Assessing Suicide Risk in Veterans: The Role of the Nurse Practitioner

Giuliana Mazza, BSN, RN, Prof. Kathy Puskar, MN, MPH, DrPH, FAAN¹

Abstract

Background: Statistics have shown that veteran men and women are at greater risk for suicide than the general population. In order to decrease the incidence of suicide in veterans, nurse practitioners (NPs) and other health care professionals must not only become more aware of the risk factors for veteran suicides but also develop strong psychiatric interviewing skills.

Purpose: To discuss the risk factors associated with veteran suicide, the assessment tools to ensure a comprehensive suicide assessment and the application of these tools by an NP or other health care professional to a case study.

Methods: Review of published literature on the topic.

Conclusion: This paper will provide valuable information for NPs and other health care professionals when assessing for suicide risk in veterans.

Keywords: Veterans, Suicide, Assessment, Psychiatry

Introduction

A suicide risk assessment is vital to perform in all psychiatric interviews. Evaluating the safety of the patient at each and every encounter is very important. "Suicide is the 11th leading cause of death in the United States (U.S.), resulting in the death of more than 33,000 people each year."(1) However, there is increased concern for even higher risk of suicide in the veteran population alone. Posey (2009) reports U.S. veterans are estimated to account for 20% of all suicides.⁽²⁾ The American Psychiatric Association reports that male U.S. veterans are at twice the risk of suicide than similar males in the general population. Females in the U.S. are thought to be at a 3 times higher chance than the comparable female population.⁽²⁾ Similar to the position in Australia, suicide in veterans is a concern. A study of male Australian Korean War veterans suggests a relationship between war service and long-term mental health illnesses.⁽³⁾

Ziven et al. (2007) reports that U.S. veterans are at an increased risk of suicide over the general population due to their high prevalence of depressive disorders and co morbid psychiatric conditions.⁽⁴⁾ Among U.S. veterans, depressive symptoms are prevalent in 31% of the population; this is 2 to 5 times higher than the general population.⁽⁴⁾

According to McCarthy et al. (2009), the United States Veterans Affairs Health Administration (VHA) considers understanding and reducing veteran suicide risk a national concern.⁽⁶⁾ NPs and other health care professionals can play a key role in the medical care of veterans.⁽⁵⁾ From 1996 to 1999, NP employment increased from 75% to 90% in United States Department of Veterans Affairs (VA) primary care practices. This is considered a significant increase in the use of NPs. in primary care.⁽⁶⁾ The purpose of this paper is to discuss the risk factors associated with veteran suicide, the assessment tools to ensure a comprehensive suicide assessment and the application of these tools to a case study seen by an NP or other healthcare professional.

Literature Review

A literature review was conducted to evaluate risk factors associated with veteran suicide. Extensive searches in databases such as PubMed and CINAHL were performed to obtain literature for this topic. PubMed comprises more than 21 million citations for biomedical literature from MEDLINE (also a database), life science journals, and online books. CINAHL provides indexing for more than 3,000 journals from the fields of nursing and allied health. Various assessment tools to ensure a comprehensive suicide assessment were analyzed in these databases for the literature review. Textbooks that provided relevant information were also referenced.

According to McCarthy et al. (2009), older male populations with significant medical morbidities, substance abuse, mental illness, and knowledge/ access to firearms are the predominant

characteristics of the United States VHA population⁽⁵⁾ These characteristics increase the suicide risk significantly. A clinical diagnosis of a psychiatric disorder significantly increases the risk of suicide. It is estimated that 25.6% of the general population of United States VA users was noted to have been diagnosed with at least one mental health illness (depression and substance abuse are the most common).⁽⁷⁾ Additionally, the study on male Australian Korean War veterans reported that the veterans group was estimated at five times more likely to meet criteria for depression and anxiety and six times more likely to meet criteria for Post-Traumatic Stress Disorder (PTSD) than participants in the comparison group. The comparison group consisted of male Australian natives or male residents of Australia at the time of the Korean War.⁽³⁾

Hudenko (2007) reports that U.S. veterans also endure a higher risk for PTSD and there is research to suggest that there is a correlation between PTSD and suicide.⁽²⁾ According to Kotley, Iancu, Efroni, & Amir (2001), "Researchers have also found that conditions that co-occur with PTSD, such as depression, may be more predictive of suicide."⁽²⁾ Some patients who suffer from PTSD use ineffective coping skills such as, suppression, repression, or avoidance. These patients could be at higher risk for suicide.⁽²⁾

A study published in the American Journal of Epidemiology reported increased multisymptom illness in male Australian Gulf War I veterans when compared with Australian males of non-Gulf War deployment or no deployment. A correlation exists with male Australian Gulf War I veterans and the presence of psychiatric conditions, psychological distress, and poor quality of life.⁽⁸⁾ In the United States suicide risks among United States VHA patients are 66% higher than those of the general population.⁽⁵⁾ Weiner, Richmond, Conigliaro & Wiebe (2011) report that today's veterans seem to have a suicide risk that is higher than that among Vietnam and Gulf War veterans and even higher than that among the general population.⁽⁹⁾ There are currently about 200,000 military personnel involved in combat operations in Iraq and Afghanistan.⁽⁹⁾

Male United States VHA patients between the ages of 30 and 79 have greater suicide risks than comparable men in the general population.⁽⁵⁾ In 2005, the United States VA estimated 9.3 million veterans were age 65 and older.⁽⁵⁾ With the growing population of the elderly, this is of great public health concern. ⁽⁵⁾ In 2006, a suicide rate in the U.S. of 14.2 per 100,000 persons aged 65 and older was reported⁽¹⁰⁾ Furthermore, U.S. suicide rates are the greatest among males aged 30-49 and lowest in those aged 18-29 and 60-69 years.⁽⁵⁾

Ilgen et al. (2010) used the United States VA National Patient Care Database to identify all individuals who used any United States VHA inpatient residential, or outpatient services in fiscal year 1999. These patients were followed until death or the fiscal year 2006 (n=3,291,891) and over 7,000 died of suicide in the following 7 years. In addition, these individuals were predominantly male.⁽⁷⁾ Matthieu et al. (2010) reports that older adults account for 12.4% of the population and represent 16.6% of all deaths by suicide.⁽¹⁰⁾ Female United States VHA patients are also at higher risk for suicide due to their experience with and access to firearms.⁽¹⁰⁾

In order to reduce the incidence of veteran suicide, the NP must be able to recognize potential populations at risk. According to Posey (2009), "risk factors can be organized into three categories: biopsychosocial, environmental, and sociocultural."(2) The biopsychosocial category consists of mental illness, alcohol and substance abuse. Other biopsychosocial factors involve feeling hopeless, trauma or abuse history, physical disability, family history of suicide or previous suicide attempts, and impulsive or aggressive behaviors. The environmental category incorporates job or financial loss, separation/divorce, and access to firearms. The sociocultural category contains poor social support, difficulty accessing mental health treatment, cultural and/or religious belief.⁽²⁾ The majority of the veteran population is exposed to at least one or more of the above.

Posey (2009) states that according to the United States Department of Health and Human Services, people who are contemplating suicide give hints or clues. Some people give verbal clues whereas others give away prized possessions, withdrawal from family and friends, write a will, sudden impulsive purchase of a firearm, and sleep problems.⁽²⁾

Matthieu et al. (2010) reports a cross-sectional U.S. survey where the 50 states and the District of Columbia were invited to participate. This was an attempt to collect the states' suicide assessment instruments. Of the 50 states and the District of Columbia, 43 assessment tools were collected and 30 included a suicide risk assessment comprised of questions about suicidal ideation, attempts, plans, and action instructions. However, not one of those 30 assessments contained all four categories. Twentynine states were assessed for suicidal ideation and very few assessed for previous suicide attempts, a suicide plan, or action instructions. Assessors might be more appropriately trained to identify suicidal behaviors in elders if a universal policy was implemented.⁽¹⁰⁾

Once the NP becomes familiar with the risk factors associated with veteran suicide, he or she must

develop strong assessment skills to evaluate the risk further. Agencies have a responsibility to recognize and refer individuals at risk for suicide.⁽¹⁰⁾ It is critical to assess risk factors, plan/feasibility, prior experience, associated features and collateral information (reports from family, significant others, health care). Active listening and observing nonverbal behavior is also crucial to the assessment.⁽¹¹⁾

The ultimate goal of thorough suicide assessment is prevention. The use of an assessment tool can only help in evaluating the patient. "Traditional instruments include items related to history of suicide attempts, statements of intent to selfharm, plans for suicide, feelings of hopelessness or helplessness, a method to commit suicide, and family history of suicide attempts."⁽¹²⁾ According to Busch & Fawcett (2004) and Powell, Geddes, Deeks, Goldacre, & Hawton (2000), these factors can help clinicians identify chronic suicide risk but lack the sensitivity to detect those at imminent risk.⁽¹²⁾ This continues to be a challenge among health care professionals.

Hermes et al. (2009) suggests assessing anxiety and agitation, as these are also risk factors for suicide. Two validated instruments, the Hamilton Anxiety Scale for anxiety and the Behavioral Activity Rating Scale (BARS) for agitation were combined to create the Hermes-Deakin Suicide Risk Assessment (HDSRA). This assessment is an 18-item tool reflecting the two scales and suicidal ideation assessment. After 6 weeks of implementation, the nurses found the instrument to be easy to use. Not only did the HDSRA increase communication with the patients but also alerted the nurses to focus on signs of agitation and anxiety along with suicidal ideation.⁽¹²⁾

As mentioned previously, anxiety and depression can increase the risk of suicide; therefore, a portion of the interview should be dedicated to a thorough assessment of these comorbidities. The Patient Health Questionnaire (PHQ-9) and the Beck Anxiety Inventory (BAI) can be used to aid in not only the assessment of anxiety and depression but also the response to treatment. The PHQ-9 is a 9-symptom checklist that rates depression severity via various assessment questions related to the diagnostic criteria for depression. It is a useful tool to recognize major depression.⁽¹³⁾ The BAI is a 21-item selfreport questionnaire that provides symptoms of anxiety. The patient is asked to rate how much each symptom has disturbed him/her in the past week. The symptoms are rated on a four-point scale, ranging from "not at all" ⁽⁰⁾ to "severely" ⁽³⁾.⁽¹⁴⁾ The NP will choose which scale is appropriate based on the symptom presentation of each patient.

Clinical Case

Mr. A. is a 35-year-old veteran who presents to his NP in the United States VA clinic with various complaints associated with depression. Mr. A. has served 2 deployments in his lifetime. Each deployment lasted over 1 year. He has been home since his last deployment for 6 months. Mr. A. sustained extensive injuries from his most recent deployment including a gunshot wound to his L leg. The wound became infected requiring long courses of antibiotics and wound debridement. His medical treatments have kept him from working as he did in the past and enjoying life post deployment. He has difficulty walking and has to depend on his wife, to some extent, for everyday activities. He is also in a great deal of pain, requiring narcotics. Prior to his deployments, Mr. A. was an athletic man and being physically fit was a priority. Lately, he has been feeling down due to his medical problems and does not leave the house often. His pain medications also make him drowsy and unable to stay awake throughout the day. He has previously been seen by the same NP for his symptoms and was placed on Citalopram 10mg for his depressed mood. He states that he has noticed a slight improvement in his mood; however, he is constantly reminded of his medical problems when he has difficulty with ADLs or has pain. He reports decreased sleep in the past 2 months. He is experiencing difficulty falling asleep and early morning awakening. Mr. A. has not tried any pharmacological treatment for this symptom.

Mr. A. states that he has a good relationship with his wife and the rest of his family. He states they are a good support system for him. His mother has a history of Major Depressive Disorder (MDD) and he vaguely recalls his older sister suffering from MDD also. He does not know their treatment at this time.

When asked how Mr. A. copes, he states that he becomes withdrawn, starts fights with his wife, and at times increases his intake of pain medication. He reports no alcohol use. He stated in his interview that sometimes he feels his wife would be better off if he was not around. "I feel like a burden at times and that my situation will never get better." Due to his involvement in the military, Mr. A. has extensive knowledge about and access to firearms. He does keep them contained in a locked cabinet, however they remain in his home and he has access to the key. He reports no legal issues.

There have been no previous suicide attempts in the past and he denies suicidal ideation, homicidal ideation, and self-injurious behavior. No evident or reported delusions or hallucinations. Patient does endorse some hopelessness and helplessness. As stated above, the patient does have access to guns and home medications. The patient endorses a passive death wish when he is feeling like a burden to his wife. He estimates this at about 3 to 4 times per month. He admits to thinking about his guns as a means for suicide, however, he quickly remembers his love for his wife and family and these thoughts diminish. Mr. A. states that he does not wish to die and having these thoughts makes him feel guilty at times. However, he is afraid that maybe one day he will want to die. There is no family history of suicide or suicide attempts. He does have a family history of MDD in his mother and sister. Patient's friends and family are his support system. Per his wife, patient does exhibit signs of anxiousness and agitation at times through starting fights, insomnia, and depressed mood.

Mr. A.'s risk factors are:

- Family history of MDD
- Age
- Male
- Veteran
- Physical disability
- Possible narcotic abuse
- Depression with frequent thoughts of suicide
- Hopelessness and helplessness
- Isolation
- Poor coping skills
- Passive death wish
- Easily accessible method for suicide
- Extensive knowledge about and access to firearms
- A PHQ-9 score of 12 suggesting moderate depression
- Some indications for anxiety, agitation, and suicide on the HDSRA.

Although the family or adult NP is very capable of conducting a thorough suicide assessment, he or she would then refer to a Psychiatric NP and other psychiatric mental health professionals for psychotherapy and further management of psychiatric medications.

Mr. A. was referred to a Psychiatric NP for shortterm psychotherapy and was maintained on the antidepressant. Although Mr. A. had an increased amount of risk factors for suicide, the Citalopram and psychotherapy were sufficient to stabilize him. A course of action was set in place if ever suicide is seriously considered.

All identifying data changed for patient protection.

Standards of Care

"The NP Core Competencies... are guidelines for educational programs preparing NPs to implement the full scope of practice as a licensed independent practitioner. The competencies are essential behaviors of all NPs."⁽¹⁵⁾ Competencies are "necessary for NPs to meet the complex challenges of translating rapidly expanding knowledge into practice and function in a changing health care environment."⁽¹⁵⁾

These competencies explain the role of the NP in assessing all aspects of the patient's health status, including "health promotion, disease prevention, health protection, anticipatory guidance, counseling, [and] disease management..."⁽¹⁵⁾ The NP employs complex health assessment skills to differentiate between normal, variations of normal and abnormal findings. He or she uses screening and diagnostic strategies in the development of diagnoses.⁽¹⁵⁾

One standard refers to the assessment interview and requires effective communication skills, interviewing, behavioral observation, and comprehensive assessment of the patient and relevant systems. This enables the NP to make clinical judgments and plan appropriate interventions with the patient.⁽¹⁶⁾

Some of the key elements the NP will evaluate and assess are as follows:

- The patient's immediate need or condition is assessed.
- Ability to remain safe and is no danger to self or others.
- Physical, developmental, cognitive, mental, and emotional health status.
- Demographic profile, personal and family health and psychiatric history.
- Family, social, cultural, race, ethnicity, and community systems.
- Daily activities, functional health, substance abuse, health habits, and social roles.
- Interpersonal relationships, communications skills, and coping pattern.
- Any factors affecting health.
- · Support systems.
- Motivations to change.
- Strength and competencies that can be used to promote health.
- Medications, prescription and OTC and side effects.

Data should be collected from multiple sources such as: family, social network, health care clinicians, standardized instruments, and diagnostic and laboratory tests. Interdisciplinary team should be involved and assessment should be ongoing. $^{(16)}$

Discussion

Statistics have shown that all veteran men and women are at greater risk for suicide than the general population. Some study results show that psychological distress still exists many years after deployment.⁽³⁾ For this reason, a suicide risk assessment is vital to perform in all psychiatric interviews. According to the NP standards of care, assessing a patient requires effective communication skills for interviewing, behavioral observation, and comprehensive assessment of the patient and relevant systems. This enables the NP to make clinical judgments and plan appropriate interventions with the patient.⁽¹⁶⁾ Furthermore, the use of an assessment tool can only help in evaluating the patient. The NP must use every skill and resource available to achieve the ultimate goal of prevention of suicide attempts and completions.

it is merely a fleeting thought but for others, suicide is a very serious consideration and becomes a preoccupation. Often, repeated suicide gestures are more cries for help. In other cases, life has become so full of dissatisfaction or pain that death has become preferable. It is the NP's responsibility to assess whether a client is experiencing transient suicidal thoughts or severe suicidal preoccupations. $^{\scriptscriptstyle (17)}$ For this reason, the NPs and other health care professionals must gain excellent interviewing skills. The ability to recognize the warning signs is key to providing a safe patient environment. Through active listening, empathy, and assessment tools the risks of suicide can be detected and alternatives to suicide established. Each and every patient deserves time, energy, and support. Suicide is a preventable cause of death and by ensuring patient safety the NPs and other healthcare professionals may be able to contribute to the reduction of completed suicides.

Authors'affiliation: ¹University of Pittsburgh School of Nursing Corresponding author: Prof Kathy Puskar, University of Pittsburgh School of Nursing, 3500 Victoria Street, Pittsburgh, PA 15261, USA Email: krp12@pitt.edu

Conclusion

It is not uncommon for patients to consider suicide in very traumatic or stressful life events. For some,

References

- 1. Mills PD, Watts BV, Miller S, Kemp J, Knox K, DeRosier JM, Bagian JP. A checklist to identify inpatient suicide hazards in veterans affairs hospitals. Jt Comm J Qual Patient Saf. 2010; 36(2): 87-93.
- 2. Posey S. Veterans and suicide: A review of potential increased risk. Smith Coll Stud Soc Work. 2009; 79: 368-74.
- Ikin JF, Sim MR, McKenzie DP, Horsley KWA, Wilson EJ, Moore MR, Jelfs P, Harrex WK, Henderson S. Anxiety, post-traumatic stress disorder and depression in Korean war veterans 50 years after the war. 2007; 190: 475-483.
- 4. Zivin K, Kim HM, McCarthy JF, Austin KL, Hoggatt KJ, Walters H, Valenstein M. Suicide mortality among individuals receiving treatment for depression in the veterans affairs health system: Associations with patient and treatment setting characteristics. Am J Public Health. 2007; 97(12): 2193-98.
- 5. McCarthy JF, Valenstein M, Kim HM, Ilgen M, Zivin K, Blow FC. Suicide mortality among patients receiving care in the veteran health administration health system. Am J Epidemiol. 2009; 169: 1033-38.
- 6. Huang PY, Yano EM, Lee ML, Chang BL, Rubenstein LV. Variations in nurse practitioner use in veterans affairs primary care practices. Health Services Research. 2004; 39(4): 887-904.
- 7. Ilgen MA, Bohnert ASB, Ignacio RV, McCarthy JF, Valenstein MM, Kim HM, Blow FC. Psychiatric diagnosis and risk of suicide in veterans. Arch Gen Psychiatry. 2010; 67(11): 1152-58.
- Kelsall HL, McKenzie DP, Sim MR, Leder K, Forbes AB, Dwyer T. Physical, psychological, and functional comorbidities illness in Australian male veterans of the 1991 gulf war. Am J Epidemiol. 2009; 170(8): 1048-1056.
- 9. Weiner J, Richmond TS, Conigliaro J, Wiebe DJ. Military veteran mortality following a survived suicide attempt. BMC Public Health. 2011; 11 (374):1-9.

- 10. Matthieu MM, Welch B, Morrow-Howell N, Proctor E, Nickel M, Navarro J, Moon A. Is veteran status and suicide risk assessed in community long-term care? A review of the states' assessment instruments. AAS. 2010; 40(2): 125-132.
- 11. Aflague JM, Ferszt GG. Suicide assessment by psychiatric nurses: A phenomenographic study. Issues Ment Health Nurs. 2010; 31: 248-56.
- 12. Hermes B, Deakin K, Lee K, Robinson S. Suicide risk assessment 6 steps to a better instrument. J Psychosoc Nurs Ment Health Serv. 2009; 47(6); 44-9.
- 13. Martin A, Rief W, Klaiberg A, Braehler E. Validity of the brief patient health questionnaire mood scale (PHQ-9) in the general population. Gen Hosp Psychistry. 2006; 28: 71-7.
- 14. Leyfer OT, Ruberg JL, Woodruff-Borden J. Examination of the utility of the beck anxiety inventory and its factors as a screener for anxiety disorders. J Anxiety Disord. 2006; 20: 444-58.
- 15. National Organization of Nurse Practitioner Faculties (NONPF). (2011). Nurse Practitioner Core Competencies. Available from: http://www.nonpf.com/associations/10789/files/ IntegratedNPCoreCompsFINALApril2011.pdf
- 16. American Nurses Association, American Psychiatric Nurses Association and International Society of Psychiatric Mental Health Nurses. Psychiatric-mental health nursing scope and standards of practice. Silver Spring: Nursesbook.org; 2007.
- 17. Sommers-Flanagan J, Sommers-Flanagan R. Clinical interviewing. 3rd ed. Hoboken: John Wiley & Sons, Inc; 2003.