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Enhancing VETERAN-CENTERED CARE: A Guide for Nurses in Non-VA Settings

Understanding the impact of military service on veterans' health.

OVERVIEW

There are currently 22.5 million living U.S. military veterans, and this number is expected to increase dramatically as military personnel return from Iraq and Afghanistan. Although honorably discharged veterans may qualify for health care through the U.S. Department of Veterans Affairs (VA), only about 25% of all veterans take advantage of this benefit; a majority seek services in non-VA settings. It's imperative for nurses in all civilian care settings to understand the impact that military service has on veterans' health. This article provides an overview of veterans' unique health care issues, focusing particularly on traumatic brain injury, polytrauma, hazardous exposures, chronic pain, posttraumatic stress disorder, military sexual trauma, substance use disorders, suicide, and homelessness. Evidence-based assessment tools and treatment guidelines for these health issues are discussed. A resource table provides telephone numbers and Web sites offering tools, educational materials, and veteran services. A second table provides detailed veteran-centered health assessment and screening questions.

Keywords: chronic pain, hazardous exposure, homelessness, military sexual trauma, military veteran, polytrauma, posttraumatic stress disorder, substance use disorder, suicide, traumatic brain injury, veteran

There are currently about 22.5 million living U.S. military veterans, including nearly 17 million wartime veterans, according to the U.S. Census Bureau.[1,2] Although honorably discharged veterans may qualify for health care through the U.S. Department of Veterans Affairs (VA), only about 25% of all veterans take advantage of this benefit.[3] This low rate may be associated with many variables, including difficulty of access, veteran identity (defined below), availability of health care insurance through private or public sources, confusion about eligibility for services, and perceptions of the VA (including a sense that VA care is stigmatized as "charity" care).[4,5]

As Demers has stated, "War is widely acknowledged as a public health issue, and there is a growing body of literature documenting [its] negative health effects," most recently for veterans of the Iraq and Afghanistan wars.[6] Yet the nursing literature is limited regarding evidence-based care pertinent to the long-term effects of military-related health concerns among veterans. With perhaps as many as 75% of veterans seeking health care outside the VA, it's crucial that non-VA nurses and other providers be able

to recognize, assess, and provide appropriate care to this population.

Veteran health care. The stated mission of the VA—"to care for him who shall have borne the battle, and for his widow, and his orphan"—is to fulfill a promise first made by President Abraham Lincoln during his second inaugural address in 1865.[7] The Veterans Health Administration, a branch of the VA, is currently the largest health care system in the country, with 152 hospitals, over 800 community-based outpatient clinics, and more than 130 nursing homes.[8, 9]

Military experience varies based on the war or conflict, combat experience, and other variables. Living U.S. veterans include those involved in the conflicts of World War II, Korea, Vietnam, Grenada, the Persian Gulf, Operation Enduring Freedom (OEF) in Afghanistan, Operation Iraqi Freedom (OIF), and now Operation New Dawn (OND) in Iraq. The Department of Defense (DOD) and the VA have faced ongoing challenges in adjusting priorities and developing new services to address the ever-changing health issues of these veterans. For example, between 2000 and 2010, the number of women veterans increased from 1.6 to 1.8 million; and the proportion of women veterans among all living veterans rose from 6.1% to 8.1%, a 33% increase.[10, 11] These changes necessitated expansion of women's health care services to include women's clinics, maternity care, preventive care (such as mammograms), and disease management tailored to women. Increased knowledge about psychological health issues such as posttraumatic stress disorder (PTSD) prompted changes to mental health screening and expansion of mental health services. The extensive use of improvised explosive devices (IEDs) by insurgents in Iraq and Afghanistan has stimulated a tremendous amount of research into traumatic brain injury (TBI) and polytrauma, including amputations. Exposure to environmental hazards continues to be studied regarding health effects and treatment. And a growing awareness of the effects of deployment on veterans and their family members have led to improved social services.

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Table 1. Resources on the VA and Veterans' Health by Topic

Subject	Telephone Number	Web Site
General information about the VA	NA	www.va.gov/about_va
VA facility locator	(877) 222-8387	www2.va.gov/directory/guide/home.asp?isflash=1
Military culture and veteran identity	NA	VA course on military culture www.ptsd.va.gov/professional/ptsd101/course-modules/military_culture.asp
Postdeployment issues	NA	Post-Deployment Health Reassessment Program www.pdhealth.mil/dcs/pdhra.asp AfterDeployment.org www.afterdeployment.org
TBI	DVBIC outreach: (866) 966-1020	DVBIC www.dvbic.org Understanding TBI and polytrauma www.polytrauma.va.gov/understanding-tbi www.afterdeployment.org/topics-traumatic-brain-injury Clinical practice guideline on TBI www.healthquality.va.gov/mtbi/concussion_mtbi_full_1_0.pdf
Hazardous exposures	VA information line: (800) 749-8387	VA information on hazardous exposures www.publichealth.va.gov/exposures/index.asp
Chronic pain	NA	VHA information on postdeployment pain www.va.gov/painmanagement/post_deployment_pain.asp VHA information on chronic pain www.va.gov/painmanagement/chronic_pain_primer.asp Clinical practice guideline on chronic opioid therapy www.healthquality.va.gov/chronic_opioid_therapy_cot.asp
PTSD	Veterans Crisis Line: (800) 273-8255, then press 1 Veteran Combat Call Center (to talk to a combat veteran): (877) 927-8387 Counseling 24/7: (800) 342-9647	National Center for PTSD www.ptsd.va.gov PTSD program finder www2.va.gov/directory/guide/ptsd_flsh.asp?isflash=1 Clinical practice guideline on PTSD www.healthquality.va.gov/ptsd/ptsd-full-2010a.pdf
MST	DOD Safe Helpline: (877) 995-5247	National Center for PTSD—MST www.ptsd.va.gov/public/pages/military-sexual-trauma-general.asp
SUDs	Acute crisis: 911 Veterans Crisis Line: (800) 273-8255, then press 1	Veterans Crisis Line www.veteranscrisisline.net VA information on substance abuse www.mentalhealth.va.gov/substanceabuse.asp Clinical practice guideline on SUDs www.healthquality.va.gov/sud/sud_full_601f.pdf

Table 1. Continued

Suicide prevention	Veterans Crisis Line: (800) 273-8255, then press 1 Text: 838255	VA Suicide Prevention www.mentalhealth.va.gov/suicide_prevention/index.asp Veterans Crisis Line www.veteranscrisisline.net Confidential Veterans Chat www.veteranscrisisline.net/chat
Homelessness	VA National Call Center for Homeless Veterans: (877) 424-3838 National Coalition for Homeless Veterans: (800) 838-4357	VA National Call Center for Homeless Veterans www.va.gov/homeless/nationalcallcenter.asp VA information on homeless veterans www.va.gov/homeless National Coalition for Homeless Veterans www.nchv.org
Women veterans health care	NA	VA information on women veterans www.womenshealth.va.gov

DOD = Department of Defense; DVBIC = Defense and Veterans Brain Injury Center; MST = military sexual trauma; NA = not available; PTSD = posttraumatic stress disorder; SUD = substance use disorder; TBI = traumatic brain injury; VA = Department of Veterans Affairs; VHA = Veterans Health Administration.

This article provides nurses in non-VA settings with an overview of the unique health care needs of veterans and describes various resources available through the VA. (For a detailed list of resources by subject, and for links to those mentioned in text, see Table 1.)

MILITARY CULTURE

Serving in the military is an experience that has no counterpart in civilian life. From the outset, people in the armed forces share unique experiences that transmute the usual socioeconomic and racial or ethnic boundaries of civilian life, although those shared experiences often go unspoken.

Boot camp brings together men and women from diverse backgrounds and assimilates them into the military culture, enabling passage from a civilian to a military identity.[6] They learn the warrior ethos, which incorporates a constant readiness to complete the mission and loyalty to the team above self.[12] Deployment involves the movement of military personnel to a temporary assignment away from the home base[13]; time away may last from weeks to several months in areas ranging from peaceful regions to combat zones. Deployment consists of three phases: predeployment (which includes boot camp), deployment, and postdeployment.[14] Many veterans of recent conflicts have been deployed several times. While on deployment, the service member misses many family and social events. And the family undergoes change as well, as family members learn to function without her or him. Postdeployment may merge into another predeployment, further impeding the veteran's reintegration into family and social life.

Military culture and experiences also affect a veteran's reintegration into civilian life once service ends. As Demers explains, the military's "values of duty, honor, loyalty, and commitment to comrades, unit, and nation" promote a credo of self-sacrifice that may not be understood by civilians.[6] Family and community members often don't understand what veterans have been through or how service has changed them. And after the intensity and focus of military service, many veterans feel they can no longer fit into the familial or societal roles they had before. They may never be the same.

Veteran identity is defined as the self-concept deriving from one's military experiences within a sociohistorical context.[5] Significant factors that influence both veteran identity and use of VA health services over the life span include length of time served in the military, conflict or war (if any) during which the veteran served, combat exposure, any service-related disability, and overall perception of military service as positive or negative.[5]

Military culture and veteran identity present challenges for veterans and their families, who must live within a civilian society unfamiliar with their experiences. For civilian health care providers, an understanding of military culture, an ability to listen and respond without judgment, and respect for a veteran's military service are essential to caring for veterans. These qualities will also likely enhance veterans' willingness to seek and obtain health care in non-VA

settings. This is of particular importance as veterans consider expanded health services options that will be available under the Patient Protection and Affordable Care Act in 2014.

Among the issues veterans may seek care for are TBI, polytrauma, hazardous exposures, chronic pain, PTSD, military sexual trauma (MST), substance use disorders (SUDs), suicidality, and homelessness. Assessment and screening questions for many of these concerns are offered in Table 2.[15-22]

TRAUMATIC BRAIN INJURY

Although TBI is not new, advancements in body armor and helmets have drastically increased a soldier's

Table 2. Veteran-Centered Health History Assessment

Subject	Assessment Questions (ask in a clear, nonjudgmental manner)
General military history[15]	Are you a veteran? Tell me about your military experience. • In which branch did you serve? • Where were you assigned? When? • What did you do in the service? • How has military experience affected you? For the following five questions, if the patient answers yes to any, 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 ever become ill while in the service? • Were you a prisoner of war? • Do you have a service-connected condition? Would you like assistance in filing for compensation related to your service?
VA facility locator	Do you receive any services from the VA? If not, would you like information about the local VA?
Veteran identity (postdeployment)[15]	Were you deployed? Where were you deployed? Was it a combat zone? How long were you deployed? Did you have any other tours? How do you feel about being home? How is your family life? Work life? Do you have any medically unexplained symptoms? Is there anything we can do to help you?
Mild TBI[16] Series of four questions	1. Did you experience blasts or explosions, vehicular accidents, fragment or bullet wounds above the shoulders, or falls during your service? 2. Were you dazed or did you experience loss of consciousness or memory or a concussion or head injury immediately after the event? 3. Have you started to experience memory or sleep problems, dizziness or balance problems, sensitivity to light, irritability, or headaches? If you have, have they gotten worse? 4. Have you experienced any of the above-mentioned symptoms in the past week? If the veteran answers yes to one or more of these questions, refer for further evaluation and care of mild TBI.
Hazardous exposures[15]	Were you exposed to any environmental hazards (such as chemicals, infectious diseases, radiation, excessive heat, burn pit smoke, vibration, or loud noise)? Did you receive a blood transfusion? Have you ever injected any drugs?

Table 2. Continued

Chronic pain	The policy for pain assessment at a given heath care facility should be followed. Initial pain assessment should include assessing for location, onset, description of pain, intensity, variation from previous pain, aggravating and relieving factors, treatment, and effects of treatment. The assessment may be augmented by asking whether the pain affects: • emotions • relationships • employment • appetite • sleep • activities Also assess: • expectations of pain relief • cultural and spiritual views of pain and pain medications • past pain experiences • self-medication • emotional and behavioral health issues • risk for suicide
PTSD Series of four questions[17]	Ask the following: In your life, have you ever had any experience that was so frightening, horrible, 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? If the veteran answers yes to any three items, the screening is considered positive. Refer the veteran for further assessment via structured interview for PTSD. More screening tools are available at www.ptsd.va.gov/professional/pages/assessments/list-screening-instruments.asp.
MST[18]	While you were in the military, • did you receive uninvited or unwanted sexual attention, such as touching, cornering, pressure for sexual favors, or verbal remarks? • did anyone ever use force or threat of force to have sexual contact with you against your will?
SUDs–alcohol Series of three questions[19-21]	The AUDIT-C screening tool includes three questions that are scored on a scale of 0 to 4 points each, for a total possible score of 0 to 12 points, based on response. Ask the following: 1. How often did you have a drink containing alcohol in the past year? 2. On days in the past year when you drank alcohol, how many drinks did you typically drink? 3. How often did you have six or more drinks on an occasion in the past year? Appendix B of the VA and DOD clinical practice guideline (www.healthquality.va.gov/sud/sud_full_601f.pdf) explains scoring. If the alcohol screen is positive (≥ 4 in men, ≥ 3 in women), nurses should initiate a brief intervention that includes expressing concern about unhealthy drinking, discussing links between alcohol consumption and other health issues, encouraging a goal of abstinence or decreased intake, and offering referral to treatment.

Table 2. Continued

Subject	Assessment Questions (ask in a clear, nonjudgmental manner)
Suicide prevention Series of four actions[22]	1. Look for behaviors that warrant immediate attention and referral, such as • threatening to hurt or kill oneself or others. • seeking pills or weapons. • hopelessness, rage, or revenge. • substance abuse. • social withdrawal or acting reckless. • mood changes. • sleep disturbances. • giving away possessions. 2. Assess risk and protective factors. *Risk factors:* a current plan; past suicide attempt; recent physical, financial, or person loss; impulsiveness; family history of suicide or abuse; and comorbid health problems. *Protective factors:* coping skills, life satisfaction, spirituality, sense of responsibility to family, and positive support systems. 3. Ask this series of four questions: • Are you feeling hopeless about the present/future? *If yes, ask* • Have you had thoughts about taking your life? *If yes, ask* • When did you have these thoughts and do you have a plan to take your life? • Have you ever had a suicide attempt? 4. Respond: • Ensure the veteran's immediate safety and arrange mental health treatment in an appropriate setting. • Inform and involve significant others. • Limit access to means of suicide. • Commit to help the veteran through the crisis. • Offer access to a confidential crisis line to veteran and loved ones
Homelessness[15]	Where do you live? Do you feel safe? Are you in any danger of losing your home? Do you need assistance in obtaining housing? Do you need assistance with caring for dependents? Do you need assistance in obtaining health care or medicines?
Women veterans	Have you ever experienced any physical, emotional, or sexual abuse? Have you ever experienced neglect or domestic violence? How did this experience affect you? Is this experience causing you problems now? Do you feel safe now or do you feel like you are still in danger? Do you want a referral to a female caregiver or to a specialist? Do you want a referral to a VA women veterans program manager?

AUDIT-C = Alcohol Use Disorders Identification Test Consumption Questions; DOD = Department of Defense; MST = military sexual trauma; PTSD = posttraumatic stress disorder; SUD = substance use disorder; TBI = traumatic brain injury; VA = Department of Veterans Affairs.

chances of surviving a head injury. According to one source, during the OEF and OIF conflicts, 22% of soldiers wounded in combat sustained injuries to the face, head, or neck, which "can serve as a rough estimate" of TBI incidence; in contrast, during the Vietnam War, some 12% to 14% of soldiers wounded in combat had brain injuries.[23] IEDs have caused the majority of TBIs in current and recent conflicts.[23, 24]

TBI has been defined as "a traumatically induced structural injury and/or physiological disruption of

brain function as a result of an external force," and includes injuries caused by penetration by a foreign object, acceleration or deceleration movements, blunt force trauma, and pressure waves from explosive blasts.[25] Depending on the severity of the injury, TBI is classified as severe, moderate, or mild. Mild TBI (often shortened to mTBI) is considered equivalent to a concussion and is the most frequent type of TBI among military personnel.[25, 26] Its prevalence among all military personnel has more than tripled in the past 12 years.[27, 28] However, its symptoms—which can include headaches, ringing in the ears, difficulty sleeping, irritability, memory problems, mood and anxiety disorders, suicidality, chronic pain, and dizziness or balance problems—are also common to many other conditions, making diagnosis challenging.[25, 29]

POLYTRAUMA

War injury patterns evolve with each conflict, and U.S. soldiers are currently surviving injuries at a higher rate than they have in previous conflicts. During the Vietnam War, two of every three wounded soldiers died, compared with two of every seven wounded soldiers during OIF and two of every eight during OEF.[35] The widespread use of IEDs in Iraq and Afghanistan, as well as of land mines and rocket-propelled grenades, has resulted in more cases of multiple severe injuries, or polytrauma.[36] Although definitions vary, the Veterans Health Administration has defined polytrauma as "two or more injuries sustained in the same incident that affect multiple body parts or organ systems and result in physical, cognitive, psychological, or psychosocial impairments and functional disabilities."[37]

Veterans with polytrauma may experience an overlapping of numerous physical, cognitive, and affective symptoms.

Mild TBI resulting from repeated blast exposure is complex. Symptoms last longer than they do in cases of TBI from other causes, and may present with comorbidities such as depression, PTSD, and pain.[30] The VA is seeing veterans with symptoms suggestive of the lasting effects of undiagnosed mild TBI.[31] All OEF and OIF veterans discharged from the military after September 11, 2001, and seeking care at a VA facility without a prior TBI diagnosis are screened for TBI. Screening questions and an explanation of scoring used by the VA for mild TBI are available from the U.S. Government Accountability Office (www.gao.gov/new.items/d08276.pdf). An evidence-based guideline for the management of mild TBI has been jointly developed by the VA and the DOD.[25] The guideline includes a recommendation that veterans presenting for care even weeks or months after a head injury and without previous TBI diagnosis be assessed using the referenced questions.

Nursing care for veterans with mild TBI begins with a thorough assessment of symptoms. Potential safety concerns (such as whether the injury has affected the veteran's ability to drive or to manage medications) should also be addressed; an evaluation of the veteran's self-awareness and judgment is critical.[32] Education specific to symptom management; improvement of problem-solving skills, memory, and sleep patterns; and lifestyle changes, as well as information on the recovery process, should be offered to these veterans and their families.[33, 34] Research into all types of TBI and TBI-related concerns is ongoing, in order to promote consistency in the screening process, diagnosis, documentation, and medical care in both the acute and long-term stages of recovery.

Care for veterans who have experienced polytrauma is complex. Soldiers may suffer any combination of vision or hearing impairments, fractures, TBI, amputations of one or more limbs, burns, and internal injuries, as well as PTSD and other psychological disorders.[38, 39] According to one study by VA researchers, 75% of polytrauma patients were discharged to home after receiving acute medical care and rehabilitation.[40] Many local VA hospitals have polytrauma support clinics, where patients can receive continuing follow-up care; the interdisciplinary teams can include members from more than seven specialties.[41] For some, functional issues, physical injuries, and psychological concerns may not be identified until after they return home. Veterans with polytrauma may experience an overlapping of numerous physical, cognitive, and affective symptoms that affect their ability to perform everyday functions at work and at home.[42] In cases involving multiple limb amputations or disfigurement, body image issues may create multiple social and employment barriers. One recent study, conducted among civilians, found that women who suffer polytrauma experience PTSD more frequently than men with similar injuries.[43]

Polytrauma in veterans is a relatively new health concern, and its cumulative and long-term consequences for veterans and their families have yet to be identified. Nursing care should include assessing for alterations in cognitive or social functioning and addressing potential safety concerns (such as whether injuries have affected the veteran's ability to drive or to manage medications).[44] It's also important for nurses to help the veteran and family members identify their strengths and coping mechanisms, provide relevant education, and offer help with accessing support services.

HAZARDOUS EXPOSURES

Military personnel on active duty are at increased risk for hazardous exposures to various chemical, physical, and environmental materials.[45] The list of such exposures is continuously evolving. We address just a few examples here; for more information, visit the VA's public health Web site (www.publichealth.va.gov).

Agent Orange was one of several dioxin-containing chemicals used by the military during the Vietnam War to eradicate vegetation that provided cover for enemy forces.[46] The VA maintains a comprehensive Agent Orange Registry; local VA medical centers offer the registry's health examination to eligible veterans, which can alert them to possible long-term consequences of such exposure, as well as facilitate further research.[47] At each facility, an environmental health coordinator follows up with veterans to discuss the results and to recommend further testing if indicated.

The VA has also joined forces with the Centers for Disease Control and Prevention and the Institute of Medicine (IOM) to conduct research on the long-term health effects of Agent Orange on veterans.[48] There's sufficient or suggestive evidence associating Agent Orange exposure with the development—even years later—of various diseases, including type 2 diabetes, Parkinson's disease, peripheral neuropathy, ischemic heart disease, chronic B-cell leukemia, Hodgkin's lymphoma, non-Hodgkin's lymphoma, multiple myeloma, prostate and respiratory cancers, and soft tissue sarcoma.[49] Such exposure has also been linked to teratogenic effects seen in veterans' children. In 1991, legislation established that veterans exposed to Agent Orange during their service and diagnosed with any of the diseases linked to Agent Orange could claim disability. Persistent questions remain regarding exposure to Agent Orange and long-term health outcomes. The IOM has recommended continued research.

Exposures specific to OEF, OIF, and OND. Long-term health problems have yet to be determined for veterans exposed to various hazardous materials while serving in Iraq and Afghanistan. Three VA War Related Illness and Injury Study Centers have been established to focus on postdeployment health issues, including hazardous exposures and medically unexplained symptoms, and to offer clinical evaluations and postdeployment health education. Signs and symptoms vary depending on the type and duration of the exposure. For example, the burning of debris in "burn pits" has been common practice at military sites in Iraq and Afghanistan.[50] The debris burned has included chemicals, paints, petroleum products, unused ammunition, rubber, and medical waste, among others. The health effects of exposure to toxins in burn pit smoke aren't known, but it's possible such exposure can affect multiple body systems. Exposed veterans might have experienced eye irritation and burning, coughing and throat irritation, breathing difficulties, and skin itching and rashes.[50] They may qualify for an exposure assessment with a referral from a VA primary care provider.

Rabies. Veterans of the conflicts in Iraq and Afghanistan have reported symptoms associated with infectious exposures such as rabies. Iraq is a high-risk country for rabies, with unvaccinated dogs being the primary carrier.[51, 52] Transmission occurs when a soldier is bitten by or otherwise exposed to the saliva of an infected animal; untreated, the disease usually causes fatal encephalitis. Rabies should be suspected in veterans within 18 months of postdeployment who present with delirium, hallucinations, slight or partial paralysis, anxiety, confusion, increase in saliva, difficulty swallowing, fear of water, or insomnia.[51]

It's essential to ask veterans about their military history and places of deployment within the past two years in order to ensure accurate assessment and timely treatment of conditions related to hazardous exposures.

Musculoskeletal and connective system ailments are among the most frequent diagnoses of veterans from recent conflicts.

CHRONIC PAIN

There's evidence that the prevalence of chronic pain in U.S. veterans is high. One large retrospective study found that 50% of veterans presenting at one VA health care system suffered from chronic pain.[53] Soldiers generally endure significant physical stress; for example, they often must carry heavy loads of armor and supplies for long distances. Moreover, pain from an acute injury can become chronic if undertreated. Musculoskeletal and connective system ailments are among the most frequent diagnoses of veterans from recent conflicts seeking care at the VA.[54, 55] In a study of OEF and OIF veterans who sought care at a VA Polytrauma Network Site, 82% reported chronic pain, with back and head injuries being the most common sites.[56] In another study of OEF and OIF veterans, the prevalence of back pain and musculoskeletal and joint conditions increased significantly between the first and the seventh year postdeployment.[54]

Chronic physical pain is often associated with comorbid conditions, including TBI[57] and PTSD,[56] that may complicate treatment. In the general population, approximately 15% to 35% of people with chronic

pain also have PTSD.[58] Pain may serve as a constant reminder of the traumatic event and worsen PTSD symptoms.[58] Furthermore, the state of hyperarousal is associated with muscle tension,[59] and may compound the pain. Chronic pain may also be a precursor to suicide. Head and musculoskeletal pain and related functional impairments were more prevalent in suicidal compared with nonsuicidal veterans.[60]

It's crucial that clinicians recognize the pervasiveness of pain in the veteran population. Pain is often located in several sites, and comprehensive assessment and medical history are essential for optimal pain management and functionality.[61] Narcotics may be used to treat severe injuries sustained in the military, resulting in abuse or dependence (in which case increasing dosages may be necessary to maintain pain relief).[61, 62] An evidence-based guideline for the management of opioid therapy for chronic pain has been developed jointly by the VA and DOD.[63] It offers clinicians "a structured goal-directed approach to chronic opioid treatment" with the aim of improving veterans' pain management and quality of life.

A comprehensive pain assessment is crucial in determining not only the intensity of pain, but also any associated factors and existing comorbidities. Important nursing interventions include advocating for standardized pain-assessment scales and treatment therapies while addressing medication education, lifestyle changes, and complex comorbidities such as TBI, PTSD, and SUDs.[64] Extreme caution is required when administering opioids in the presence of untreated SUDs, respiratory instability, suicide risk, or other situations that could result in further harm. Collaboration with specialists in pain management, substance abuse, or behavioral health may also be warranted to address other comorbidities that may exacerbate chronic pain.[63] For example, one pilot study found that veterans with chronic pain and PTSD benefited from treatment that concurrently targeted both conditions.[65]

Complementary and alternative therapies for pain management are also gaining attention. Mirror therapy has been successfully used to decrease phantom limb pain in amputees.[66] Other such therapies include massage, acupuncture, aromatherapy, and meditation, as well as energy-based modalities such as Reiki and therapeutic touch. With the increased interest in such therapies, both in the general public and among veterans,[64, 67] it would be valuable for nurses to broaden their knowledge in this area. Nurses are encouraged to explore nontraditional options for pain management that might be used concurrently with traditional therapies to achieve optimal outcomes.

POSTTRAUMATIC STRESS DISORDER

For centuries, veterans of war have suffered from nightmares, irritability, flashbacks, and other symptoms of PTSD. Previously called "shell shock" during World War I and "combat fatigue" or "combat neurosis" during World War II, the term "posttraumatic stress disorder" was first listed in the 1980 edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* and categorized as an anxiety disorder.[68] Current diagnostic criteria for PTSD in adults include exposure to a traumatic event that involved actual or threatened death or serious injury and having a response that involves intense fear, helplessness, or horror.[69] Symptoms can be intermittent and may include reliving the trauma through intense flashbacks or nightmares triggered by sensory cues, activities, or places. In an effort to cope, some veterans may adopt a state of persistent hyperarousal, which is associated with irritability or anger, sleep disturbances, and difficulty concentrating. Some will try to avoid potential triggers and suppress all emotions, both positive and negative, resulting in social isolation.

In the general population, an estimated 8% of men and 20% of women who experience a traumatic event will develop PTSD.[70] The 1983 National Vietnam Veterans' Readjustment Study found that veterans with high levels of war zone exposure had significantly higher rates of PTSD: 36% in men and 18% in women.[71] Even veterans with noncombat duties in Southeast Asia had significantly higher rates of PTSD than the general public. By 2008, the VA had more than 442,000 veterans from various conflicts receiving treatment for PTSD.[72] One study found that PTSD had been diagnosed in 22% of OEF and OIF veterans using the VA health care system.[73]

For some veterans, symptom onset may be delayed for years; for others, symptoms may ease and then worsen again as the veteran ages.[74] The VA is currently conducting a longitudinal study to examine long-term health outcomes among women veterans who served during the Vietnam War era, with a focus on PTSD.[75] The aging process may also exacerbate PTSD symptoms in ex-prisoners of war. An Israeli study found that over a 12-year period, ex-prisoners of war reported significant increases in intrusion, avoidance, and hyperarousal symptoms.[76]

Validated screening tools have been developed to help identify veterans who may be at high risk for PTSD.[77, 78] Several such tools are available at the VA's National Center for PTSD Web site, including the Primary Care PTSD screen, which was designed specifically for use in primary care settings.[17] It is a four-question, problem-focused assessment that relies on the veteran to self-report symptoms.

An evidence-based guideline for management of posttraumatic stress has been developed jointly by the VA and DOD, and is relevant for a spectrum of related disorders.[72] PTSD is often associated with TBI, MST, sleep problems, substance use, pain, and other psychiatric disorders, and requires comprehensive assessment. This guideline encompasses multiple treatment modalities to ensure individualized care.

Therapies include trauma-focused psychotherapies (such as exposure therapy), anxiety management, stress reduction, guided imagery, cognitive behavioral therapy, and social support. Primary pharmacotherapy involves selective serotonin reuptake inhibitors or serotonin norepinephrine reuptake inhibitors. Additional medications may be beneficial for the treatment of sleep disorders, nightmares, and depression.

Patient education about the wide range of PTSD causes, symptom complexity, coping strategies, and interdisciplinary treatment options should be offered to veterans and their significant others so that they can make informed decisions about treatment. Nursing care should include medication reconciliation. Nurses should also foster therapeutic relationships, ensure ongoing monitoring for behavioral changes, encourage the application of skills learned in therapy, promote consistent sleep schedules, and support the patient and family with education and resource information.[79] For veterans with acute symptoms, nursing measures might include knocking before entering the room, addressing the veteran by name, using caution when making physical contact, avoiding making any sudden or loud noises, assessing the veteran's mental status and eye contact, reorienting the veteran to surroundings as needed, and offering the veteran opportunities to express feelings.[80]

MILITARY SEXUAL TRAUMA

The term "military sexual trauma" was coined by the VA to indicate "experiences of sexual assault or repeated, threatening acts of sexual harassment."[81] The term also covers any psychological trauma that results from harassment, assault, or battery of a sexual nature while in training or on active duty.[82]

A 2012 survey of active duty service members conducted by the Defense Manpower Data Center found that 6.1% of women and 1.2% of men had experienced unwanted sexual contact, increasing from 4.4% and 0.9%, respectively, in 2010.[83] But actual prevalence is probably much higher. Unwanted sexual contact often goes unreported; reasons can include embarrassment, concerns about confidentiality, fear of retaliation, and lack of faith that appropriate action will be taken.[83] Indeed, a 2008 literature review found that among screened veterans, overall prevalence of MST ranged from 20% to 43%.[84]

Every veteran seeking care at the VA is screened for MST.[85] At the initial encounter with a primary care provider, veterans are asked about any unwanted sexual attention or contact during their military service.[18] Because MST can have many long-term effects on physical and psychological well-being, veterans who screen positively are followed by a designated MST coordinator, who arranges for counseling and treatment provided by the VA.[82]

Veterans with an unreported history of MST may present with a variety of ailments not usually recognized by clinicians as consequences of MST.[86] One large study found that, compared with veterans who have not experienced MST, those who have are more likely to have concurrent mental health conditions such as anxiety, depression, SUDs, personality disorders, and PTSD.[18] MST was also associated with numerous physical diagnoses. For both sexes, MST was significantly associated with liver and chronic pulmonary diseases. Female veterans who experienced MST were more likely to present with obesity, weight loss, and hypothyroidism, while male veterans who experienced MST were more likely to present with AIDS. The researchers noted that risky behaviors (such as substance abuse and unhealthy eating patterns) precipitated by MST may be factors in the development of physical illness.[18] Providers should be alert to such symptoms in both male and female patients, regardless of age, and consider the possibility of MST. Initial screening for MST is essential. Once it's established that a veteran has a history of MST, care by a mental health provider is warranted, and a referral to the VA is recommended.

As is common in cases of PTSD, veterans with MST may try to avoid thoughts, feelings, and activities that remind them of the trauma or precipitate flashbacks.[81] They may become distrustful and socially isolated or use alcohol or other substances to block the memories. In the long run, such avoidance can be more harmful than remembering and actively dealing with the issue. Furthermore, men and women with a history of MST are at much higher risk for suicide or self-harm.[18] Therefore, screening for suicidal ideation is also crucial in this group.[87]

SUBSTANCE USE DISORDERS

These disorders might involve illicit drugs, prescribed medications, tobacco, or alcohol (or a combination of these).[69] A recent IOM report found that many veterans from the Vietnam War and more recent conflicts need assistance with SUDs.[88] The stressors of active military service, combat, MST, and frequent loss of peers are associated with increased risk of anxiety, depression, and PTSD, as well as with the development of SUDs.[62, 88] The VA and DOD have jointly developed a clinical practice guideline for the management of SUDs, which includes several examples of evidence-based screening tools to help clinicians identify veterans with SUDs and improve outcomes.[21]

If local VA services are available, veterans experiencing SUDs should be referred for treatment and follow-up care. The VA Chemical Dependency Program, designed to provide comprehensive and individualized treatment, can include inpatient and outpatient detoxification, methadone maintenance, an outpatient recovery program, and relapse prevention. Both the outpatient recovery program and relapse prevention can be self-accessed or accessed by referral from a VA provider. A VA referral is required

for the intensive evidence-based outpatient addiction treatment program.

Tobacco. Cigarette smoking is a significant public health issue for veterans. From World War I until the mid-1970s, the practices of distributing free cigarettes in troops' rations, using cigarettes and cigarette breaks as rewards during basic training, and featuring military personnel in advertising all contributed to an increased likelihood that soldiers would smoke. Although these practices have since ceased and despite military policies aimed at lowering smoking rates, tobacco use remains much higher among veterans and active-duty soldiers than among civilians.[89] One source states that 74% of veterans report a history of smoking, compared with 48% of nonveterans.[89]

The VA lists smoking cessation treatment as a high priority among veterans seeking health care.[90] The VA has adopted the U.S. Public Health Service's clinical practice guideline on treating tobacco use,[91] and recommends that nurses and other primary care providers use "the 5 As" to guide treatment: **a**sk about tobacco use at every visit, **a**dvise quitting, **a**ssess readiness to quit, **a**ssist users with appropriate treatment, and **a**rrange follow-up.[92] Those who want help with quitting are offered numerous resources, including counseling, nicotine replacement therapy, and participation in evidence-based smoking cessation programs.

Alcohol. Studies have found that recent alcohol consumption is significantly higher among veterans than nonveterans.[93] Among OEF and OIF veterans, alcohol dependence is relatively more common (7%) than either drug dependence (3%) or drug abuse (4%).[94] And deployed service members exposed to combat may be at greater risk for binge drinking when compared with other service members.[95]

The VA and DOD guideline for the management of SUDs recommends the Alcohol Use Disorders Identification Test Consumption Questions (known as the AUDIT-C) as a screening tool for unhealthy alcohol use.[21] It involves asking three questions; possible total scores range from 0 to 12 (Appendix B of the guideline lists the questions and explains scoring).[19, 20] If the alcohol screen is positive, nurses should initiate a brief intervention that entails expressing concern about unhealthy drinking, discussing alcohol consumption in relation to other health issues, encouraging a goal of abstinence or decreased intake, and offering a referral to addiction treatment.

SUICIDE

Firearms, the most frequent means of completed suicide in the general adult population, account for 41% of completed suicides of all military personnel, who are routinely trained in firearm use during basic training.[96, 97] One recent study found that younger veterans ages 18 to 34 had much higher firearm suicide and total suicide rates than their civilian counterparts.[98] Healthy People 2020, the federal government's interagency initiative, has identified veterans who experienced physical and mental trauma as a risk population for mental health issues, including suicide.[99]

It's estimated that, every day, about 18 to 22 U.S. veterans commit suicide, accounting for about 20% of all completed suicides in this country.[100, 101] One study of Iraq and Afghanistan war veterans referred for mental health services at a large VA medical center found that 13% were at elevated risk for suicide.[102] An estimated 11% of veterans who survive a first suicide attempt will reattempt within nine months, and 6% of those will die.[103] There is evidence that the rate of nonfatal suicide attempts is lower among veterans who utilize VA health care services compared with those who do not, suggesting the efficacy of the VA's screening, assessment, and intervention strategies.[100] The VA Suicide Prevention Program focuses on assessing suicide risk in all veterans and offers a risk assessment guide.[22] Nurses should be alert for behaviors that warrant immediate attention and referral, such as engaging in risky behaviors or talking about suicide. In conducting a risk assessment, the involvement of family members may be warranted, both in gathering data and to obtain their commitment to help the veteran. Nurses can also encourage the use of the VA's confidential crisis line. Designated suicide prevention coordinators at each VA medical center receive referrals from the crisis line to ensure that veterans receive needed counseling and services.

One large study found that veterans who have experienced MST are more likely to have concurrent mental health conditions such as anxiety, depression, SUDs, personality disorders, and PTSD.

HOMELESSNESS

Veterans represent about 10% of the total U.S. adult population. Yet a disproportionate number are homeless; it's estimated that anywhere from 12% to about 33% of all homeless adults are veterans.[104, 105] According to the National Coalition for Homeless Veterans, most homeless veterans are men; 68% live in urban areas; half have at least one disability.[105] Two-thirds served in the military for more than three years; nearly half served during the Vietnam War. Contributing

factors for homelessness among veterans and nonveterans are largely similar: substance abuse, mental and physical illnesses, shortage of affordable housing, lack of employment, and insufficient support networks.[104, 105] But for veterans, there are often added military-related factors, such as PTSD, TBI, a history of multiple deployments, and military skills that might not be transferable to the civilian work environment.[105, 106]

Women veterans are two to four times more likely to become homeless than nonveteran women.[107] According to research cited by the U.S. Department of Labor Women's Bureau, 81% to 93% of women veterans have experienced some form of trauma, including childhood abuse, domestic violence, MST, and combat-related trauma.[108] Such experiences in turn can contribute to substance abuse, behavioral health issues, struggles in accessing and maintaining employment, and difficulty in establishing trust. And like male veterans, female veterans assimilate to the military culture, in which seeking help may be considered a sign of weakness.

Being homeless is associated with numerous health concerns, including thermal injuries, substance abuse, mental health illnesses, bronchitis, pneumonia, skin infections, and communicable diseases.[109] Veterans who are homeless may need coordinated efforts to assist them with personal development, housing, nutrition, behavioral health issues, health care access, legal concerns, skill training, and job placement.[105]

In 2009, the VA committed to ending veteran homelessness by 2015.[110] The VA created prevention programs and has collaborated with public, private, and nonprofit organizations to expand work training, housing assistance, educational assistance, transportation, justice outreach, medical exams, and other support programs.

When caring for veterans who are homeless, it's important for nurses to understand their physical environment and risk factors that may compromise their safety and health. Discharge instructions must be tailored accordingly. Collaboration with social workers and other interdisciplinary team members is essential to minimize the possibility of readmission and ensure continuity of care. Once any needed medical care has been provided, nurses should encourage the veteran to contact the VA's National Call Center for Homeless Veterans or help the veteran do so. Every VA medical center is staffed with both a homeless veteran coordinator and a women veterans program manager.

DISCUSSION

More than 16 million veterans seek health care outside of the VA.[111] This number will likely increase as troops continue to return from Iraq and Afghanistan. Veteran identity, developed in basic training and honed during deployment and combat experiences, presents challenges during the transition back to civilian life. In one study, veterans described three important challenges to that transition: feeling a lack of respect from civilians, holding themselves to a higher standard than civilians, and not fitting into the civilian world.[6] Many veterans return home to supportive families and secure employment, and reclaim their lives with minimal difficulty. But for those whose injuries and disabilities adversely affect their health, relationships, and quality of life, making the transition may be much more difficult.

Physical wounds and battle scars are often recognizable; but nurses might not associate a patient's emotional issues or mental health conditions with military service. The mechanism of injury must be considered to ensure a comprehensive assessment and appropriate treatment plan.[38] It's critical that nurses ask patients about their veteran status, military experiences, and support systems, in order to provide patient care that takes into consideration a veteran's unique needs. And it's essential that nurses understand and acknowledge the influence of veteran identity on health and health-seeking behaviors.

Eligibility for VA health care is based on a number of variables. Many of the conditions discussed here are high-priority VA issues, for which the veteran may be best served in a VA setting. Yet many health concerns go unreported for various reasons, including embarrassment, concern about confidentiality, fear of stigmatization, and lack of awareness of available treatments and resources. The VA has improved veterans' health outcomes by introducing specific health care initiatives, implementing multiple screenings and evidence-based treatment programs, and using technology to improve access to care. VA providers and staff also receive education about the symptomatology of many health conditions, in order to ensure proper assessment and treatment. Many veterans may feel safer in a VA setting, where other comrades are experiencing similar issues. VA facilities are located throughout the United States and its territories; anyone can contact a local VA facility for information regarding a veteran's access to care.

Researchers have linked many health care issues to military service, and veteran health care continues to evolve as research unfolds. But more research into the long-term effects of military service on veterans' health and their nursing implications is needed. And in both academic and practice settings, nursing education about veterans' health care needs must be expanded.

Spelman and colleagues have proposed several clinical "pearls" for primary care providers who treat veterans, beginning with acknowledgment of military service, obtaining a military history, and keeping this information easily accessible in the medical record.[112] These suggestions are also apt for nurses. In assessing every adult patient, nurses should ask whether the patient has served in the military. If the answer is affirmative, time should be taken to learn the patient's story. Listen and ask questions in an open and unbiased

manner, and incorporate the patient's military experiences and health-related concerns into the medical history. The VA Office of Academic Affiliations offers a Military Health History Pocket Card for clinicians, which includes a series of questions that should be asked of military service members and veterans.[15] In this article, Table 2[15-22] provides veteran-centered health history assessment questions; these questions stem either from our clinical experiences or from references cited. We also recommend that every health care facility designate a veteran liaison to assist veterans in receiving care from the VA or other agencies.

Veterans have made many sacrifices while serving this country. The ranks of veterans continue to grow as thousands of soldiers return from Iraq and Afghanistan. It's imperative that nurses be familiar with the various health care issues veterans face, risk factors and comorbidities, and the complexity of care. They should also be able to provide patients and their families with appropriate education and help in accessing available resources. The warrior ethos includes a promise never to leave a fallen comrade. In that spirit, every clinician can ensure that no veteran is "left behind" without adequate health care. ▼

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