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Improving PTSD/Substance Abuse Treatment in the VA: A Survey of Providers

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We surveyed 205 Veterans Affairs (VA) staff on treatment of posttraumatic stress disorder (PTSD), substance use disorder (SUD), and the combination (PTSD/SUD). The survey was anonymous and VA-wide. PTSD/SUD was perceived as more difficult to treat than either disorder alone; gratification in the work was stronger than difficulty (for PTSD, SUD, and PTSD/SUD); and difficulty and gratification appeared separate constructs. Respondents endorsed views that represent expert treatment for the comorbidity; however, there was also endorsement of "myths." Thus, there is a need for more training, policy clarifications, service integration, and adaptations for veterans returning from Iraq and Afghanistan. Limitations are described. (Am J Addict 2010;19:257–263)

Posttraumatic stress disorder (PTSD) and substance use disorder (SUD) frequently co-occur, and are more challenging to treat than either alone.[1–3] Clients with PTSD/SUD have worse treatment outcomes and more psychiatric, medical, legal, and social problems than those with just PTSD or SUD.[3–5]

High rates of PTSD/SUD comorbidity are documented in both community[2] and veteran samples.[6–8] In 2008, 20% of Veterans Affairs (VA) patients with a diagnosis of PTSD also had SUD (Rosenheck, personal communication). Veterans from Iraq and Afghanistan are also demonstrating problems with PTSD and SUD: current PTSD is estimated at 20% in military troops[9] and 11% in veterans;[10] and current SUD is estimated at up to 21% in veterans seeking VA care.[11] Military deployment is a risk factor for both PTSD and SUD.[9,12,13]

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Staff working with PTSD/SUD clients may feel challenged by how best to engage and treat them. Most Afghanistan ("Operation Enduring Freedom"; OEF) and Iraq ("Operation Iraqi Freedom"; OIF) veterans do not access VA care. Among the 800,000 OEF/OIF veterans, only 37% have obtained VA health care of any kind since 2002.[11] These rates are far lower than the number needing help. OEF/OIF veterans have a high rate of problem drinking (33%).[14] Moreover, whereas 56% of those with PTSD accessed mental health services, only 18% of those with problem drinking did so. Studies have also documented increased domestic violence and poor functioning among veterans with comorbid PTSD/SUD.[15,16] There are now more women veterans than ever before, and they may be particularly underserved in VA substance abuse treatment programs.[17]

Currently, the VA healthcare system is widely viewed as one of the top U.S. healthcare systems after major "turnaround" initiatives to improve a much lower quality of care several decades ago.[18] Nonetheless, the VA is a massive system that requires on-going quality assessment, especially with the influx of new veterans.

The purpose of this project was to survey VA staff on their attitudes about treatment of PTSD/SUD, including strengths and weaknesses of programs, clinical dilemmas, engagement issues, workforce needs, and concerns particular to OEF/OIF veterans. We also sought to analyze variability in attitudes based on professional characteristics. Our goal was to understand how VA staff perceive the current quality of care for PTSD/SUD, but may also have implications for community-based programs, which are seeing increasing numbers of veterans. Early treatment may lead to less decline in functioning than occurred in previous generations of veterans.[19]

METHOD

Survey data were collected online November, 2007 to July, 2008 from 205 participants. All were VA clinicians or program managers currently working with veterans who had PTSD/SUD. We sought respondents from all professional backgrounds (eg, substance abuse counselors, psychologists, psychiatrists, social workers, and rehabilitation counselors) and all level of care (eg, inpatient, outpatient, day program). Inclusion criteria were: currently on staff at VA, and currently in contact with PTSD/SUD clients. To preserve anonymity, recruitment was conducted across the country and as broadly as possible so that at no point could the study team identify who filled out the survey. Because of this anonymity, the VA Boston IRB exempted the project from full IRB review. Members of a national VA workgroup on PTSD/SUD were asked to distribute the survey URL via e-mail to as many VA clinicians and program managers as they could. Survey recipients were encouraged to further forward the e-mail to others, who could also forward it on, thus using a "snowball" procedure. No one could ever know the complete list of who was invited to fill out the survey nor who chose to complete it. The survey was conducted until we met our target of at least 200 respondents.

The survey[20] was a one-time assessment to obtain quantitative and qualitative information related to PTSD/SUD treatment. It was adapted from an earlier community study[21] to add items relevant to VA. It had 37 items in three parts. In Part 1 respondents rated their difficulty and gratification in areas relevant to PTSD/SUD treatment. Part 2 asked about current treatment issues and policies for PTSD/SUD. Part 3 obtained professional and personal background information, such as work setting, training, theoretical orientation, and job satisfaction. Quantitative questions were scaled 1–5 (1 = "not at all"; 5 = "greatly"). Qualitative questions were open-ended (eg, "How would you like to see services improved for PTSD/substance abuse clients?").

RESULTS

The results below are statistically significant unless indicated otherwise.

Participant Characteristics

Our sample comprised 37.6% doctoral level psychologists ($n = 77$), 30.7% social workers ($n = 63$), 10.7% certified substance abuse counselors ($n = 22$), 9.3% psychiatrists ($n = 19$), 6.8% nurses ($n = 14$), 6.3% master's level psychologists ($n = 13$), 4.9% bachelor's level professionals ($n = 10$), 2.9% vocational or rehabilitation counselors ($n = 6$), 1% pastoral counselors ($n = 2$), and .5% nonpsychiatrist physician ($n = 1$). Respondents reported spending an average of 14.18 hours treating SUD (SD = 17.16), 8.64 hours treating PTSD alone (SD = 15.04), 10.36 hours treating co-occurring PTSD and SUD (SD = 12.55), and 7.82 hours treating other clients (SD = 13.79). Most respondents (81.5%, $n = 167$) conducted psychosocial clinical services; 12.2% ($n = 25$) conducted medical (eg, psychiatric) treatments; 30.2% ($n = 62$) were administrators or directors of programs that provided clinical services; 20.5% ($n = 42$) were researchers; 27.3% ($n = 56$) were clinical supervisors; 15.1% ($n = 31$) were trainees; 2% ($n = 4$) were administrators of programs that did not provide clinical services. Note that respondents could endorse more than one professional category. Respondents also responded to two satisfaction questions, scaled 1–5 ("not at all" to "greatly"): "How much do you like your work?" (mean = 4.61; SD = 0.56); and "How effective do you feel as a clinician?" (mean = 4.11; SD = 0.63).

Most respondents reported that the primary focus of their setting was mental health (41.1%, $n = 83$); followed by substance abuse (27.2%, $n = 55$), dual diagnosis (23.8%, $n = 48$), medical (2%, $n = 4$), and other (5.9%, $n = 12$). On level of care, most reported working in outpatient programs ($n = 124$, 60.5%), followed by residential treatment (17.6%, $n = 36$), intensive outpatient programs (eg, day treatment programs) (11.7%, $n = 24$), inpatient programs (1.5%, $n = 3$), and 18 respondents (8.8%) did not complete this item. For type of VA setting, most reported working in a VA hospital (77.1%, $n = 158$), followed by a community based outpatient clinic (CBOC; 12.2%, $n = 25$), specialty care (3.9%, $n = 8$), or Vet Center (3.4%, $n = 7$) and 7 respondents (3.4%) did not complete this item. On theoretical orientation, they were given a list of major theoretical orientations and asked to rate how much they adhered to each, totaling 100%. Cognitive-behavioral therapy (CBT) was highest (m = 51.04, SD = 27.61), followed by "other" (m = 23.88, SD = 23.88; eg, eclectic, humanistic, mindfulness-based, and motivational interviewing); then psychodynamic/psychoanalytic (m = 21.19, SD = 21.19), 12-step (15.99, SD = 22.36), systems (10.42, SD = 13.24), and "no mode" (1.05, SD = 19.89).

Difficulty and Gratification in Treating PTSD/SUD

Table 1 presents respondents' ratings of their degree of difficulty treating this population. PTSD/SUD was rated as more challenging to treat than either PTSD ($t = -10.50$, $df = 185$, $p < .0001$) or SUD ($t = -10.03$, $df = 197$, $p < .0001$). Ratings for PTSD versus SUD were not significantly different.

Table 2 presents respondents' degree of gratification in treating this population. They reported that PTSD was more gratifying to treat than SUD ($t = 5.82$, $df = 183$, $p < .0001$), and PTSD/SUD ($t = 2.36$, $df = 181$, $p < .05$). PTSD/SUD was seen as more gratifying than SUD ($t = -5.62$, $df = 192$, $p < .0001$).

We also compared their levels of difficulty and gratification. In each of three comparisons, respondents reported significantly more gratification than difficulty: gratification

TABLE 1. Difficulties treating PTSD and/or SUD

	*m**	SD	*n*
Overall Difficulty			
PTSD/SUD	3.16	1.15	202
SUD alone	2.47	1.14	201
PTSD alone	2.44	0.99	190
Specific Difficulties Treating PTSD/SUD			
Clients' self-harm (eg, suicidality, cutting, burning)	3.32	1.10	198
Clients' potential for violence	3.31	1.04	201
Lack of providers who are skilled at working with this dual diagnosis	3.05	1.28	190
Clients' dependency (eg, needing a lot of care)	3.00	1.07	204
Domestic violence	2.91	1.15	193
Case management (finding services, referrals, etc.)	2.79	1.21	196
Homelessness	2.79	1.24	200
Confusion about what to do (eg, dilemmas, challenges)	2.76	0.92	201
Trying to calm patients (eg, when agitated, upset, or dissociating)	2.75	1.00	204
Exposure to painful details of trauma	2.64	1.07	200
Clients' intense emotions (eg, anger, sadness)	2.62	1.06	204
Military sexual trauma	2.61	1.04	190
Your own emotions toward these clients (eg, frustration, disappointment)	2.45	0.86	202
Lack of knowledge about best practices for these clients	2.40	0.99	197
Setting boundaries with these clients	2.38	1.03	204

*Ratings scaled 1–5, from "not at all" to "greatly."

TABLE 2. Gratifications treating PTSD and/or SUD

	*m**	SD	*n*
Overall Gratification			
PTSD alone	4.37	0.78	188
PTSD/SUD	4.22	0.88	197
SUD alone	3.90	1.03	201
Specific Gratifications Treating PTSD/SUD			
Helping clients work on PTSD recovery	4.56	0.7	200
Teaching clients new coping skills	4.49	0.71	204
Helping clients work on substance abuse recovery	4.28	0.87	203
Obtaining insight about yourself through the work	3.65	1.17	198
Other	3.50	1.82	16
Listening to clients' trauma histories	3.39	1.12	204

*Ratings scaled 1–5, from "not at all" to "greatly."

was higher than difficulty in treating SUD ($t = -11.87$, $df = 199$ $p < .0001$), PTSD ($t = -18.42$, $df = 186$, $p < .0001$), and PTSD/SUD ($t = -9.64$, $df = 196$, $p < .0001$).

Tables 1 and 2 list specific issues in treating PTSD/SUD. "Most difficult" were clients' self-harm, potential for violence, a lack of providers skilled at working with this dual diagnosis, and clients' dependency. "Least difficult" were setting boundaries, lack of knowledge about best practices, and providers emotions toward these clients (eg, frustration). "Most gratifying" were helping clients work on PTSD, teaching new coping skills, and helping clients work on substance abuse recovery. "Least gratifying" were listening to trauma histories, obtaining insight about oneself through the work, and "other." The latter were write-in responses and included client anger, those unmotivated to change, and coordinating PTSD/SUD care.

Intercorrelations of difficulty and gratification ratings were explored. We found a low negative intercorrelation of difficulty and gratification within each of the three areas, suggesting that difficulty and gratification were largely perceived as separate constructs: for PTSD, $r = -.26$ ($p < 0001$); for SUD, $r = -.25$ ($p < .0001$), and PTSD/SUD, $r = -.13$ ($p = .06$). Intercorrelations across the three areas indicated that difficulty treating PTSD versus SUD was moderately correlated ($r = .34$, $p < .0001$). Correlations were highest between PTSD/SUD and PTSD ($r = .59, p < .0001$), and PTSD/SUD and SUD ($r = .65, p < .0001$). Gratification in treating PTSD was not highly correlated with either SUD ($r = .13$, $p = .16$) or SUD/PTSD ($r = .25, p < .01$).

Extreme Respondents

The subset who reported the greatest difficulty treating PTSD/SUD (five on the 1–5 scale; "high difficulty group") were compared to those who reported less difficulty (four or below on the scale, "lower difficulty group"), using independent samples *t*-tests. Twenty-seven respondents (13.4%) were in the high-difficulty group. *T*-tests revealed the high difficulty group having greater difficulty not only for PTSD/SUD, but also for PTSD, SUD, and 12 of the 14 difficulty areas in Table 1 (all except "lack of knowledge of best practices," and "lack of skilled providers"). They were also more likely to endorse that a mental health degree was needed to treat PTSD ($M = 4.11$ vs. $M = 3.62$; $t = 2.64$, $df = 1.96$, $p < .01$) and that for clients to improve they needed to be committed to abstinence or substance use reduction at the start of treatment ($M = 3.86$ vs. $M = 3.51$; $t = -3.09$, $df = 193$, $p < .01$). However, they did not differ on any gratification variables, suggesting that those who found the work most difficult did not necessarily find it more or less gratifying.

Professional Characteristics

We next evaluated whether perceptions of difficulty and gratification in working with PTSD/SUD differed by professional characteristics. Several variables were significant. First, we found some differences based on *professional setting* (mental health, substance abuse, dual diagnosis, medical, or other). The ANOVAs for both difficulty ($F(4,194) = 2.67$, $p < .05$) and gratification ($F(4,189) = 2.89$, $p < .05$) were significant. Post-hoc comparisons using the least-significant-difference test showed that respondents in mental health settings perceived PTSD/SUD work as more difficult than those in dual diagnosis settings ($M = 3.39$ vs. $M = 2.89$, $p < .05$); and less gratifying than those in SUD ($M = 4.01$ vs. $M = 4.41$, $p < .05$) or dual diagnosis settings ($M = 4.01$ vs. $M = 4.44$, $p < .05$). Second, ANOVAs on respondents' *profession* were significant for difficulty ($F(5,172) = 2.61$, $p < .05$) but not gratification. Post hoc comparisons revealed that both PhDs and social workers reported more difficulty than substance abuse counselors (PhDs $M = 3.38$ versus $M = 2.30$, $p < .01$; social workers $M = 3.16$ versus $M = 2.30$, $p < .05$); PhDs also reported more difficulty than nurses ($M = 3.38$ vs. $M = 2.64$, $p < .05$). Finally, for the full sample, the more hours respondents worked with SUD clients, the less difficulty they found working with PTSD/SUD ($r = -.25$, $p < .01$).

Nonsignificant characteristics in relation to difficulty/gratification were: *level of care* (eg, outpatient, intensive outpatient, inpatient, residential, telephone contact only, or peer support only); *type of VA setting* (VA hospital, Vet Center, CBOC, or specialty program); *job* (eg, clinician, program manager); *hours working with various patient populations* (PTSD, SUD, both, other); *theoretical orientation*; and *job satisfaction* ("How much do you like your work?" and "How effective a clinician do you feel you are?").

Views on Treatment

Table 3 shows means that were mid-point or higher (3 or above on the scale), indicating that respondents had strong optimism and interest in working with comorbid PTSD/SUD (eg, the first several rows). However, there was also considerable endorsement of what might be termed "myths" in working with this population: "A clinician must have a degree in mental health to treat PTSD"; "Clients need to be committed to abstinence or reduction of substance use at the start of treatment"; and "Before working on PTSD, clients need to. . .Attain abstinence from substances." Yet, they also endorsed items that represent state-of-the-art comorbidity treatment principles, including openness to alternative recovery options (harm reduction, controlled use); the use of integrated and parallel treatment; the use of both present- and past-focused PTSD models (but with the former more highly endorsed); and allowing clients to keep attending treatment even if they relapse. Also they reported that their programs have clear policies on substance use. Interestingly, most believed that if PTSD improves, the SUD will improve, but not vice versa.

Participant Comments

Most respondents added write-in comments; major themes are below and a detailed summary is presented in the Supporting Information. In terms of systems issues, they reported frustration with a lack of integration of PTSD and SUD treatment within VA, as well as policies that sometimes decrease the quality of care (overly strict admission criteria, territoriality among providers, and abstinence-only policies). They perceive that within VA too little attention is paid to SUD in comparison to PTSD, and also that greater attention is needed for noncombat PTSD (military sexual trauma, childhood trauma). Numerous comments related to negative or ignorant attitudes toward PTSD/SUD clients by some staff, suggesting that more clear and positive messages about these clients may be needed. Respondents also noted a lack of sufficient staff, overbooking of providers, the concern that financial compensation related to the PTSD diagnosis may impact recovery, and a strong need for more training. Yet overall, they reported strong satisfaction and perceived efficacy in their role as clinicians, and various positive aspects of the work.

Respondents also named client-level challenges: self-harm, potential for violence, use of substances around young children, excessive organization of identity around the PTSD diagnosis, lack of motivation to work on substance abuse recovery, anger, and traumatic brain injury. They also described ways that PTSD/SUD treatment may need to be adapted for OEF/OIF veterans, including the following:

- Developmental stage-of-life issues (eg, they may be living with their parents, embarking on school and career transitions, marrying and divorcing)
- SUD recovery may be more challenging due to peer influences and young age
- The need for creative engagement strategies
- Generational and cohort differences (eg, traumatic brain injury, greater reliance on electronic communication, and the all-volunteer nature of the current military)
- Rapid intervention for PTSD/SUD to prevent the chronic course observed in older veterans
- Recognition that redeployment concerns may impact care.

DISCUSSION

We surveyed 205 VA staff on how to improve care for veterans with PTSD/SUD, tapping respondents from various professional disciplines, treatment settings, and work roles. To our knowledge, this study is the first of its kind within VA. We explored difficulties and gratifications in

TABLE 3. Views on treatment*

	m	SD	*n*
Clients with PTSD/SUD can recover	4.58	0.70	200
PTSD/SUD is a significant issue for OEF/OIF veterans	4.58	0.72	197
I would like more training on PTSD/SUD	4.06	1.17	201
Treatment of OEF/OIF veterans needs to be adapted, compared to prior generations of veterans	3.92	1.04	145
In my program, we have clear policies on substance abuse	3.85	1.21	190
A clinician must have a degree in mental health to treat PTSD	3.82	1.28	201
For clients with PTSD/SUD, present-focused PTSD treatment is a good option	3.70	1.11	195
Harm reduction is an acceptable goal rather than abstinence	3.64	1.25	200
Clients need to be committed to abstinence or reduction of substance use at the start of treatment	3.35	1.49	198
Controlled substance use is an acceptable goal rather than abstinence	3.10	1.37	199
For clients with PTSD/SUD, past-focused PTSD treatment is a good option	3.07	1.11	194
Clients with PTSD/SUD need to attend 12 step groups	2.57	1.28	197
Before working on PTSD, clients need to:			
Reduce substance use	3.59	1.37	194
Stabilize	3.47	1.33	195
Attain abstinence from substances	2.75	1.47	198
Complete a SUD treatment program	2.33	1.31	200
Attend 12-step groups	2.26	1.33	199
How helpful are the following treatment models:			
Integrated treatment (treat PTSD and SUD at same time by same clinician)	4.34	0.95	195
Parallel treatment (one clinician or program treats PTSD, another SUD)	3.10	1.15	180
Sequential treatment†	2.79	1.18	186
If a client has a substance relapse, it is important to:			
Allow the client to keep attending the program	3.87	1.23	196
Insist the client attend 12-step groups	2.15	1.28	200
Remove the client from the program for some period of time	1.70	1.04	196
If PTSD improves, is SUD likely to improve, worsen, or stay the same?	% "yes"		*n*
Improve	94.9		174
Worsen	2		4
Stay the same	9.2		18
If SUD improves, is the PTSD likely to improve, worsen, or stay the same?	%		*n*
Improve	40.8		80
Worsen	49.5		97
Stay the same	9.7		19

*Scaling of all items is 1–5, except for percents as noted.

† In a follow-up item, 53.2% ($n = 109$) endorsed that substance use should be treated first, 6.3% ($n = 9$) that PTSD should be treated first.

treating veterans with PTSD/SUD, systems issues, workforce needs, and the relationship between participant characteristics and survey results. The survey was anonymous and VA-wide. We used a survey previously used in a non-VA community clinician sample, and are thus able to compare results with that as well.[21]

Several major findings emerged. PTSD/SUD was rated as more difficult to treat than either disorder alone, but PTSD versus SUD were not significantly different. Yet in terms of gratification in the work, PTSD was more gratifying than the other two domains (SUD, PTSD/SUD); and PTSD/SUD was more gratifying than SUD. The overall pattern thus appears to be that the dual diagnosis is the most challenging; and that the presence of SUD makes the work less gratifying. This lower gratification in treating SUD was consistent with provider comments expressing frustration with patient relapse and a sense that many patients had low motivation to stop using substances. Yet, importantly, we also found gratification higher than difficulty within each of the three areas when analyzed separately (eg, SUD gratification was higher than SUD difficulty; PTSD gratification was higher than PTSD difficulty; etc.). These findings speak to the overarching gratification in the work, despite its challenges. Next, we found a low negative correlation between difficulty and gratification within each of the three areas, suggesting that difficulty and gratification are largely separate constructs. Finally, we found PhDs, social workers, and those in a mental health setting reported

the work more difficult than substance abuse counselors, nurses, and those in dual diagnosis or SUD settings. We did not find any relationship between difficulty (or gratification) and professional setting, level of care, type of job, hours working with particular patient populations, theoretical orientation, or satisfaction as a clinician. In all, our results mirror those from the study of non-VA community clinicians,[21] suggesting that it is the nature of PTSD/SUD clients, rather than setting, that largely determines providers' response.

A new area of the survey related to PTSD/SUD treatment issues. We found strong optimism and interest in working with PTSD/SUD, as well as endorsement of several state-of-the-art treatment concepts for comorbidity. These included openness to harm reduction and controlled substance use; integrated and parallel treatment; both present- and past-focused PTSD models (but with stronger ratings of the former); and allowing clients to keep attending treatment even if they relapse. However, there was also considerable endorsement of what might be termed "myths" in working with this population: "A clinician must have a degree in mental health to treat PTSD"; "Clients need to be committed to abstinence or reduction of substance use at the start of treatment." Thus, VA clinicians have a notable level of sophistication in their understanding of treatment of PTSD/SUD, yet also some education needs based on the "myths" they endorsed. Finally, most believed that if PTSD improves, SUD improves, but not vice versa. This is an accurate reflection of current research and highlights the complexity of comorbidity treatment—improvement in one area is not necessarily associated with improvement in the other.[22,23]

Study limitations include the large number of statistical tests and the use of a survey not yet psychometrically validated. We obtained a broad range of respondents, but the "snowball" recruitment yielded a convenience sample that may be biased or unrepresentative. We did not explore client characteristics of the respondents, nor actual clinical outcomes. Nonetheless, this project can help guide improvement of care for VA PTSD/SUD clients.

CONCLUSIONS

PTSD/SUD represents an area of challenge for VA care, especially with the influx of new veterans. Clinicians report significant difficulties, but also notable gratifications from the work, and overall the latter was more prominent than the former. SUD was associated with greater perceived difficulty than PTSD. Some clinician characteristics were associated with greater difficulty, and these staff may need additional training. VA systems and policies may benefit from refinement in areas such as integration of care, greater resources, attention to the interplay between PTSD and SUD recovery, adaptation of treatments for new veterans, and more research. Although solutions may not be easy, increased focus on these areas may help to improve the quality of care for PTSD/SUD.

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Declaration of Interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

REFERENCES

1. Brady KT. Comorbid posttraumatic stress disorder and substance use disorders. *Psychiatr Ann*. 2001;31:313–319.
2. Kessler RC, Sonnega A, Bromet E, et al. Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry*. 1995;52:1048–1060.
3. Ouimette P, Brown PJ. *Trauma and Substance Abuse: Causes, Consequences, and Treatment of Comorbid Disorders*. Washington, DC: American Psychological Association Press; 2002:209–226.
4. Najavits LM, Weiss RD, Shaw SR. The link between substance abuse and posttraumatic stress disorder in women: A research review. *Am J Addict*. 1997;6:273–283.
5. Norman SB, Tate SR, Anderson KG, et al. Do trauma history and PTSD symptoms influence addiction relapse context? *Drug Alcohol Depend*. 2007;33:25–32.
6. Engel CC, Ursano JR, Magruder C. Psychological conditions diagnosed among veterans seeking Department of Defense care for Gulf War–related health concerns. *J Occup Environ Med*. 1999;41:384–392.
7. Goldberg J, Eisen SA, True WR, et al. A twin study of the effects of the Vietnam conflict on alcohol drinking patterns. *Am J Pub Health*. 1990;80:570–574.
8. The Iowa Persian Gulf Study Group. Self-reported illness and health status among Gulf War veterans. A population-based study. *JAMA*. 1997;277:238–245.
9. Hoge CW, Castro CA, Messer SC, et al. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *N Engl J Med*. 2004;351:13–22.
10. Seal KH, Bertenthal D, Miner CR, et al. Bringing the war back home mental health disorders among 103,788 US veterans returning from Iraq and Afghanistan seen at Department of Veterans Affairs facilities. *Arch Intern Med*. 2007;167:476–482.
11. VHA Office of Public Health and Environmental Hazards. *Analysis of VA Health Care Utilization Among US Global War on Terrorism (GWOT) Veterans: Operation Enduring Freedom/Operation Iraqi Freedom*. Washington, DC: 2008.
12. Bray R, Hourani L. Substance use trends among active duty military personnel: Findings from the United States Department of Defense Health Related Behavior Surveys, 1980–2005. *Addiction*. 2007;102:1092–1101.
13. Jacobson IG, Ryan MA, Hooper TI, et al. Alcohol use and alcohol-related problems before and after military combat deployment. *JAMA*. 2008;300:663–675.
14. Erbes C, Westermeyer J, Engdahl B, et al. Post-traumatic stress disorder and service utilization in a sample of service members from Iraq and Afghanistan. *Mil Med*. 2007;172:359–363.

15. Ouimette P, Moos RH, Finney JW. PTSD treatment and 5-year remission among patients with substance use and posttraumatic stress disorders. *J Consult Clin Psychol*. 2003;71:410–414.
16. Bell NS, Harford T, McCarroll JE, et al. Drinking and spouse abuse among U.S. Army soldiers. *Alcohol Clin Exp Res*. 2004;28:1890–1897.
17. Weller LA. Group therapy to treat substance use and traumatic symptoms in female veterans. *Federal Practitioner*. 2005;22:27–38.
18. Longman P. *Best Care Anywhere: Why VA Healthcare is Better than Yours*. Sausalito, CA: PoliPoint Press; 2007.
19. Fontana A, Rosenheck R. Treatment-seeking veterans of Iraq and Afghanistan: Comparison with veterans of previous wars. *J Nerv Ment Dis*. 2008;196:513–521.
20. Najavits LM. *Clinician Survey on PTSD and Substance Abuse-VA Version*. Unpublished measure, Boston: Massachusetts; 2007.
21. Najavits LM. Clinicians' views on treating posttraumatic stress disorder and substance use disorder. *J Subst Abuse Treat*. 2002;22:79–85.
22. Najavits LM, Harned MS, Gallop RJ, et al. Six-month treatment outcomes of cocaine-dependent patients with and without PTSD in a multisite national trial. *J Stud Alcohol Drugs*. 2007;68:353–361.
23. Trafton JA, Minkel J, Humphreys K. Opioid substitution treatment reduces substance use equivalently in patients with and without posttraumatic stress disorder. *J Stud Alcohol*. 2006;67:228–235.

Supporting Information

Additional Supporting Information may be found online in Appendix S1: Qualitative Comments.

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