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Clinical Considerations in the Treatment of Substance Use Disorders with Veterans

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Abstract

This article addresses issues associated with the treatment of substance use disorders (SUD) in the U.S. veteran population. First, we examine special considerations regarding the assessment of alcohol and drug use in veterans. Second, we discuss current treatment approaches that have demonstrated efficacy in this population, with special consideration the issue of co-morbidity (especially SUD and Posttraumatic Stress Disorder). Third, we discuss two strategies to coordinate treatment of SUD: stepped care as a way to implement these treatments for SUD alone, and integrated treatment for SUD and co-morbid disorders. Finally, we discuss promising future directions for the treatment of SUD in the veteran population, including examination of mechanisms of behavior change, formal involvement of the veteran's family in treatment, and use of existing datasets.

Keywords

Veterans; Addiction; Treatment; Alcohol; Drugs; Substance use; Dependence; Abuse

Substance Use Disorders in the Veteran Population

Many veterans receive their care through the Veterans Health Administration (VHA), a healthcare system within the Department of Veterans Affairs (VA). Approximately 7.6 million veterans are enrolled in VHA care, and recent estimates suggest that over 625,000 veterans in the VHA have been diagnosed with an SUD (Dalton et al. 2004). An SUD is diagnosed when the individual meets criteria for abuse or dependence for alcohol or any other substance (except nicotine or caffeine, for the purpose of this review) as defined by the Diagnostic and Statistical Manual (DSMIV; American Psychiatric Association 1994).

This trend is especially problematic, as SUD is also prevalent in veterans who have served in current conflicts: Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). Although true prevalence of SUDs among all OEF–OIF veterans is unknown because only 40% seek VA health care, of those presenting to the VA, approximately 16% receive a provisional diagnosis of substance abuse, 4% of alcohol dependence, and 2% other substance dependence (Eggleston et al. 2009). Independent studies find that 33–56% of returning OIF/OEF veterans screen positive for hazardous/binge drinking, 15–22% for alcohol problems or a possible alcohol use disorder (Jacobsen et al. 2008). Heavy drinking and alcohol-related problems appear to be especially prevalent in younger service members who are returning from military combat deployments (Jacobsen et al. 2008). Approximately one quarter of all deployed service members are at risk for new-onset binge drinking following their return from Iraq or Afghanistan (Jacobsen et al. 2008), and violent combat experiences have been linked to increased risky behaviors such as alcohol use and physical and verbal aggression.

In light of the prevalence of SUD in the veteran population, this paper will discuss four areas of clinical concern and provide case examples. First, the paper will examine special considerations regarding the assessment of alcohol and drug use of veterans. Second, the paper will discuss the current recommended treatments that have demonstrated efficacy in this population, highlighting the issue of co-morbid disorders. Third, stepped care and integrated treatment is discussed as ways to systematically provide treatment for SUD and co-morbid disorders. Finally, we will discuss promising future directions for substance use disorders in veterans. To this end, the paper is intended as a combination of theoretical and practical information to help guide the difficult challenges inherent in treating SUD in the veteran population.

Assessment of SUD in Veterans

When addressing substance use in any population, it is important to assess the substance use and history of treatment successes and failures prior to commencing treatment. Working with veterans provides unique considerations and challenges.

One of the advantages of working with veterans is they may have been already assessed or treated by the VHA or while on active duty (with records kept by the National Personnel Records Center [NPRC]). Therefore, there may be a wealth of valuable information available to the practitioner that can inform treatment. The VHA has an extensive record keeping system (computerized patient record system, or CPRS), which allows practitioners to view all the data, from lab work to session notes, offering a valuable source of information when examining the etiology of the veteran's substance use. In addition, this system permits links to other organizations such as the Department of Defense (DoD). If a practitioner is working with the veteran outside the VHA system, he or she should encourage the veteran to obtain these records, which he/she can then share with current providers. Furthermore, the practitioner should have the veteran complete the required

releases of information in order to further coordinate care between the veteran's VHA and non-VHA providers.

Of course, issues may arise if the veteran is being treated by a variety of providers, especially those who can prescribe medications. If this is the case, s/he may under-report use to some providers, especially in instances when medication seeking is at play. Therefore, when trying to assess a veteran's previous and current substance use, the provider should access as much information as possible. If the veteran is resistant to attempts to contact previous or current providers, or permit access to records, this issue should be explored further. It may not be the case that medication seeking is the issue. A significant consideration when working with active military personnel seeking treatment for substance use regards their concerns that commanders or fellow soldiers will be informed of their problems. In this case, the provider and veteran can establish mutually agreed upon topics to be addressed and disclosed over the course of treatment, with the limits of confidentiality clearly defined.

Treatment of SUD with Veterans

To address SUD in the veteran population, the VHA and the DoD created clinical guidelines for treatment of SUDs (Management of SUD Working Group 2009). This report identified evidence-based treatments shown to be effective with veterans and other populations. Specifically, veterans who have not responded to advice from their practitioners are referred for specialty SUD treatment that can be conducted on an in- or out-patient basis. These include pharmacotherapy (a discussion of which is beyond the scope of this article) and psychosocial treatment approaches.

There are currently six manualized SUD treatments recommended following efficacy demonstrations in randomized clinical trials: behavioral couples therapy (BCT), cognitive-behavioral coping skills therapy, the community reinforcement approach, contingency management, motivation enhancement therapy, and twelve step facilitation (Management of SUD Working Group 2009). First, behavioral couples therapy (BCT; O'Farrell and Fals-Stewart 2006) is designed to reduce the substance use of the veteran as well as improve the marital relationship. This approach incorporates the partner to implement activities to improve communication, reinforce abstinence, and reduce the risk of relapse. Second, cognitive-behavioral coping skills therapy (e.g., Monti et al. 2002) focus on identifying and altering the thoughts and behaviors that continue to contribute to substance use. This is accomplished by educating the veteran about the cognitive-behavioral model, collaboration between the therapist and veteran to identify and try different thoughts and behaviors, and the use of behavioral rehearsal and role play. Homework assignments are often incorporated to encourage practice and learning of these new skills outside of the session (e.g., self-monitoring, identifying automatic thoughts). Third, the community reinforcement approach (Myers and Miller 2001) is a comprehensive cognitive-behavioral approach focused on aspects of the veteran's environment that supports or impedes the veteran's substance use. This approach uses many techniques (e.g., involving significant others, teaching new coping skills, conducting a functional analysis of the veteran's substance use) to help the veteran create a reinforcing sober lifestyle. Fourth, contingency management (Higgins et al. 2007) uses behavioral incentives (e.g., money, vouchers for goods) to maintain sobriety, which is measured by objective measures (e.g., toxicology screens). Fifth, motivation enhancement therapy (Miller 1995a, b) uses motivational interviewing principles as well as assessment and personalized feedback to assist the veteran in resolving ambivalence regarding their substance use. Finally, twelve-step facilitation (Nowinski 2003, 2006) is an approach geared towards initiating and/or increasing the veteran's engagement in Alcoholics Anonymous or other 12-step programs.

Although each of these six treatments have shown efficacy with a variety of substances, their delivery depends on a variety of factors including the veteran's motivation and current life situation, provider training and expertise, and availability of resources.

SUD and Co-Morbid Diagnoses

U.S. veterans, as compared to civilians, have high rates of mental health problems (e.g., Hankin et al. 1999; Kaplan et al. 2007). Younger veterans are at significantly higher risk for serious psychological distress and for co-occurring substance use disorders, as compared to older veterans (SAMHSA 2007). Among veterans of the wars in Iraq and Afghanistan, nearly one-third are at risk for mental health and/or psychosocial problems (Seal et al. 2007), and 20–42% are in need of mental health treatment (Milliken et al. 2007). Veterans are also at increased risk for suicide, as compared to the non-veteran general population (Kaplan et al. 2007). The most prevalent disorders among OEF/OIF veterans, besides substance use disorders, are post-traumatic stress disorder (PTSD), depression, generalized anxiety, and the “signature wound” of the Iraq/Afghanistan conflicts, traumatic brain injury (TBI) (Hoge et al. 2008; Tanielian and Jaycox 2008). Prevalence estimates of mental health problems largely depend on combat exposure, type and timing of assessment, baseline health status, with wide-ranging prevalence rates from 9 to 48% for PTSD and 5–38% for depression. In regards to treatment, co-occurring substance use and mental health disorders are associated with increased symptom severity and poorer treatment outcomes.

Some specific considerations will be provided regarding the treatment of co-morbid PTSD and SUD, given its prevalence in the veteran population. In the past 20 years, several treatments have been developed to address PTSD and SUD together. Perhaps the most disseminated is *Seeking Safety* (SS; Najavits 2002), which was the first integrated treatment for PTSD and SUD with published results. It is considered a “first-stage” treatment, and therefore focuses on emphasizing stabilization, teaching coping skills, and reducing self-destructive behaviors. The intervention was designed to be adaptable to a wide variety of settings and to meet the needs of each program. SS is largely a manualized CBT approach and includes 25 different topics (e.g., Coping with Triggers, Honesty, Asking for Help) applicable to both PTSD and SUD. Overall, reductions in PTSD symptoms and substance use have been reported in studies implementing *Seeking Safety* as a sole treatment in clinical settings with non-veteran women, women in a correctional facility, outpatient, urban, low-income women with full or partial PTSD and SUD, and adolescent girls. Research investigating SS with veterans is emerging and there has been some preliminary evidence for its effectiveness and with female homeless veterans, although a recent pilot trial with OEF/OIF veterans indicated significant difficulty with engagement and retention in treatment.

Strategies for Implementing SUD Treatments

SUD Alone

Given the numerous treatments available of differing intensity, one issue that arises is how to strategically implement treatments for veterans reporting SUD. In stepped care, also known as an adaptive intervention or dynamic treatment regime (Murphy et al. 2007a, b), assignment to different steps of care can be based on individual characteristics, past treatment failure, clinical judgment, and/or research. The term “stepped care” describes the way different interventions are linked together and the clinical guidelines used to make referrals. Specifically, individuals not responding to the initial level of care are then provided more intensive treatments. Thus, stepped care can be considered a dynamic, performance-based procedure: the individual who does poorly during or following the first step of treatment receives a more intensive level of treatment.

When properly implemented, stepped care can offer several advantages. First, it can reduce the negative effects of inappropriately assigned treatment. Second, it can conserve resources by assigning individuals only the amount of care they require. Third, the gradual intensification of treatment for non-responders increases the amount of contact with treatment providers, providing opportunities to implement treatment recommendations and identify areas of difficulty. Fourth, individualized treatments are likely to be better received than generic approaches, thus increasing compliance and satisfaction with care. Finally, the implementation of objective and appropriate decision rules permit the treatment of a wide range of symptoms.

Related to the concept of stepped care is the focus on how to “step down” treatment for SUD. Specifically, once the desired outcome is obtained (e.g., sobriety), it may not be clinically appropriate to stop treatment completely or resume a treatment schedule with long periods of time between appointments. For example, prompt mental health follow-up with veterans within 30 days of discharge was significantly related to fewer subsequent medical/surgical visits (Druss and Rosenheck 1997). Therefore, an approach called “extended monitoring” has been developed to prevent relapse following intensive treatment for SUD. A recent study (McKay et al. 2010) examined this approach with adults with alcohol dependence who had completed intensive outpatient therapy (IOP) found that continued monitoring and stepped care was an efficient and effective way to maintain gains made in SUD treatment during the 18 months following treatment.

Stepped care can be a useful heuristic to clinicians addressing SUD in veterans. Specifically, substance use can be assessed by providers and veterans exhibiting abuse or dependence are provided education and brief intervention to help them reduce or stop their use. Any of the previously mentioned treatments could be applied, given the expertise and confidence of the provider. Veterans that do not respond are then referred to specialized and more intensive SUD treatment, either within VHA or non-VHA. Once SUD is resolved, treatment can be stopped and the veteran’s substance use can then be monitored in subsequent interactions by healthcare providers. Stepped care is already being loosely implemented in the VHA system (Management of SUD Working Group 2009); however, the specific rules regarding when to step treatment up or down are not well defined.

SUD and Co-Morbid Disorders

Substance use disorders are often accompanied with other disorders. Therefore, the veteran’s co-morbidity should be considered when establishing a treatment plan. Traditionally, there have been two approaches to treating SUD and co-morbid disorders (Mueser et al. 2006). First, the *sequential* approach posits that substance use should be addressed first, with therapists often requiring some period of abstinence before addressing the co-morbid disorder. This approach tends to be ineffective, especially if the individual has used substances to cope with the emotions or stress associated with the comorbid disorder (e.g., flashbacks in PTSD, anxiety in GAD). Second, the *parallel* treatment approach recommends treating both SUD and the comorbid disorder at the same time, but typically by different providers. This approach also tends to be ineffective due to the amount of resources required as well as confusion on the part of the individual resulting from treatment strategies addressing different behaviors and symptoms (strategies that may conflict). The sequential and parallel approach to the treatment of SUD and comorbid disorders has been common among veterans being treated at VHA hospitals, which have clinics devoted to different diagnoses—substance abuse, PTSD, and general psychiatry. Therefore, a veteran could receive parallel treatment from these programs.

Given the limitations of the sequential and parallel approaches to treating co-morbid disorders, an *integrated* approach which addresses SUD and the co-morbid disorder

concurrently is consistently recommended by clinicians and researchers as more likely to succeed, more sensitive to patient needs, and more cost-effective. Moreover, patients often prefer simultaneous treatment of both disorders by the same providers. For example, the movement toward integrated treatment for PTSD and SUD is largely based on the recognition that substance use is often triggered by trauma-related symptoms (i.e. nightmares, hyperarousal). By addressing trauma in the context of substance use (or vice versa), patients often feel they are being heard and understood in a more comprehensive way. Accordingly, it is recommended that therapists frame substance use in terms of an avoidance and/or coping strategy and work with the veteran on alternative ways of coping with anxiety symptoms. It is also important to emphasize that continuing to use substances while in treatment may work against ultimate goals of anxiety reduction and processing of traumatic events.

Although the integrated treatment approach is promising, some caveats should be noted. First, the veteran's substance use should be monitored as much as possible, and the veteran's sobriety assessed throughout treatment. In the case of alcohol use, breathalyzers should be administered at the start of the session. Veterans should be discouraged from attending sessions intoxicated, and a plan to keep the veteran safe enacted in case he/she does present intoxicated.

Of particular importance is educating the veteran on blood alcohol levels and the amount of time it takes the liver to process alcohol. For heavier drinkers, it is possible that they may still be intoxicated when they present for a morning (or even afternoon) therapy session.

When faced with a veteran that insists on continuing to use substances while in treatment, he/she should also be educated about the likely decrease in effectiveness of psychotherapy that will result if he/she continues to use substances. For example, substance use, while often an attempt to combat insomnia, typically interferes with restful sleep, further resulting in deficits in learning and memory. Furthermore, care should be taken to recognize whether the use of substances directly interferes with the proposed MOBC. For example, in prolonged exposure for PTSD (PE; Foa et al. 2007), the hypothesized MOBC changing the fear structure created by the traumatic events. This process requires the veteran to discuss the traumatic event, and put him/herself in situations that are reminders of the trauma, through in vivo and imaginal exposure exercises. As a result, the memories and reminders of this event do not have the same emotional impact as they would have if avoidance of thoughts or triggers were continued. If substances are used during this treatment, especially to help the individual tolerate the emotional distress of the traumatic memories, then the substances may interfere with the habituation required to make PE effective. That said, there has been preliminary evidence demonstrating some improvements in PTSD and substance use following the administration of PE with individuals who were dependent on cocaine and alcohol.

Finally, treating a co-morbid disorder may lead to an increase in distress that may make substance use more appealing to the veteran. For example, veterans engaged in Cognitive-Behavioral Treatment for Insomnia (CBT-I; Perlis et al. 2006) will most likely experience daytime impairment and exhaustion when first engaging in sleep restriction (SR). SR is a process in which the veteran's time in bed (TIB) is limited, as are naps, in order to consolidate sleep. Early in this process, the veterans TIB may be 4–5 h, resulting in daytime sleepiness as the veteran re-trains him/herself to restrict sleep to certain times. As a result, during SR the veteran may be attracted to the use of stimulants (e.g., cocaine, amphetamines) to counter this daytime impairment. Therefore, a veteran's current and past substance use should be assessed and addressed prior to initiating treatment for any disorder.

Furthermore, the veteran should be provided a clear explanation of the possible short-term distress that can result from treatment and alternate coping strategies discussed.

Future Directions for SUD Treatment in Veterans

There are many developments underway that will improve our current assessment, treatment, and relapse prevention efforts with veterans with SUD.

Involvement of Significant Others in Treatment

Including family members (e.g. spouses/significant others, parents) in treatment for SUD and co-occurring disorders is increasingly recognized as a critical element for recovery. Literature supports the inclusion of a concerned significant other in treatment for SUD increase the probability that change will occur in an at-risk alcohol user while also aiding in treatment retention (O'Farrell and Fals-Stewart 2006). Social support, particularly support for abstinence from substance use has been shown to positively affect drinking outcomes, however heavy drinking social supports may negatively influence hinder drinking outcomes. Often, it is useful to invite family or significant others (with the veteran's permission) to a session or two early in treatment to provide psychoeducation about addiction and assess relationship functioning. Family members or partners can also provide valuable collateral information about the veteran's substance use and related consequences. Therefore, selection of appropriate social support members is important when considering incorporating significant others into treatment.

Use of Telehealth Technology to Assist with SUD Treatment

Telehealth technology has been made available to veterans in the VHA system (see Darkins et al. 2008 for a detailed description). Called Care Coordination/Home Telehealth (CCHT) this program provides a variety of devices to the veteran to use in his/her own home. These devices include videophones and video-telemonitors for face to face counseling or physical examinations, telemonitoring devices which can record self-report data on everything from mood to substance use, and biometric devices which can directly record biological data (e.g., blood sugar levels) or vital signs. The CCHT program was initiated between 2003 and 2007 with over 40,000 veterans, and continues to expand. To date, this technology has been implemented to help veterans with chronic diseases, and has also been adopted for alcohol use. Use of this technology may be very valuable in delivering primary or supplemental treatment for SUD in veterans. In addition, assessment and evaluation using telehealth may help reduce the frequency and severity of relapse through its incorporation into extended monitoring. Furthermore, the biological data and other information that could be collected by CCHT have remarkable utility in both SUD research (evaluation of treatment outcome) and clinical work (providing CCHT data in personalized feedback).

Use of Existing Data to Understand Relapse Processes and Circumstances Surrounding Relapse

The data provided by CCHT and CPRS, coupled with the fact that many veterans receive long-term care from VHA, provides researchers an opportunity to better understand the lifelong course of substance use and predictors of relapse. The entry of young soldiers into the system provides an unprecedented opportunity to have comprehensive and multi-faceted data from entry into treatment. One example of such research is the evaluation of CPRS charts to examine the outcomes of methadone maintenance. The research questions and their clinical utility will only become more sophisticated as the specificity of the data collected improves along with the complexity and flexibility of the statistical procedures used for analyses.

In sum, there are many unique issues for the treatment of SUD in veterans. In particular, coordination of services provided within the VHA, the likely presence of co-morbid disorders (particularly PTSD), and deciding which treatments to provide and when are ongoing considerations for providers working with veterans with SUD. Nonetheless, there have been considerable improvements in the assessment, treatment, and relapse prevention with this population over the past 20 years. Furthermore, the coordination of the myriad of treatments available has also been greatly improved through the study and implementation of stepped care and integrated treatment. Looking ahead, access to improved record keeping systems will greatly improve clinicians and researchers' understanding of how to identify and provide treatment to veterans with SUD. In addition, a continued reciprocal dialogue between those who work with veterans and those in the more general field of substance abuse treatment will continue to advance efforts to improve SUD treatment. These efforts are especially prescient, given the number of veterans who will continue to serve in Operation Enduring Freedom and Operation Iraqi Freedom and return home in need of services.

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