

Substance Use Treatment Needs Among Recent Veterans

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United States combat veterans have historically been at risk for substance use disorders. Following 19th century medical advances in opiate anesthetics, many Civil War soldiers were routinely given opiate doses to manage their pain and fatigue; a great number of these soldiers subsequently developed a morphine addiction, commonly called the "Soldier's Disease."¹ About a century later, nearly 8% of Vietnam veterans tested positive for marijuana, opiates, and other substances at discharge.²

A new cohort of US combat veterans has emerged from Operation Enduring Freedom (OEF), located primarily in Afghanistan, and Operation Iraqi Freedom (OIF), located primarily in Iraq. As our nation's combat operations move into their seventh year—continuing longer than World War II—1.6 million men and women have served in Iraq or Afghanistan as part of America's all-volunteer fighting force.³ Up to 75% of deployed troops have endured two or more deployments during the current conflict. Repeated and extended deployments have been associated with increased physical and mental health concerns.⁴ As nearly 10% of all US Active Duty and 3% of all US Reserve military personnel reside in North Carolina,⁵ the mental health needs of this growing veteran population is especially salient to the North Carolina mental health care community.

Substance Use Among OEF-OIF Veterans

Anecdotal accounts from clinicians and the media (for example, ABC's 20/20 series, *Coming Home: Soldiers and Drugs*

and Usher, 2006⁶) allude to problematic alcohol consumption, tobacco use, and illicit substance use beginning during military training and increasing during combat deployment. Many military personnel see drinking heavily as a right of passage or as part of their military culture. Veterans commonly report steroid

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use in response to perceived challenges to meet physical performance measures, as well as use of illicit stimulant and sedatives to relieve boredom, cope with stress, and meet performance demands during deployment. Many describe smoking cigarettes as a way to pass time. Often, what may start as a social practice or coping strategy can become an addiction.

Post-deployment measures of mental health status completed by the Department of Defense (DoD) evidence problematic alcohol use following deployment. Pre-deployment data indicates that approximately 8% of military service members

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engage in heavy weekly drinking, 45% engage in binge drinking, and 11% report at least one alcohol-related problem.⁷ Recent analysis of longitudinal data gathered by the DoD reveals that 12% of active military and 15% of National Guard and Reserve military service members drank more than they meant to drink or felt the need to cut down within six months post-deployment.⁸ Furthermore, National Guard and Reserve military service members who deploy and report combat exposure are at significantly increased risk for new-onset, heavy weekly drinking, binge drinking, and alcohol-related problems.⁷

Alcohol and other substance use problems persist past the period of active military service. Among OEF-OIF veterans seen at Veterans Affairs (VA) hospitals and clinics in 2005, 40% screened positive for potentially hazardous alcohol use on a three-item alcohol consumption measure (AUDIT-C).⁹ Among the nearly 350,000 OEF-OIF veterans who have presented to the VA between FY 2002 and FY 2008, approximately 16% received a provisional diagnosis of nondependent alcohol or other substance abuse, 4% of alcohol dependence, and 2% other substance dependence.¹⁰ Another 11% of these veterans have a diagnosis of tobacco use disorder without other substance use diagnoses. A retrospective study examining confirmed mental health diagnoses in a sample of 103,788 OEF-OIF veterans seeking VA care found 5% received a substance use disorder diagnosis.¹¹ Neither of these studies included veterans who seek care through the Vet Centers, which operate independently from VA medical centers and VA community outpatient clinics. Moreover, OEF-OIF veterans who sought VA health care constitute only 40% of all OEF-OIF veterans eligible for care, so the true prevalence of substance abuse disorders among all OEF-OIF veterans is unknown.

While US national trends show decreasing tobacco use, higher rates of tobacco use have been reported both within OEF-OIF Active Duty cohorts and VA cohorts. In surveys of military personnel deployed to Iraq and Afghanistan, 39% smoked 10 or more cigarettes daily during their deployment and 42-48% either began smoking or resumed smoking during the deployment.^{12,13} Initiating smoking during deployment was related to combat exposure, while smoking relapse was associated with combat exposure, multiple deployments, and deployments enduring longer than nine months.¹³ Little research has been conducted on the use of smokeless tobacco.

Posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI) are prevalent conditions in this veteran cohort and are likely to exacerbate the severity and course of substance use problems. PTSD is an Axis I mental health diagnosis, referring to its status as a clinical condition, versus Axis II diagnoses, which refer to underlying and pervasive conditions such as mental retardation. PTSD is the most common Axis I diagnosis among the OEF-OIF combat veterans, with prevalence estimates ranging from 13-22% of those presenting to VA.^{10,11} High rates of substance use disorders and PTSD comorbidity were first reported in war-related studies, in which as many as 75% of Vietnam war combat veterans with lifetime PTSD also met criteria for alcohol abuse or dependence.¹⁴ Among men in the general population with a lifetime history of PTSD, 35%

report drug abuse or dependence at some point in their lives versus 15% of men without PTSD. For women, 27% with a lifetime history of PTSD report drug abuse or dependence during their lives versus 8% of women without PTSD.¹⁵ In a longitudinal study of Vietnam veterans, researchers found that the onset of alcohol abuse was associated with the onset of PTSD.¹⁶ Increases in alcohol use paralleled the increase in severity of PTSD symptoms.

The combination of substance dependence and PTSD is a significant clinical problem. Substance dependent individuals with PTSD are more likely to report suicidality, aggression, and psychosocial impairment at treatment onset than are those with other Axis I conditions (excluding PTSD) or those suffering from substance dependence alone.¹⁷ In a multisite, treatment outcome trial, Ouimette and colleagues found that male veterans with both PTSD and a substance use disorder required twice as much time to achieve equivalent improvements in substance use, other psychiatric symptom severity, and psychosocial functioning compared to those with other Axis I conditions (excluding PTSD) or those suffering from substance dependence alone.¹⁸⁻²⁰

With improved military and medical technology, many of our recent veterans survive head injuries that would have killed veterans from previous cohorts. Consequently, TBI has been estimated to affect 20-30% of OEF-OIF surviving casualties.³ Available findings suggest that rates of substance abuse increase among casualties over time since injury and pre-injury alcohol and other substance abuse substantially increases risk for subsequent substance use problems.²¹ Although TBI injury areas vary with impact characteristics, combat and motor vehicle accident injuries typically involve the frontal lobes. This part of the brain influences impulse control, decision making, and emotional inhibition, among other significant functions. Injury-related cognitive deficits present a significant challenge in managing alcohol and other substance use. Moreover, emotional-behavioral vulnerabilities like PTSD and environmental stressors like the deployment cycle itself further complicate clinical presentation. Given that PTSD is strongly associated with even mild TBI (concussion) among OEF-OIF veterans,²² clinical complications are to be expected.

Clinical Needs Among OEF-OIF Veterans

Increase and improve the capacity of the substance use treatment system in North Carolina to provide evidence-based care

The Veterans Health Administration (VHA) is a leader in promoting evidence-based treatment and, accordingly, VA substance use treatment guidelines for primary care and specialty clinics mandate provision of these treatments.²³ Although effective substance use disorder treatment is offered through the VA, there has been a substantial decline in the number of specialized VA substance use treatment programs and staff, from 389 programs and 4,718 staff in FY 1994 to 215 programs and 2,427 staff in FY 2003.²⁴ This decline

occurred during a period in which the number of VA patients diagnosed with substance use disorders increased.²⁵ Integration of substance services within VA primary care programs could potentially fill this service gap. A base of growing empirical literature supports the efficacy of brief alcohol misuse and tobacco screening and interventions within primary care settings.^{26,27} Recent evidence suggests, however, that primary care providers feel ill-equipped to treat substance use disorders and typically refer such patients to specialty clinics.²⁸ In fact, data show that only 31% of the large portion (40%) of OEF-OIF veterans who screened positive for potentially hazardous alcohol use reported having been advised by their doctor to reduce their drinking.⁹ Furthermore, there is no research supporting the efficacy of brief screening and interventions for illicit substance use within nonspecialty settings.

Since 2003, the number of VA specialized substance use treatment programs has grown but has not attained previous levels.²⁹ Data also suggest inadequate service delivery by private and public sectors, as only 9% of all people needing alcohol or other substance use treatment receive treatment.³⁰ Thus, an opportunity exists for VA and state substance use programs to work together to increase substance use capacity and access for OEF-OIF veterans and their families. While 2-5% of alcoholics, smokers, and other substance dependent patients remit each year, even without treatment, the rest continue to need substance use treatment.³¹ The demand for substance use treatment services can only be expected to grow as OEF-OIF veterans age. Thus, long-term planning to support the needs of these veterans and their families should begin now as a separate component of a concerted VA/state plan. Provision of adequate substance use treatment services is cost-effective. Untreated alcohol or drug dependent people incur health care and other costs at nearly twice the rate of their age and gender peers; however this trend begins reversing at treatment initiation.^{32,33} Intensive outpatient treatment has been shown across studies to demonstrate the greatest cost-benefit ratio. Moreover, and of particular relevance to OEF-OIF veterans, age differences in costs support the value of early intervention

Include tobacco cessation programming within primary care and substance use treatment

As tobacco abuse and dependence are the most lethal and costly substance use disorders in the US, routine tobacco use screening and effective smoking cessation treatment will also promote health and well-being among this cohort of veterans. As with alcohol and other substance use disorders, the VA mandates evidence-based treatment for tobacco users.³⁴ The VA has been particularly successful making tobacco cessation resources available. By integrating a clinical assessment reminder into the computerized medical records system, more than 95% of VA users who are smokers are screened annually for tobacco use and advised to quit.³⁵ VHA primary care and mental health providers must make smoking cessation medications, such as nicotine replacement therapies, available to veterans who want to stop quitting. Furthermore, a toll-free

tobacco cessation support line (800.QUIT.NOW) is promoted and used throughout the VA system. In January 2006, the VA eliminated all copayments for smoking cessation counseling. The VA continues to expand services including telephone care for veterans willing to set a quit date with their primary care providers. Community providers could significantly improve OEF-OIF veteran care by assessing for tobacco use during routine exams and either mirroring these interventions or referring veterans using tobacco to the VA system for follow-up care as appropriate.

Provide integrated treatment for substance use disorders, PTSD, and TBI

Because of high rates of comorbid substance use, PTSD, and TBI expected in the OEF-OIF veteran cohort and the potential interactions between these problems, integrated treatments may provide better outcomes than treatment plans that address these problems separately and, typically, sequentially. A large body of evidence finds that untreated PTSD may adversely affect the treatment of substance use disorders (i.e. Brown et al, 1999 and Hien et al, 2000).^{36,37} Moreover, integrated therapy for substance use disorders and PTSD may improve outcomes of both disorders.^{38,39} No standardized or evidence-based treatment exists for treating all three conditions concurrently. Future investigations into their interplay and impact on treatment would advance the mental health field and veteran care.

Advance community partnerships with the DoD/VA continuum of care

Active Duty military members who separate from service and National Guard and Reserve service members who have returned from deployment are eligible for VA health care without copay for five years for any condition which their VA clinician deems likely to be related to their service in a combat area. Veterans whose medical problems are subsequently determined to be service-connected will continue to receive treatment without copay indefinitely. The VA, in collaboration with the DoD, has implemented outreach efforts to provide information about VA services to new veterans immediately prior to and following deployment and again 90-180 days after return from deployment as part of a routine Post-Deployment Health Reassessment (PDHRA).

While the DoD/VA care continuum provides a comprehensive range of substance use treatment and other medical services for military members and OEF-OIF veterans, partnerships between community health services and VA and DoD health care systems are still needed in order to maximize access to and quality of care for the men and women who have served our country. Notably, although family members of active component military members may obtain their medical services on base within the same facilities as do military members, the family members of Reserve component military members and veterans do not have this option. These divisions in the care of individual family members across systems pose an obstacle to integrated efforts to support the military member/veteran by

supporting his or her family. In addition, because of the powerful stigma associated with seeking mental health care in military settings,⁴ many OEF-OIF veterans and their family members seek care through community mental health clinicians, primary care providers, or clergy.⁴⁰ These formidable and persistent obstacles to integrated care could be addressed through interagency training, cooperation, and communication. When clinicians and administrators coordinate efforts across systems, they significantly improve the quality and availability of services. North Carolina has already taken the lead in developing this kind of DoD/VA state and community partnership and now serves as a model for other states.⁴⁰ Among the key elements of this system are the toll-free, 24-7 telephone-based NC CareLine accessible at 800.662.7030 (English/Spanish) or

877.452.2514 (TTY) and the web-based NC CareLink at <http://www.NCcareLINK.gov>. Both resources offer OEF-OIF veterans and their families easy access to a broad array of services including substance use services.

Taken together, these steps comprise a multisystem, interdisciplinary, public health approach to the substance use and mental health problems of OEF-OIF veterans, which is informed by research on their psychosocial needs and evidence-based approaches to their treatment. Such measures are necessary to ensure that veterans of our most recent wars will, along with their families, gain from what has been learned in our nation's experience with past generations rather than simply repeat those experiences. **NCMJ**

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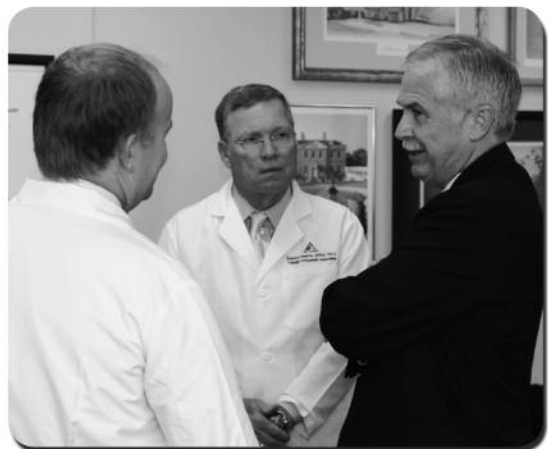
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