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To Reduce or Abstain? Substance Use Goals in the Treatment of Veterans With Substance Use Disorders and Comorbid PTSD

Brian E. Lozano, PhD^{1,2}, Daniel F. Gros, PhD^{1,2}, Therese Killeen, PhD², Maryanne Jaconis, MA², Francis M. Beylotte III, MA², Stephen Boyd, MA², and Sudie E. Back, PhD^{1,2}

¹Ralph H. Johnson Veterans Affairs Medical Center, Charleston, South Carolina

²Medical University of South Carolina, Charleston, South Carolina

Abstract

Background—Posttraumatic stress disorder (PTSD) and substance use disorders (SUD) frequently co-occur. Previous research demonstrates the utility of goals in attaining improved SUD outcomes, however, no previous studies have examined goal choices in the context of integrated treatment for comorbid PTSD and SUD.

Objectives—The present study investigated correlates of treatment entry goals to either reduce or abstain from substance use.

Methods—Participants ($N = 60$) were treatment-seeking veterans with current PTSD and SUD. Participants completed self-report and clinician-rated measures of substance use, PTSD, and affective symptoms as part of a larger randomized controlled trial.

Results—Half (30/60) of participants endorsed a treatment entry goal to reduce substance use (reducers). Compared to participants who endorsed a treatment entry goal of abstinence (abstainers), reducers were significantly younger, more likely to be employed, more likely to have served in recent military conflicts (Operations Enduring/Iraqi Freedom), and endorsed significantly fewer symptoms of alcohol dependence.

Conclusions and Scientific Significance—The findings demonstrate clinically relevant differences based on treatment entry goals, suggesting that individuals are often able to choose conceivably appropriate treatment goals based, most notably, on the severity of their SUD. Collaboratively engaging patients in establishing treatment goals that are consistent with their beliefs and desires in conjunction with empirical findings is particularly relevant in the context of treatment for SUD and PTSD where many patients are ambivalent about treatment and attrition is common.

Address correspondence to Dr. Lozano, Mental Health Service 116, Ralph H. Johnson VAMC, 109 Bee Street, Charleston, SC 29401. Brian.Lozano@va.gov.

Declaration of Interest

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

INTRODUCTION

Goal setting techniques may increase motivation and commitment for behavior change,¹ and a number of studies have demonstrated the utility of abstinence or reduced use treatment goals in attaining improved substance use outcomes.^{2,3} However, a lack of evidence clearly supporting either abstinence or reduced use as a superior treatment goal (ie, leading to more favorable substance use outcomes) persists, and many patients maintain treatment goals that differ from abstinence oriented programs.⁴ Understanding factors associated with treatment goal choice is important as they may influence treatment retention and outcomes. While there is some uncertainty regarding consistent predictors of goal choice and for whom abstinence versus reduced use goals are best suited, less chronicity of substance use problems, lower levels of dependence and severity of negative consequences, and less exposure to treatment services are associated most consistently with the choice of a reduced/moderate use goal and substance use outcomes consistent with those goals.^{2,3,5}

Less is known, however, regarding substance use goals among patients with SUD and comorbid psychiatric conditions. Posttraumatic stress disorder (PTSD) is one of the most common comorbid disorders among treatment-seeking SUD patients,⁶ and the presence of SUD complicates the course of treatment for PTSD.⁷ Although abstaining from alcohol and drugs would likely assist efforts in PTSD treatment,⁶ patients may be reluctant to pursue abstinence if they are using substances to self-medicate PTSD symptoms. To date, no previous studies have examined substance use goal choices in the context of integrated treatment for SUD and co-occurring PTSD. Given the illicit nature of drug use, it is reasonable to expect controversy surrounding the practice of offering anything other than abstinence as a viable treatment goal. It should be noted that despite the legal issues surrounding drug use there remain a considerable number of individuals who continue to use illicit substances and for whom the goal of reduced use would represent a step toward reducing negative consequences associated with substance use consistent with a harm reduction approach to the treatment of addiction.⁸

The present study investigated correlates of substance use goal choice among veterans enrolled in a randomized controlled trial (RCT) designed to investigate the efficacy of an integrated psychosocial treatment for co-occurring SUD/PTSD among veterans. Based on the SUD literature, we hypothesized that participants with less chronicity of substance use, fewer symptoms of dependence, and fewer previous contacts with substance abuse treatment services, would be more likely to choose reduced use than abstinence as their initial treatment goal.

METHODS

Subjects

Participants were treatment-seeking veterans ($N = 95$) recruited from treatment clinics at a large Veterans Administration Medical Center, through newspaper and internet advertisements, and flyers posted at local mental health clinics and colleges. Data were collected as part of the baseline assessment of a National Institute on Drug Abuse (NIDA)-

sponsored RCT investigating the efficacy of an integrated psychosocial treatment for co-occurring SUD/PTSD as compared to SUD treatment alone.⁹

Inclusion criteria for the present study included: (1) veteran, reservist, or member of the National Guard; (2) 18–65 years old; (3) meet DSM-IV¹⁰ diagnostic criteria for current PTSD (ie, past 6 months); (4) meet DSM-IV diagnostic criteria for a current alcohol dependence (ie, past 6 months); (5) report use in past 90 days; and (6) speak fluent English. Individuals with drug dependence, in addition to alcohol dependence were also included. Exclusion criteria included: (1) current psychotic disorder or bipolar disorder; (2) current suicidal or homicidal ideation and intent; (3) current eating disorder or dissociative identity disorder; (4) participation in other ongoing PTSD or SUD treatment; and (5) significant cognitive impairment.

Procedures

The baseline assessment involved both clinician-administered and self-report measures of demographics, diagnostics (Clinician Administered PTSD Scale [CAPS¹¹] and Mini International Neuropsychiatric Interview [MINI¹²]), substance use (Addictions Severity Index – Lite [ASI-Lite¹³] and Timeline Follow-Back [TLFB¹⁴]), and PTSD and other associated symptoms (PTSD Checklist – Military [PCL-M¹⁵], Beck Depression Inventory-2nd Edition [BDI-II¹⁶], and the State-Trait Anxiety Inventory [STAI¹⁷]). The number of alcohol or drug dependence criteria met on the MINI (range: 0–7; higher scores indicate more severe substance dependence) was used as an index of severity of alcohol and drug dependence. Participants were asked to specify their personal substance use treatment goal as either “to not use substances at all” (ie, abstinence) or “to reduce substance use,” (ie, reduced use). If a participant was dependent on more than one substance, goal choice was assessed in reference to his/her self-identified primary substance of dependence. While the treatment program embraced a patient-centered approach in establishing SUD treatment goals, abstinence was presented as the safest choice. Ultimately, participants were allowed to come to their own conclusions regarding treatment goals, regardless of substance (ie, alcohol or illicit drugs). All study procedures were IRB-approved and all participants provided written informed consent before any study procedures were conducted. Participants were compensated \$60 for completing the baseline assessment.

RESULTS

Data from the baseline assessment were included in the analyses. Of the 95 participants that completed the baseline assessment, 35 were excluded for not meeting study inclusion criteria (eg, no current diagnosis of PTSD or SUD). Of the remaining participants ($N = 60$), 30% (18/60) had both alcohol and drug dependence. Of these, 17% (3/18) identified a substance other than alcohol as their primary substance of dependence. Participants ($N = 60$) were separated into two groups based on their stated SUD treatment entry goal: (1) abstain from substance use (abstainers; $N = 30$) or (2) reduce substance use (reducers; $N = 30$). All demographic findings for the two groups are presented in Table 1.

A series of two-variable χ^2 tests for categorical variables, and one-way analyses of variance (ANOVA) test for continuous variables were conducted to investigate group differences in

demographic variables. In comparison to abstainers, reducers were significantly younger ($M = 34.0$; $SD = 9.6$ versus $M = 46.0$; $SD = 9.0$), more likely to be employed (50.0% versus 16.7%), and more likely to have served in OEF/OIF (90.0% versus 43.3%; $ps < .01$). These variables were entered as covariates in the ANCOVA for severity of SUD and PTSD symptoms to better control for group differences in demographics; however, the limitations of such an approach to control for real group differences are acknowledged.¹⁸ Due to the overlap with age and service in OEF/OIF, only age was entered as a covariate. Bonferroni corrections were applied to reduce the chance of making a Type 1 error in each set of analyses. Based on the fourteen tests, the significance level with a Bonferroni correction was set to $p = .003$. Measures of SUD, PTSD symptomatology, and affective symptoms are presented in Table 1. Reducers evidenced less severe symptoms of alcohol dependence than abstainers, as evidenced by endorsement of significantly fewer dependence criteria on the MINI ($p = .002$). No other significant group differences were observed ($ps > .120$).

DISCUSSION

Findings from the present study indicate that half of the participants seeking treatment for comorbid PTSD and SUD identified reduced use, rather than abstinence, from alcohol and drugs as their goal for treatment. Participants who chose reduced use as their SUD goal were significantly younger by approximately 12 years, more likely to be employed, and more likely to have served in the recent OEF/OIF conflicts as compared to abstainers. Multivariate results indicated that severity of alcohol dependence remained a significant predictor of goal choice, above and beyond that predicted by employment functioning, age, and OEF/OIF service.

The findings regarding age and employment status are consistent with previous studies in which individuals with controlled drinking goals have similarly been characterized as being younger and more socially stable compared with those choosing an abstinent goal.^{5,19} Age and service era are likely collinear, with OEF/OIF veterans being younger than veterans of other service eras. Perhaps younger individuals and those with employment perceived their use as less severe and were therefore less interested in abstaining from substances.

The results regarding severity of dependence are consistent with previous findings on goal setting in the SUD literature and extend this research to veterans with comorbid SUD/PTSD. The association between severity of alcohol dependence and goal choice is supported by the notion that the greater an individual's substance dependence, the less likely it is that they will be able to moderate their use.²⁰ The current findings, although preliminary, suggest that individuals are often able to choose conceivably appropriate treatment goals based on their severity of substance dependence, and this is particularly relevant in light of the fact that many community SUD treatment programs continue to follow an abstinence-based treatment approach.²¹ The perspective among many PTSD treatment providers has similarly been restrictive in terms of substance use, generally endorsing the approach that patients need to abstain from substance use prior to engaging in trauma work.²² The unfortunate consequence of restrictive approaches is that patients, many of whom are already ambivalent about behavior change, may be dissuaded from pursuing SUD/PTSD treatment or otherwise discontinue treatment prematurely. Findings from the present study indicate that a significant

proportion of individuals seeking treatment for comorbid SUD/PTSD do not endorse abstinence from substances as a treatment goal, suggesting a need for a more patient-centered approach to treatment. Given the utility of personal choice in goal setting to foster motivation and commitment to goals,¹ one clinical implication of the current findings is to collaboratively engage patients in establishing treatment goals consistent with their beliefs and desires. Collaboratively working with patients to set treatment goals can foster increased engagement and retention in treatment,²³ something particularly relevant in the context of treatment for SUD and PTSD where attrition from treatment is common.^{24,25}

There are several limitations of the present study that warrant attention. For example, the assessment of substance use goals was limited to two choices, abstinence or reduced use, and did not elicit additional information regarding reasons for choosing a particular goal. While the treatment program embraced a patient-centered approach in establishing SUD treatment goals, abstinence was presented as the safest choice for participants enrolling in the RCT; therefore, it is possible that rates of non-abstinence (ie, reduced use) goals were minimized in this study. Lastly, participants in the current study endorsed highly similar levels of PTSD, anxiety, and depression symptoms which may have made it difficult to detect differences in goal preference based on these indices.

This study represents a first step in investigating treatment goal choice among individuals seeking treatment for comorbid SUD/PTSD. The findings may be useful in matching goals and related treatments to patient preferences. Future research should investigate the effects of substance use treatment goals on substance use behaviors and PTSD symptom outcomes, as well as investigate the nature of changes in treatment goals over time. Empirical findings regarding treatment outcomes may further assist patients in making informed decisions regarding appropriate and effective treatment goals.

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TABLE 1

Comparison of demographics and clinical characteristics among veterans with treatment entry goals to abstain or reduce substance use

Scale	Abstain	Reduce	F/ χ^2	p	ηp^2
Age	46.0 (9.0)	34.0 (9.6)	24.9	.000	.293
Sex (male)	86.7%	90%	0.2	.688	n/a
Race (white; black)	63.3%; 33.3%	66.7%; 33.3%	1.0	.599	n/a
Employment (unemployed)	83.3%	50%	7.5	.006	n/a
Marital status (single; married; divorced)	23.3%; 20.0%; 56.7%	36.7%; 26.7%; 36.7%	2.5	.292	n/a
Years of education	14.0 (1.8)	13.6 (1.8)	0.8	.385	.012
Service branch (Army; Navy; Marines)	66.7%; 13.3%; 13.3%	50.0%; .0%; 23.3%	10.7	.057	n/a
Theatre (Gulf War; OEF/OIF; Both)	6.7%; 40.0%; 3.3%	3.3%; 80.0%; 10.0%	15.4	.009	n/a
Comorbid drug dependence (yes)	40.0%	20.0%	2.9	.091	n/a
MINI-Alcohol dependence severity	6.1 (1.2)	4.4 (1.5)	10.8	.002*	.205
ASI-Alcohol subscale	.49 (.24)	.70 (.67)	.2	.688	.017
ASI-Drug subscale	.07 (.10)	.05 (.08)	1.5	.253	.128
TLFB-Alcohol days using	27.9 (22.5)	35.4 (18.3)	1.5	.230	.026
TLFB-Stimulants days using	1.1 (2.5)	.3 (1.0)	2.5	.121	.044
TLFB-Opiates days using	.3 (1.1)	1.6 (8.1)	1.9	.177	.033
TLFB-Marijuana days using	3.5 (17.4)	7.8 (19.4)	.2	.655	.004
ASI-Years of any use	20.7 (11.1)	14.8 (8.9)	.1	.806	.001
ASI-Previous treatment for use	5.5 (8.1)	1.3 (2.4)	2.2	.141	.038
ASI-Psychiatric subscale	.99 (1.08)	1.04 (.70)	.1	.759	.010
CAPS	80.7 (17.7)	83.9 (17.4)	.5	.491	.009
PCL-M	64.0 (10.0)	61.5 (10.2)	1.6	.212	.028
BDI	28.4 (12.8)	27.9 (12.3)	.1	.750	.002
STAI	57.1 (11.3)	56.2 (9.6)	.8	.370	.015

Means (standard deviations) are presented in the abstain and reduce columns. OEF, Operation Enduring Freedom; OIF, Operation Iraqi Freedom; MINI, Mini International Neuropsychiatric Interview; ASI, Addictions Severity Index; TLFB, Timeline Follow Back; Days using substances, total days used in the past 60 days; CAPS, Clinician Assessed PTSD Scale; PCL, PTSD Checklist; BDI, Beck Depression Inventory; STAI, State Trait Anxiety Inventory.