Mental Health Issues Common to Veterans and Their Families

HOW TO RECEIVE CREDIT

- Read the enclosed course.
- Complete the questions at the end of the course.
- Return your completed Evaluation to NetCE by mail or fax, or complete online at www.NetCE. com. (If you are a physician, behavioral health professional, or Florida nurse, please return the included Answer Sheet/Evaluation.) Your postmark or facsimile date will be used as your completion date.
- Receive your Certificate(s) of Completion by mail, fax, or email.

Faculty

Alice Yick Flanagan, PhD, MSW, received her Master's in Social Work from Columbia University, School of Social Work. She has clinical experience in mental health in correctional settings, psychiatric hospitals, and community health centers. In 1997, she received her PhD from UCLA, School of Public Policy and Social Research. Dr. Yick Flanagan completed a year-long post-doctoral fellowship at Hunter College, School of Social Work in 1999. (A complete biography appears at the end of this course.)

Mark Rose, BS, MA, LP, is a licensed psychologist in the State of Minnesota with a private consulting practice and a medical research analyst with a biomedical communications firm. Earlier healthcare technology assessment work led to medical device and pharmaceutical sector experience in new product development involving cancer ablative devices and pain therapeutics. (A complete biography appears at the end of this course.)

Faculty Disclosure

Contributing faculty, Alice Yick Flanagan, PhD, MSW, has disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Contributing faculty, Mark Rose, BS, MA, LP, has disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

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The division planners and director have disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Audience

This course is designed for physicians, nurses, psychologists, social workers, therapists, counselors, and other healthcare professionals who may treat veterans or their family members.

Accreditations & Approvals



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NetCE designates this continuing education activity for 2 ANCC contact hours.



This activity was planned by and for the healthcare team, and learners will receive 2 Interprofessional Continuing Education (IPCE) credits for learning and change.

NetCE designates this continuing education activity for 2.4 hours for Alabama nurses.

AACN Synergy CERP Category A.

Social Workers participating in this intermediate to advanced course will receive 2 Cultural Competency continuing education clock hours.

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The purpose of NetCE is to provide challenging curricula to assist healthcare professionals to raise their levels of expertise while fulfilling their continuing education requirements, thereby improving the quality of healthcare.

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Disclosure Statement

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Course Objective

The purpose of this course is to provide health and mental health professionals with an appreciation of the impact of military service on patient health as well as the skills necessary to effectively identify and intervene for these patients.

Learning Objectives

Upon completion of this course, you should be able to:

- 1. Outline the demographics of current and former U.S. military personnel and the need to screen for military service in health and mental health care.
- 2. Describe risk factors for and the presentation of posttraumatic stress disorder (PTSD) in military veterans.
- 3. Discuss the impact of depression and suicide in veterans.
- 4. Evaluate the impact of other various mental health issues common in veterans and their families, including violence and intermittent explosive disorder.
- 5. Identify issues that may arise during reintegration and readjustment following deployment and the need for appropriate referral to services available to veterans and their families.



Sections marked with this symbol include evidence-based practice recommendations. The level of evidence and/or strength of recommendation, as provided by the PRACTICE RECOMMENDATION evidence-based source, are also included

so you may determine the validity or relevance of the information. These sections may be used in conjunction with the course material for better application to your daily practice.

INTRODUCTION

The effects of deployment to military combat on the individual and the family system are widereaching and can be severe. According to the U.S. Department of Defense, there were nearly 3.5 million current military personnel in 2018 and 18.3 million veterans in 2017 [1; 2]. The Army has the largest number of active duty members, followed by the Navy, the Air Force, and the Marine Corps [1]. Military service presents its own set of risk and protective factors for a variety of mental health issues, including post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), depression and suicide, substance abuse, and interpersonal violence. In particular, transitioning from combat back to home life can be particularly trying for veterans and their families.

SCREENING FOR MILITARY SERVICE

As the number of military conflicts and deployments has increased since 2001, the need to identify and provide better treatment to veterans and their families has become a greater priority. The first step in providing optimal care is the identification of veterans and veteran families during initial assessments, with an acknowledgement that veterans may be any sex/gender and are present in all adult age groups [2].

Unfortunately, veterans and military families often do not voluntarily report their military service in healthcare appointments. In 2015, the American Medical Association updated its recommendations for social history taking to include military history and veteran status [3]. In addition, the American Academy of Nursing has designed the Have You Ever Served? Initiative to encourage health and mental health professionals to ask their patients about military service and related areas of concern [4]. This program provides pocket cards, posters, and resource links for professionals working with veterans and their families. Recommended guestions for intake include [4]:

- Have you or has someone close to you ever served in the military?
- When did you serve?
- Which branch?
- What did you do while you were in the military?
- Were you assigned to a hostile or combative area?
- Did you experience enemy fire, see combat, or witness casualties?
- Were you wounded, injured, or hospitalized?
- Did you participate in any experimental projects or tests?
- Were you exposed to noise, chemicals, gases, demolition of munitions, pesticides, or other hazardous substances?

MENTAL HEALTH ISSUES

POST-TRAUMATIC STRESS DISORDER

Military personnel may confront numerous potentially traumatizing experiences, including military-specific events and those experienced by civilians. Research suggests the most common traumatic events experienced during active duty are witnessing someone badly injured or killed or unexpectedly seeing a dead body. Events most likely to result in the development of PTSD include witnessing atrocities, accidentally injuring or killing another person, and other interpersonal traumas, such as rape, domestic violence, and being stalked, kidnapped, or held captive [5; 6].

Exposure to multiple traumatic events is not uncommon during deployment, and exposure to real or threatened death and serious physical injury that can lead to PTSD is likely. Fundamental beliefs about self, the world, and humanity can become severely challenged by the nature of

wartime traumatic events, such as exposure to the death of civilians and destruction of communities on an unimaginable scale with little preparation. Veterans may themselves have committed acts of violence they deem with hindsight as atrocities, shattering previously held beliefs about the self [5].

More than 2.77 million members of the U.S. Armed Forces have now served on 5.4 million deployments in the Iraq and Afghanistan wars beginning in 2001 and 2003, respectively. In these conflicts, more than 6,000 soldiers died, close to 43,000 were wounded (ranging from shrapnel injuries to amputation and TBI), and more than 100,000 witnessed one or more traumatic events involving horrific injuries or loss of life in members of their unit [7; 31]. Many have returned home with psychologically damaging memories. Combat veterans have often described feeling unable to relate to civilians, including their families, and of having lost the ability for true connectedness except with their comrades, which leads to a sense of loneliness and isolation [7].

With innocent civilians used as human shields, children used as "bait" for attacks, calm moments erupting into death and devastation in seconds, and violations of the rules of engagement, the nature of the Iraq and Afghanistan wars impose on the returning veteran an unnatural recalibration of security and sanity. Among returning war veterans, the most common problems involve somatic, emotional, cognitive, behavioral, interpersonal, and psychosocial components. Somatic concerns appear as primary and middle (sleep-maintenance) insomnia, fatigue, headaches, tinnitus, impotence, restlessness, and chronic pain. Emotional and psychologic complaints may involve nightmares, racing thoughts (particularly at bedtime), generalized and social anxiety, anger and irritability, impulsive hostility, emotional numbing, hypervigilance, complicated grief, and despair [7].

Cognitive problems that may develop from combat trauma exposure include poor sustained and divided attention that partially reflects hypervigilance, poor concentration, impaired memory, rumination, and distorted thinking (e.g., jumping to conclusions, dichotomous decision-making). Common behavioral problems (often underreported) include abuse of alcohol, illicit drugs, or prescription medications, and high-risk behaviors such as reckless driving or starting fights. Interpersonal concerns often involve feeling misunderstood, intolerance of others, distrust, isolation, and withdrawal. Frequent psychosocial concerns can involve spiritual crisis, domestic violence, child abuse, and general family dysfunction. The most common concerns of veterans seeking primary care are anger, sleep problems, and erectile dysfunction, and all are complicated if there is ongoing substance abuse [7; 8].

Veterans frequently report sensitivity to triggers that stimulate sensory perception, such as sudden or loud sounds, noxious or unusual smells, high temperatures, foreign foods, or uneven terrain. Even less obvious triggers can produce anxiety, panic, fear, anger, and overall sympathetic nervous system arousal, including situations that appear unpredictable (e.g., crowds), beyond control (e.g., a room without an easy exit), or the precursor of potential danger (e.g., traffic or building complexes) [7].

Triggers can activate muscle memory of combat, including the readiness to fight, aggress, and escalate, and none of these are appropriate reactions in the civilian milieu. Combat immersion mode can become stuck in the "on" position, with the defensive or aggressive posture not easily turned off. For others, this heightened state of arousal is experienced as an adrenaline rush of battle that is reinforcing, driving some veterans to seek danger, risk, or excitement to maintain the "high" [7].

Epidemiology

Vietnam Veterans

The National Vietnam Veterans Readjustment Study interviewed 3,016 U.S. Vietnam-era veterans between 1986 and 1988 and found a lifetime PTSD prevalence of 30.9% in men and 26.9% in women. The past-year PTSD prevalence was 15.2% in men and 8.1% in women [9; 10].

Gulf War Veterans

From 1995 to 1997, 11,441 U.S. Gulf War veterans were assessed with the PTSD Checklist, with a score \geq 50 considered as meeting PTSD criteria. The prevalence of current PTSD was 12.1% [9; 11].

Iraq and Afghanistan War Veterans

Several studies have published PTSD prevalence and incidence rates in Iraq and Afghanistan war veterans. Highly consistent rates have been found with grouping the studies by subpopulation, such as Army or Marine combat infantry units [12; 32]. An early PTSD prevalence study in Iraq and Afghanistan war military personnel using stringent PTSD criteria found three-month post-deployment rates among infantry soldiers and Marines returning from high-intensity combat in Iraq of 12.9% and 12.2%, respectively. Soldiers deployed to Afghanistan who were exposed to very low-intensity combat showed a three-month post-deployment PTSD rate of 6.2%, compared with the pre-deployment baseline population rate was 5% [12; 13]. Subsequent studies of Iraq and Afghanistan war-deployed soldiers found rates of acute stress disorder (ASD) or PTSD of 10% to 20% [12; 32]. Prevalence was directly associated with combat frequency and intensity, with units exposed to minimal combat similar in prevalence to baseline rates in the population, and a linear increase up to 25% in units involved in the highest-intensity combat. Soldiers in Afghanistan showed lower PTSD prevalence earlier in the war, which increased to levels comparable with Iraq combatants from 2007 onward [12].

Soldiers assigned to active and National Guard combat infantry teams showed post-deployment PTSD rates of 15% after 3 months and 17% to 25% after 12 months [12; 14]. A study of previously deployed Iraq and Afghanistan war veterans found a current PTSD rate of 13.8% [9].

Risk Factors

The strongest predictors of increased prevalence of post-deployment PTSD are combat frequency and intensity, which impose greater risk than the actual number of deployments in predicting adverse mental health outcomes [12; 32]. Some evidence indicates that military recruits have a higher prevalence of childhood physical abuse, sexual abuse and neglect, and family dysfunction compared with community averages, with these factors contributing to the higher PTSD risk [15; 16]. Practitioners should assess pre-military history, as these factors can also influence the therapeutic relationship and treatment planning [5].

Comorbid Conditions

Biomechanical Injury/Traumatic Brain Injury

In Iraq and Afghanistan war veterans, biomechanical trauma to the brain caused by explosions and blast waves is the most frequent physical injury [17]. When severe enough, the brain trauma is termed traumatic brain injury or TBI. Even mild TBI elevates patient risk of psychiatric conditions, including PTSD, depression, anxiety, substance abuse, or suicide. TBI is characterized by three symptom types [7; 18]:

- Cognitive: Problems with memory, poor attention, and limited concentration
- Emotional/behavioral: Irritability, depression, anxiety, impulsivity, and isolation
- Somatic: Insomnia, headache, tinnitus, and dizziness

The chaos and possible amnesia surrounding the TBI event can interfere with obtaining a proper history of the injury, but the provider should make an effort to document injury severity and type, previous brain injury history, and the extent of symptom overlap between TBI and PTSD. Common overlapping symptoms include depression, anxiety, irritability/anger, trouble concentrating, fatigue, hyperarousal, and avoidance [7; 18].



As PTSD may contribute to the overall burden of symptoms in some individuals following mild traumatic brain injury (TBI), particularly where problems persist for more than three months, the Scottish Intercollegiate Guidelines Network

recommends that mental state should be routinely examined in patients with TBI.

(https://www.sign.ac.uk/assets/sign130.pdf. Last accessed April 16, 2020.)

Level of Evidence: C (A body of evidence including well-conducted case control or cohort studies, directly applicable to the target population and demonstrating overall consistency of results; or extrapolated evidence from high-quality systematic reviews of case control or cohort studies)

Risk of Suicide and Violence

Since 2007, the suicide rates in the Army and Marine Corps have surpassed general population rates [19]. Factors with the greatest association to suicide risk include depression, relationship strain, financial and vocational loss, and magnitude of life impairment. Clinical presentations with the highest prediction of potential future suicidal behavior are the presence of overwhelming negative thoughts and hopelessness over the future [20].

The potential for harm to others is another safety concern to address during assessment. Veterans with pronounced irritability, anger, and impulsivity may act aggressively toward others, and in one study, 63% of veterans seeking care for PTSD had been aggressive to their partners in the last year [7; 21]. To gain a clearer picture of individual veteran risk of suicide or violence, the provider should assess the integrity of the veteran's support system, access to lethal means of self-harm, history of impulsivity and substance use, sleep adequacy, medication regimen, and outlook on the near and distant future [22].

Treatment

The overall objective of PTSD therapy is to treat the four core symptom clusters of intrusive re-experiencing, avoidance, hyperarousal, and negative alterations in cognitions and mood. Psychotherapy is the backbone of PTSD therapy, with pharmacotherapy used as an adjunct if necessary. Providers should be aware of the range of therapeutic options along with their advantages and disadvantages (e.g., time commitment, side effects, risks) and be able to explain these to the patient.

Therapies for PTSD are broadly divided into psychotherapies, pharmacotherapies, and adjunctive or supplemental treatment modalities. Providers and patients alike are faced with important decisions involving the type, number, frequency, and dose of psychotherapy and pharmacologic interventions [32].

As noted, TBI is often comorbid in combat veterans with PTSD. The effect of mild TBI on PTSD treatment response is less clear due to the absence of high-quality randomized controlled trials. Tentative suggestions support the use of standard cognitive-behavioral therapy, with minor modifications as needed. Therapists can encourage patients to manage mild TBI-related symptoms by using compensatory strategies such as personal digital assistants or scheduling cognitive breaks [23; 24; 25].

DEPRESSION AND SUICIDE

Although the true incidence of suicide among military war veterans is difficult to estimate due to the lack of national suicide surveillance data, the U.S. Department of Veterans Affairs (VA) estimates that 17.8% of all deaths from suicide in the United States are in military war veterans [26]. In addition, 12% of all U.S. Army suicides occur within 12 months of hospital discharge [27]. The rate of suicide among the veteran population increased rapidly between 2000 and 2010, but has remained unchanged since 2011 despite ongoing preventive measures taken by the military [26; 28; 29; 30]. Although the majority of military suicides occur among young men shortly after their discharge from military service, military women complete suicide at a rate of nearly twice that of nonveteran women of the same age group [33].

Protective Factors

Several general protective factors against suicide may be more prevalent among veterans, including strong interpersonal bonds, responsibilities/duties to others, steady employment, sense of belonging/ identity, and access to health care [26]. Historically, the selection bias for healthy recruits, employment, purposefulness, access to health care, and a strong sense of belonging were believed to be protective against suicide, but increased rates have challenged this assumption [26]. In one study, having a serviceconnected disability was associated with a lower risk of suicide in veterans, likely due to greater access to VA health care and regular compensation payments [28]. It is interesting to note that many of these protective factors do not apply to discharged or retired veterans. Other potentially protective factors include older age, African American/black race, and admission to a nursing home [26].

Risk Factors

Veterans often possess many risk factors for attempting or completing suicide. These include combat exposure (particularly deployment to a combat theater and/or adverse deployment experiences), combat wounds, PTSD and other mental health problems, comorbid major depression, TBI, poor social support, feelings of not belonging or of being a burden to others or society, acquired ability to inflict lethal self-injury, and access to lethal means [28; 36; 37]. There is conflicting evidence of the role of PTSD in suicide risk, with some studies finding PTSD diagnosis to be protective while others indicating it increases risk. Other possible risk factors include [26]:

- Disciplinary actions
- Reduction in rank
- Career-threatening change in fitness for duty
- Perceived sense of injustice or betrayal (unit/command)
- Command/leadership stress, isolation from unit
- Transferring duty station
- Administrative separation from service/unit



The Department of Veterans Affairs recommends an assessment of risk factors as part of a comprehensive evaluation of suicide risk, including but not limited to: current suicidal ideation, prior suicide attempt(s), current psychiatric conditions

(e.g., mood disorders, substance use disorders) or symptoms (e.g., hopelessness, insomnia, and agitation), prior psychiatric hospitalization, recent biopsychosocial stressors, and the availability of firearms.

(https://www.healthquality.va.gov/guidelines/MH/srb. Last accessed April 16, 2020.)

Strength of Recommendation: Strong for

With military service members, the command element should also be involved in education, safety planning, treatment planning, and implementation of duty limitations. Additional areas to address are medical, psychosocial, socioeconomic, or spiritual needs of the patient [26].

Treatment

In 2019, the VA updated its practice guidelines for patients at risk of suicide. The VA made the following recommendations for evidence-based treatment methods to reduce suicidal behavior [26]:

- Nonpharmacologic treatment
 - Cognitive-behavioral therapy-based interventions for suicide prevention
 - Dialectical behavior therapy
 - Problem-solving therapy-based interventions
- Crisis response plan (Table 1)
- Pharmacotherapy
 - Ketamine infusion (among patients with suicidal ideation and major depressive disorder)
 - Lithium alone (among patients with bipolar disorder) or in combination with another psychotropic agent
 - Clozapine (among patients with either suicidal ideation or a history of suicide attempt)
- Other
 - Reduce access to lethal means

Prevention

Assessment of suicide risk and protective factors in military personnel is vital, particularly at times of transition (e.g., deployment, separation from service/unit). It is important to include life planning, referral information, and resources for patients who experience suicidal ideation, and there are military-specific resources available for current or former members of the military. The Veterans Crisis Line, at 800-273-8255, is free to all

VA/DoD CRISIS RESPONSE PLAN

- Semi-structured interview of recent suicide ideation and chronic history of suicide attempts
- Unstructured conversation about recent stressors and current complaints using supportive listening techniques
- Collaborative identification of clear signs of crisis (behavioral, cognitive, affective, or physical)
- Self-management skill identification including things that can be done on the patient's own to distract or feel less stressed
- Collaborative identification of social support including friends and family members who have helped in the past and who they would feel comfortable contacting in crisis
- Review of crisis resources including medical providers, other professionals, and the suicide lifeline (1-800-273-8255)
- Referral to treatment, including follow-up appointments and other referrals as needed
- Consider protective factors
- Additional steps for management of military service members:
 - Inform command
 - Determine utility of command involvement
 - Address barriers to care (including stigma)
 - Ensure follow-up during transition
 - Enroll in risk management tracking

Source: [26] Table 1

active service members, including members of the National Guard and Reserve, and veterans, even if they are not registered with the VA or enrolled in VA health care [38].

In 2017, a suicide prevention memorandum of agreement was established between the VA and the DoD focusing on the following areas [26]:

- Periods of transition
- Education, outreach, and strategic communications
- Lethal means safety and/or restriction
- Engagement and capacity building
- Call center efforts
- Research and program evaluation
- Data and surveillance
- Postvention

These suicide prevention efforts formally began in 2018 in response to Executive Order No. 13822: Supporting Our Veterans During Their Transition From Uniformed Service to Civilian Life [34].

Suicide Survivors: Treatment and Resources

Family members and friends affected by the death of a loved one through suicide are referred to as "suicide survivors." Conservative estimates suggesting a ratio of six survivors for every completed suicide indicate that an estimated 6 million Americans became suicide survivors in the past 25 years [39]. One study estimated that 115 individuals are exposed to a single suicide, in addition to those who are intimately affected (equaling more than 5 million individuals) [40; 35]. Among these, one in five (or more than 1 million individuals) reported that the experience had a devastating impact or caused a major-life disruption [35]. A similar study published in 2019 estimated rates of those affected to be 135 individuals per suicide, illustrating the wide effects of suicide [35].

The death of a loved one by suicide can be shocking, painful, and unexpected for survivors. The ensuing grief can be intense, complex, chronic, and nonlinear. Working through grief is a highly individual and unique process that survivors experience in their own way and at their own pace. Grief does not always move in a forward direction, and there

is no time frame for grief. Survivors should not expect their lives to return to their previous state and should strive to adjust to life without their loved one. The initial emotional response may be overwhelming, and crying is a natural reaction and an expression of sadness following the loss of a loved one [40].

Survivors often struggle with trying to comprehend why the suicide occurred and how they could have intervened. Feelings of guilt are likely when the survivor believes he or she could have prevented the suicide. The survivor may even experience relief at times, especially if the loved one had a psychiatric illness. The stigma and shame that surrounds suicide may cause difficulty among the family members and friends of survivors in knowing what to say and how to support the survivor and might prevent the survivor from reaching out for help. Ongoing support remains important to maintain family and other relationships during the grieving process [40].

Many survivors find that the best help comes from attending a support group for survivors of suicide in which they can openly share their own story and their feelings with fellow survivors without pressure or fear of judgment and shame. Support groups can be a helpful source of guidance, understanding, and support through the healing process [40]. The American Foundation for Suicide Prevention maintains an international directory of suicide bereavement support groups on their website at https://www.afsp.org.

SUBSTANCE ABUSE

Among all military service members, the overall prevalence rate for heavy alcohol use in the past 12 months is 5.4% [41]. A Department of Defense report indicates that the heaviest rates of drinking were among Marines (12.4%), followed by the Navy (6%), Army (4.1%), Coast Guard (3.5%), and Air Force (2.7%) [41]. When comparing illicit substance use among civilian and military populations, civilian past-year usage is higher (16.6%)

compared with military servicemen and women (0.7%). This lower rate of illicit substance use is due in part to the military's random testing procedures and zero-tolerance policies [41]. Binge drinking has spiked since the wars in Iraq and Afghanistan started; in 2008, almost half of active-duty military members reported binge drinking [42]. In that same time, the use of prescription pain medications (particularly opioids) has also increased; between 2001 and 2009, the number of prescriptions written by military physicians increased fourfold [42]. Because drugs and alcohol can inhibit negative feelings and disconcerting memories, it may be used to self-medicate, particularly among those who have witnessed or experienced suffering related to war and deployment.

Substance and alcohol abuse can cause tremendous harm, strain, and burden on the family system. It inevitably impacts communications, roles, finances, routines, parenting, employment, and other dimensions of family life [43]. The Stress-Strain-Coping-Support model has been employed to understand how substance and alcohol abuse impact the family [44]. This framework postulates that a family member using substances or alcohol causes stress and strain on the entire family; family members may exhibit stress or strain through a variety of physical, emotional, and psychologic symptoms; family members frequently try to determine what is wrong and what they can do to fix the problem; and the way family members cope and respond to the situation is often influenced by how others in their immediate social support system respond [44].

For military families, deployment and reintegration trigger additional stressors that can lead to substance and alcohol abuse. For example, servicemen and women returning from deployment have a higher prevalence rate of new-onset drinking problems compared with nondeployed active-duty personnel [45]. In a study examining veterans returning from Iraq, 13.9% of the veterans were determined to have probable PTSD, 39% prob-

able alcohol misuse, and 3% probable substance abuse [46]. Military members who have been in combat and who have PTSD are more likely use substances and alcohol to cope [47]. However, one study found that a clinical diagnosis of PTSD was a less important predictor of alcohol, substance, or aggressive behavioral problems than the presence of symptoms of a stress response [47].

MILITARY SEXUAL TRAUMA

The VA defines military sexual trauma as "sexual assault or repeated, threatening sexual harassment that occurred while the veteran was in the military" [48]. This can include rape (nonconsenting, forced, or coerced sexual activity); unwanted sexual touching or grabbing; threatening, offensive remarks about a person's body or sexual activities; and/or threatening or unwelcome sexual advances [48]. In 2018, the Department of Defense estimated that 20,500 service members, including 13,000 women and 7,500 men, experienced unwanted contact or penetrative sexual assault; however, only 6,053 individual made a report of the incident[49]. In a survey of 60,000 veterans who served during the Operations Enduring Freedom and Iraqi Freedom eras, approximately 41% of women and 4% of men reported experiencing military sexual trauma [50]. Female Marines and Navy veterans were at an increased risk compared with female Air Force veterans, and both men and women who experienced combat exposure during deployment had increased risk for sexual trauma compared with those who did not [50]. In general, deployment was a protective factor for male veterans, but not for female veterans. In a separate study of 13,262 female military members, significant risk factors for sexual stressors included younger age, recent separation or divorce, service in the Marine Corps, positive screen for a baseline mental health condition, moderate/severe life stress, and prior sexual stressor experiences [51].

Although military sexual assault is relatively common, victims remain reluctant to report their experiences [52]. It is recommended that all health and mental health professionals ask their veteran patients about experiences of sexual assault, even if they served many years previously. The following questions may be included in history-taking [4]:

- During military service, did you receive uninvited or unwanted sexual attention, such as touching, pressure for sexual favors, or sexual remarks?
- Did anyone ever use force or threat of force to have sexual contact with you against your will?
- Did you report the incidents to your command and/or military or civilian authorities?

Clinical care providers should be alert for, and responsive to, the emotional trauma sustained by the sexual assault victim. In the hours following an assault, these patients exhibit a range of emotional responses, including fear, panic, shame, anger, mistrust, and denial. They are in need of emotional support, comfort, and the assurance of protection. Often, there is a need for reassurance that the victim is not at fault, no matter the circumstances surrounding the assault. Rape crisis counseling and social services should be enlisted early to assist in the care of the patient and to develop a discharge plan that addresses emotional needs, support systems, safety issues, and follow-up care.

The military also provides services for victims of sexual trauma. The VA provides free services to help veterans overcome sexual trauma, even for veterans who do not qualify for other VA care or who have not reported the incident(s) [53]. The Department of Defense offers anonymous crisis and support help for victims via its Safe Helpline at (877) 995-5247 or https://www.safehelpline.org.

DOMESTIC VIOLENCE

It has been argued that because the military culture legitimizes violence, it places military family members at risk for various forms of violence [54]. Furthermore, the stressors associated with military lifestyle, such as the lack of social support systems, adjustments to a new region, or encountering different cultures, can heighten risk factors for domestic violence [55]. Often, military needs take priority over family issues. These factors contribute to stress, which can lead to domestic violence [56]. One study suggested that combat produces stress and antisocial behaviors among veterans, and these antisocial behaviors can affect marriage [57].

The U.S. Department of Defense has taken a proactive stance on domestic violence. In 2007, the Department of Defense instituted a policy that holds military-affiliated abusers accountable for their behaviors [58]. A unit commander is obligated and authorized to respond to domestic violence situations in order to safeguard victims and can discipline the alleged perpetrator. If the abuser is not a military member, there is no military recourse, but if the perpetrator is a member of the military, a commander can issue disciplinary actions such as restricting access to the post, forfeit of pay, extra duties, and/or reduction in grade [58].

Because state laws for mandatory reporting vary, in the 1980s the U.S. Army established its own definitions and policies for domestic violence [59]. When an incident of abuse (child abuse or spouse abuse) is reported, the Case Review Committee, which falls under the purview of the commander of the medical treatment facility, reviews the case to determine if it is substantiated or unsubstantiated. When the review is complete, the information is forwarded to the Army Family Advocacy Program [60]. The Army Family Advocacy Program is mandated to focus on identification, reporting, prevention, and treatment of child abuse and domestic violence. As part of the Army Family Advocacy Program's mission, the U.S. Army has a central registry that collects and maintains all cases of reported child abuse and domestic violence. Child abuse information has been collected since 1975, and domestic violence cases since 1983 [59].

In terms of prevention and intervention, the Family Advocacy Program provides a range of prevention strategies, including support groups for new parents, education programs for married couples to learn how to deal with stress, parenting classes, communicating and coping instruction, and anger management courses [61]. Training is also targeted to professionals such as law enforcement agents and social workers. Interventions include crisis intervention, marital counseling, emergency medical care, safety plan development, drug and alcohol treatment, support groups, case management, and anger control management groups.

As with domestic violence in the civilian population, military victims face a host of barriers in disclosing abuse. In addition to shame and embarrassment, fear of reprisals, feelings of isolation, and lack of available services, many military victims find when they do report abuse, military personnel are not sensitive to their needs [62].

Given the barriers to disclosure, it is difficult to assess the prevalence of domestic violence among military families. However, a few studies provide a glimpse of the scope of this problem. According to the Army's Central Registry, a total of 61,827 initial substantiated cases, 5,772 subsequent incidents, and 3,921 reopened cases were reported between 1989 and 1997 [59]. Victim rates varied between 8 and 10.5 per 1,000 married persons. More than two-thirds of the victims were female, and almost half of the referrals were from law enforcement. agencies. The majority (93%) involved physical violence resulting in minor injuries. Some Department of Defense data indicate that 19 out of 1,000 wives of Navy and Air Force personnel and 21 out of 1,000 wives of Army personnel were abused in the last year [63]. Newer reports from the Congressional Research Service indicate that among the active-duty population, there were 16,912 reported incidents of spouse and intimate partner abuse in 2018. Among these, 8,039 reports (6,372 victims) met the DoD definitions. Physical abuse accounted for the highest number of reports (73.7%), followed by emotional abuse (22.6%), sexual abuse (3.6%), and neglect (0.06%) [64].

Deployment and moving are potential risk factors for domestic violence. In a 2013 study, 2% of married deployed personnel had perpetrated physical or emotional spousal abuse during the study period [65]. Rates of moderate and severe abuse and abuse involving alcohol were significantly higher in the post-deployment period.

Some studies show that female veterans are at increased risk of physical and sexual violence from their intimate partners (33%) compared with nonveteran counterparts (23.8%) [66]. Research indicates that female veterans who experienced previous childhood sexual abuse are three times more likely to be victims of spousal abuse, and those who experienced an unwanted incidence of sexual victimization during military service were more likely to have experienced interpersonal violence in the last year [67]. Being in the Army (versus other military branches) is also a risk factor for past-year victimization [67].

In another study, a total of 716 married military service men stationed in a U.S. Army post in Alaska participated in a survey. Almost one-third of the men (31.6%) reported engaging in some act of aggression against their partner in the last 12 months. Nine percent disclosed having engaged in at least one moderate-to-severe act of aggression [69].

Race is another factor. When researchers examined white and African American spouse abuse cases documented in the Army Central Registry, rates were higher among all age brackets for African Americans. It is not clear what specific factors are influencing these different rates, but a systematic bias may exist in the referral process [60]. It is also possible that referrals are made to the Family Advocacy Program due to stereotypical perceptions that African American families are more violent. The authors recommended further longitudinal studies to examine cultural specific factors that contribute to these rates.

It has also been speculated that exposure to the trauma of combat and the development of post-traumatic stress symptoms provokes military veterans to be violent at home [56]. Furthermore, when these veterans do obtain treatment, either voluntarily or as mandated, many do not complete their treatment regimens [56].

In a similar vein, a study examined the extent by which recent military deployment predicted domestic violence against 368 wives whose husbands were deployed and 528 wives whose husbands were not deployed [70]. Wives who reported post-deployment domestic violence tended to be younger. The authors found that military deployment was not related to domestic violence during the first 10 months of the post-deployment period. However, when there was a history of pre-deployment domestic violence, the risk of post-deployment domestic violence was greater. Thus, age and previous history of domestic violence are important indicators to consider when developing prevention efforts [70].

The risk factors for domestic violence in military families are multi-faceted. The role of stress emanating from family, military life, culture, and environment and combat stress should be further researched to understand its influence on domestic violence.

INTERMITTENT EXPLOSIVE DISORDER

Intermittent explosive disorder is included under the general category of disruptive, impulse-control, and conduct disorders in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) [71]. Approximately 2.7% of the general public meets the diagnostic criteria for this disorder, but it is much more common among military veterans. In one study of nondeployed U.S. Army personnel, 11.2% of participants met the criteria for intermittent explosive disorder in the past 30 days; it was the most prevalent mental disorder, surpassing PTSD and attention deficit hyperactivity disorder [72].

Intermittent explosive disorder is characterized by recurrent behavioral outbursts (manifested as verbal aggression, damage or destruction of property, and/or physical assault) representing an inability to control aggressive impulses [71]. The magnitude of this aggression is greatly out of proportion to the stressor or provocation, is not premeditated, and causes distress or impairment to the individual.

In many cases, intermittent explosive disorder occurs with comorbid depressive disorders, PTSD, and/or substance use disorder [73; 74]. This can complicate diagnosis and treatment for some patients. In general, patients seek help only after they have committed significant violence or to address a comorbid disorder; the time from onset of symptoms to treatment is often more than a decade [75]. The recommended treatment approach is cognitive-behavioral therapy with or without pharmacotherapy [75; 76]. There may be difficulty engaging persons with impulse-control disorders, like intermittent explosive disorder, in psychotherapy. If medication is necessary, selective serotonin reuptake inhibitors (SSRIs), specifically fluoxetine, are the agents of choice [76]. Patients should continue to be monitored throughout treatment, with assessment of aggressive and/or violent outbursts. There is some evidence that the number of outbursts may decrease over time, although aggressiveness as a trait persists.

REINTEGRATION AND READJUSTMENT

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As noted, times of transition are particularly stressful for veterans and military families, and special care should be taken during these periods to fully assess and support patients. Although the majority of returning military members have readjusted well to post-deployment life, one study showed that 44% reported difficulties after they return [77].

Military personnel returning from deployment are required to complete the Post-Deployment Health Assessment [78]. This medical screener is composed of 10 mental health questions and must be completed by a medical provider within 30 days of returning from military assignment [78]. In addition, the mental health departments in the Army and Navy use the Post-Deployment Psychological Screener, which consists of 22 questions assessing for symptoms for depression, PTSD, communication issues, interpersonal problems, alcohol abuse, and anger [78]. PTSD is commonly assessed due to the many distressing events that military personnel experience in combat. However, avoidance behaviors such as substance and alcohol abuse, withdrawing from others, and dissociating should be assessed as well [79].

IMPACT ON THE FAMILY SYSTEM

During the post-deployment or reintegration phase, the service member returns and the entire family is involved in helping him/her integrate back into the system [80]. There is usually a honeymoon phase, but awkwardness and tension often follow [81]. Family roles may have changed during this time, and the returning member will need time to adjust. For example, new parenting strategies may have surfaced in order to deal with being a "single parent" during the deployment. Upon homecoming, the military member should not expect family dynamics to have remained the same, but he/she may report feeling like a guest in his/her own home [82]. Some may not recognize their child, especially if the child was recently born or just an infant when they left. Similarly, children may not recognize the returning parent or express wariness of this returning stranger. As a result, the military parent may experience distress and hurt [83].

Some military families will encounter challenges during the post-deployment phase, including substance abuse, PTSD, and domestic violence. In fact, it is estimated that the rate of relationship and family problems is four times higher during this phase than the other phases [84]. In a study involving 19,227 active U.S. soldiers from brigade combat teams who served in Iraq or Afghanistan between 2003 and 2009, problems of marital quality and separation/divorce intentions increased during the reintegration period [85].

REFERRAL

All health and mental health professionals involved in the care of veterans and their families should be committed to providing culturally competent and responsive care and should be engaged with available military resources. Referral to available resources is a vital part of the continuum of care for these patients. The military offers reintegration programs for veterans and their families. One such program is Coaching Into Care, a national telephone service of the VA created to help veterans, their family members, and other loved ones find the appropriate services at local VA facilities and/or in the community. It is staffed by licensed psychologists and social workers who can empower and support family members seeking to help veterans adjust to civilian life [68]. Military OneSource Site is a free service provided by the Department of Defense to military members and their families to help with a broad range of concerns, including possible mental health problems. Peer support groups are also a useful tool. If a veteran and/or military family is living in an isolated area or lacks access to local VA services, the VA offers the Vet Center Call Center, a 24-hour call center staffed by combat veterans and family members of combat veterans.

RESOURCES

Department of Defense Safe Helpline 1-877-995-5247

https://www.rainn.org/dod-safe-helpline

Defense and Veterans Brain Injury Center 1-800-273-8255

https://dvbic.dcoe.mil

National Suicide Prevention Lifeline

1-800-273-8255

https://suicidepreventionlifeline.org

Coaching Into Care

1-888-823-7458

https://www.mirecc.va.gov/coaching

Military OneSource

1-800-342-9647

https://www.militaryonesource.mil

U.S. Army's Intervene, Act, and Motivate (I. A.M.) STRONG

https://www.sexualassault.army.mil

After Deployment

https://www.afterdeployment.org

Give an Hour

https://www.giveanhour.org

Disabled American Veterans (DAV)

https://www.dav.org

Veteran Combat Call Center

1-877-WAR-VETS

https://www.vetcenter.va.gov

VA Caregiver Support

1-855-260-3274

https://www.caregiver.va.gov

Yellow Ribbon Program

https://www.va.gov/education/about-gi-bill-benefits/post-9-11/yellow-ribbon-program

CONCLUSION

Many service members returning from conflict report that their experiences were rewarding, and they readjust to life off the battlefield with few difficulties. Others, however, return with varied complex mental health conditions and find that readjusting to life at home, reconnecting with family, finding work, or returning to school is an ongoing struggle [77]. As such, it is vital that mental health and healthcare professionals work with veterans and families to identify risk factors, facilitate the identification of inner resources and resiliencies, and intervene to effectively treat and/ or refer to further treatment.

FACULTY BIOGRAPHIES

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Alice Yick Flanagan, PhD, MSW, received her Master's in Social Work from Columbia University, School of Social Work. She has clinical experience in mental health in correctional settings, psychiatric hospitals, and community health centers. In 1997, she received her PhD from UCLA, School of Public Policy and Social Research. Dr. Yick Flanagan completed a year-long post-doctoral fellowship at Hunter College, School of Social Work in 1999. In that year she taught the course Research Methods and Violence Against Women to Masters degree students, as well as conducting qualitative research studies on death and dying in Chinese American families.

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