurses may not find the information applicable to their practice, so they would not participate due to a decreased need for caring for this type of patient. There needs to be increased awareness on the application to many different settings. Nurses have busy schedules with minimal flexibility so it would be difficult to find a perfect date for all of the nurses to attend. Nurses may not be able to implement all of the changes suggested, such as silencing all alarms, which could deter the compliancy or adherence to interventions.

The strengths outweigh the limitations to this application. Also, best practices may change as more research is done and the guide may need to be updated.

Future Planning

Based on the first trial of the presentation and webpage, nurses will provide feedback to make future improvements. If the nurses find some aspects not useful, then those aspects can be removed ore revised. If there is content that staff finds applicable to the unit, the webpage may be included in the required Policies and Procedures to read over for the staff on that unit. If the class is successful, the class may also be offered as a computer based training (CBT) that more nurses can view at their convenience. Currently more research is being reviewed of which conditions may trigger PTSD symptoms. This information could correlate to other departments' involvement. Continuing research will reveal other important information that can be added to these interventions.

Summary

The purpose of implementation of the protocols is to better educate the nurses on the more than 16 million Veterans that are seeking care outside of the VA healthcare system. PTSD is not a common issue that acute care nurses encounter. By increasing education and knowledge on this issue, Veterans will receive better health care and nurses will feel more comfortable providing care for this population. An increasing amount of research will continue to assist healthcare providers provide the best evidence based care.

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PTSD in the Acute Care Settings

Purpose

- Educate healthcare workers about the importance of PTSD knowledge in the acute care settings

What is PTSD?

- Reliving the event, avoiding situations that remind one of the event, negative changes in beliefs and feelings, and hyperarousal that lasts longer than four weeks after an event.

Current Pharmacological Treatments

- Pharmacological treatments: used to treat depression and anxiety
  - Selective Serotonin Reuptake Inhibitors (SSRIs)/ Selective Norepinephrine Reuptake Inhibitors (SNRIs) – first line
    - Zoloft, Paxil, Prozac, Effexor
  - Second generation antipsychotics
    - Zyprexa, Seroquel, Risperdal
  - Benzodiazepines – discouraged in some settings
    - Klonopin, Xanax, Valium

Current Psychotherapeutic Treatments

Common psychotherapeutic treatments for Veterans include:

Prolonged exposure (PE)	PE exposes patients to the feelings, thoughts, and situations that are commonly avoided because of the distress they cause. The patients are repeatedly exposed to decrease the distress caused by the feelings, thoughts, and situations. Education, breathing, real world practice, and talking through the trauma are part of the treatment.
Cognitive processing therapy (CPT)	CPT helps the patient process the changes due to PTSD and the differences in thoughts and actions that it has caused. Patients learn about PTSD symptoms, become aware of thoughts and feelings, learn skills, and understand changes in beliefs through CPT. This treatment helps patients learn new ways to deal with trauma.
Behavioral activation (BA)	BA helps patients gain the ability to experience the positive rewards from activities they enjoy in their environment. This helps the patient work through the issue to prevent avoidance and escaping from reality. Patients with PTSD often have a decreased quality of life, decreased physical activity, and limited socialization due to PTSD.

Comorbidities with PTSD

- **Decreased cortisol levels**
  - Patients may be unable to respond to stressors appropriately due to the decreased cortisol in the body, which may make the patient susceptible to illness.
- **Increased blood pressure and heart rate**
  - The increased blood pressure and heart places a greater stress on the cardiovascular system, which increases the risk of cardiovascular disease.
  - Smoking and substance abuse may contribute to the increased blood pressure and heart rate.
- **General medical burdens**
  - Men often have more medical comorbidities than women in addition to the PTSD, such as skin disorders, allergies, and obesity.
  - Additional medical burdens are more common with a PTSD diagnosis than substance abuse.
- **Undiagnosed mental health issues**
  - Mental health is stigmatized in the military community, so military members may not seek help.
  - PTSD does not always show physical symptoms, so it may not be diagnosed as quickly as other medical problems.
- **Substance abuse**
  - Cannabis is often used with other substances to cope with the disorder.
  - Discontinuation of cannabis use increases the intensity of the PTSD symptoms.

Risk Factors

- Deployment to a danger zone
- Neuroticism, depression, and anxiety
- Predisposed neurological changes in the amygdala can predispose patients to the development of PTSD.

Nursing: Creating a therapeutic environment

- Create a relaxing environment
  - Dim the lights, but do not have a dark environment for the Veterans.
  - Keep the door closed to provide a quieter environment.
- Inform the patient that you are approaching.
  - State the patient's name or tap the patient's foot before touching the patient.
  - Prevent startling the patient from sudden presence.
- Change alarm settings
  - Sudden, loud noises can cause the patients distress.
  - Silence or lower the alarms to prevent the sudden, loud noise that may startle the veteran.

Military Health History Pocket Card for Clinicians

It is important to know the patient's military history to understand the medical problems and concerns for establishing a rapport. Allow your patient to give you permission to ask these questions. Ask all military service members and all Veterans. Gain trust.

General questions:

- **Would it be ok if I talked with you about your military experience?**
- When and where do you / did you serve?
- What do you / did you do while in the service?
- How has military service affected you?

*If your patient answers "**Yes**" to any of the following, ask:*
"Can you tell me more about that?"

- Did you see combat, enemy fire, or casualties?
- Were you or a buddy wounded, injured or hospitalized?
- Did you have a head injury with loss of consciousness, loss of memory, *"seeing stars"* or being temporarily disoriented?
- Did you ever become ill while you were in the service?
- Were you a prisoner of war?

Sexual Harassment, Assault and Trauma

- **Would it be okay to talk about sexual harassment or trauma that you might have experienced while serving in the military?**
- Have you ever experienced physical, emotional, or sexual harassment or trauma?
- Is this experience causing you problems now?
- Do you want a referral?

Stress Reactions / Adjustment Problems

- **Would it be okay to talk about stress?**

In your life, have you ever had an experience so horrible, frightening, or upsetting that, in the past month, you...

- Have had nightmares about it or thought about it when you did not want to?
- Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
- Were constantly on guard, watchful, or easily startled?
- Felt numb or detached from others, activities, or your surroundings?

Veterans Crisis Line 1-800-273-8255 (Press 1)

For Discharge/ More Information

The Southern Arizona VA Healthcare System also offers outpatient services for those diagnosed with PTSD that can assist after discharge.

- Mental Health Intensive Case Management (MHICM): 520-792-4535
- Mental Health Services: 520-792-1450 ext. 1-6350

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