Group Therapy to Treat Substance Use and Traumatic Symptoms in Female Veterans

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Women are underdiagnosed and underserved in substance abuse treatment programs. This author offers possible reasons—and suggests potential remedies.

In the treatment of substance use disorders (SUDs), women tend to be underdiagnosed and underserved.[1] Reasons include such access barriers as child care concerns, financial difficulties, the social stigma attached to women who drink alcohol,[2] and a tendency by women to underreport drinking problems.[3] In addition, physicians often fail to assess and identify their female patients' alcohol- and drug-related problems.[1,4]

In such male-dominated environments as VA hospitals and clinics, it may be even more difficult to identify and treat these women than it is in facilities serving the general public.[5] A national review of VA patient data revealed that, of 854 female veterans diagnosed with alcohol-related disorders, less than half (47%) received formal treatment for these conditions.[6] Hoff and Rosenheck found that, though the proportion of female patients using VA mental health services (3.95% in a sample of 70,979) was virtually identical to the proportion of women in the general VA population (4.02%), women were significantly less likely than men to receive treatment for SUDs (16.3% versus 71.2%, respectively).[7]

This article suggests possible reasons for the underutilization of VA SUD services by women and describes a small study designed to test the hypothesis that a type of specialized services would make SUD treatment more effective for female veterans. It also discusses implications for practice in the treatment of women with SUDs and includes recommendations for further study.

WHY WOMEN SHUN SUD SERVICES

Researchers have speculated that women's underutilization of VA SUD services may be due in part to dissatisfaction with the confrontational character of the services offered in most VA treatment centers and to discomfort with aggressive male patients.[5] The prevalence of sexually related trauma among women who are substance abusers also may explain why many avoid the male-dominated VA treatment centers.[8]

The comorbid diagnosis of substance abuse and posttraumatic stress disorder (PTSD) occurs at a relatively high rate.[9] Breslau and colleagues found that 43% of community members with PTSD also had a substance-related disorder, and women were twice as likely as men to have this dual diagnosis.[10]

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Among women with SUDs who were assessed for other Axis I disorders, 30% to 70% have been reported to have a comorbid diagnosis of PTSD.[8,11–14]

A review of medical literature on female veterans yields prevalence rates neither for PTSD nor for a comorbid diagnosis of PTSD and SUD. Fontana and Rosenheck gathered data from 327 women who were treated in a VA clinical treatment program for women with stress disorders.[15] Of this group, 63% reported having experienced physical or sexual harassment during military service, and 43% reported rape or attempted rape while in the service. Survey studies indicate that as many as 93% of the female veterans who have sought treatment for stress-related problems experienced sexual stress while in the military.[15] And of those who have not sought treatment for stress-related symptoms, anywhere from 26% to 76% experienced sexual stress while in the military.[16,17] In a study of 28 female veterans who participated in outpatient treatment for PTSD or substance abuse at one VA facility, Davis and Wood found that 88.9% of the women who had ever abused substances also reported a history of sexual abuse.[18] They found that 53.5% of the substance abusing women met the criteria for PTSD.

Such literature points to a need for specialized treatment services for female veterans with SUDs in the VA and suggests that SUD treatment for female veterans would be more effective if it also addressed issues of traumatic stress. In addition, some existing treatments for either disorder alone actually may increase the likelihood of symptomology in the other disorder.[19] For example, PTSD exposure therapy could increase the likelihood of a substance abuse relapse, while some aspects of a standard 12-step program (such as the emphasis on individual powerlessness and character defects) have been difficult for women with PTSD. Thus, an integrated treatment approach may be more appropriate for women with both an SUD and traumatic symptoms.

TESTING THE THEORY

In the current study, which was conducted at the VA medical center (VAMC) in Oklahoma City, OK, it was hypothesized that female veterans would remain longer in a treatment program designed specifically for women with an SUD who also have a history of traumatic stress than in a generic SUD treatment program or a mixed-gender treatment program. This would be evident in comparisons between study duration of SUD treatment and duration of SUD treatment in both the records of female veterans admitted to the Oklahoma City VAMC's substance abuse treatment center (SATC) in past years and in the participants' prior treatment histories. It was further hypothesized that participants who completed the treatment protocol would: reduce their use of alcohol or other substances; report a decrease in anxiety, depression, and trauma-related symptoms; and experience an increase in self-efficacy, as measured by preenrollment and postenrollment scores on the Self-Efficacy Scale.[20]

STUDY METHODS

Initially, 16 female veterans were recruited from the Oklahoma City VAMC's SATC. Of these 16, 11 agreed to come in for the initial interview and six of them enrolled in the treatment program. Of the five who were interviewed but did not participate, two said they had no current interest in stopping their substance use, one said that obtaining treatment for her medical problems was a greater priority, one said that she was doing well and did not need to participate in another recovery group, and one became unavailable for unknown reasons.

Initially, a financial incentive was offered to those who completed the program. But since there were, ultimately, only six participants, all six were told at the outset that they would be offered the same remuneration whether or not they completed the program. To be included in the study, participants had to: (1) meet the SUD criteria currently or be in early SUD remission and (2) report a history of traumatic events.

Five of the six participants were white and one was Native American. One was fully employed, one was self-employed, one was unemployed, and three received partial or full disability compensation. Four women listed their substance of choice as alcohol; one of those women also listed marijuana as a frequently used substance. One woman used both methamphetamine and cocaine intravenously. One woman was dependent on narcotics, stimulants, benzodiazepines, and marijuana.

Four of the women met the criteria for a diagnosis of chronic PTSD, while two did not report symptoms for criteria B (which calls for the traumatic event to be relived repeatedly in one of a variety of ways, such as remembered painful images, recurring nightmares, dissociative episodes or flashbacks, or intensive psychologi-

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cal discomfort in the presence of phenomena that symbolize the trauma).

Two of the women met the criteria for borderline personality disorder, one of whom also met the criteria for a diagnosis of major depressive disorder. Two women met the criteria for a diagnosis of dysthymia, one of whom also met the criteria for avoidant personality disorder. Another woman without dysthymia met the criteria for avoidant personality disorder, and one woman met the criteria for histrionic personality disorder. Reported sources of trauma included: long-term, repeated, childhood sexual abuse; severe physical and sexual abuse by a spouse or partner; rape during adolescence; rape while in the military; and sexual harassment while in the military (Table 1).

Each participant took part in a structured clinical interview at preenrollment and postenrollment, completed alcohol and drug usage questionnaires, and completed the following paper-and-pencil instruments: the Self-Efficacy Scale,[20] the Beck Depression Inventory-II,[21] the Spielberger State-Trait Anxiety Inventory Form Y,[22] the Profile of Mood States,[23] the Automatic Thoughts Questionnaire (ATQ),[24] and the Trauma Symptom Inventory (TSI).[25]

We used a case study design consisting of only one experimental condition—the use of group therapy to treat substance abuse and comorbid trauma symptoms in women veterans—and no control group. The group therapy treatment, which employed the empirically based *Seeking Safety* treatment manual developed by Najavits,[26] was designed to help these veterans reduce their use of substances and the symptomology of traumatic stress. The treatment protocol was a 25-session cognitive-behavioral therapy (CBT) program, administered over 13 weeks and designed to treat women with a dual diagnosis of substance abuse and PTSD.

To support participants' efforts to find new, sober friends, counselors encouraged them to maintain attendance at 12-step programs as an adjunct to this program. (All were counseled on how to use such programs most effectively—reframing such concepts as powerlessness and emphasizing the voluntary nature of personal inventories.) Two of the women also attended classes in the standard mixed-gender SATC intensive outpatient treatment program (IOP) and one of the women was enrolled in the methadone maintenance program.

Two female, doctoral-level psychologists trained in the delivery of CBT programs provided treatment. Both facilitators had worked at the Oklahoma City VAMC through postdoctoral fellowship training programs, had been trained in PTSD treatment programs at other VA facilities, and had experience in treating substance abuse.

DURATION OF TREATMENT DOUBLED

All six of the female veterans (100%) who began the treatment program completed it, attending an average 72% of the sessions. This compares favorably with the completion histories of the five participants who had attended an SUD program previously (Table 2). The first hypothesis—that female veter-

Table 1. Sources of trauma for the six participants

Patient no.	Sources of trauma				
	Childhood sexual abuse	Partner abuse	Military sexual harassment	Military rape	Adolescent rape
1	X	X	X		
2	X		X		
3	X	X			
4			X	X	
5		X	X		
6			X		X

ans would remain longer in an SUD treatment program specifically designed to address a history of traumatic stress—was thus affirmed both through comparisons with participants' prior treatment histories and through comparisons with Oklahoma City VAMC records, which indicated that, of the 34 women who made contact with the SATC between 1999 and 2001, only 36% completed the program.

At least in part, we attribute the high completion rates of the participants to the exclusion of male veterans from this program. Participation in an entirely female SUD program was a markedly different experience of SUD treatment for these women. Their 100% completion rate stands in sharp contrast to that of women enrolled in previous VA SUD programs,[7] including the Oklahoma City VAMC's SATC, and it far exceeds that demonstrated historically by the participants themselves.

SUBSTANCE USE REDUCED

The second hypothesis predicted that the participants who completed the treatment protocol would reduce their use of alcohol or other substances. Four of the six participants (67%) reported a reduction in their use of substances or abstinence from substance use over the course of the program, and the two women who reported substance use at program termination had reported a reduction in substance use during much of the program, which suggests that their usage at program termination may have reflected anxiety about ending the therapy protocol.

Of the four women whose drug of choice was alcohol, one remained in remission throughout the program. One woman was abstinent throughout the three-month program but lapsed into daily use again during the week the program terminated. One woman lapsed four times during the program but, over the course of the program, her typical alcohol consumption during a binge dropped from more than a quart of vodka to one pint of vodka, which is the total amount she consumed during each of the final two of these four episodes. At program termination, she was abstaining from alcohol entirely. One woman had two lapses during the program but was abstaining from alcohol at program termination. Three of these four women (75%) either continued alcohol abstinence or reduced the quantity and frequency of their alcohol use.

The woman who used marijuana daily in addition to alcohol abstained from marijuana through the completion of the treatment protocol. The woman who used intravenous methamphetamine and cocaine reported abstinence throughout the program. The woman who used narcotics, stimulants, benzodiazepines, and marijuana and participated in a methadone maintenance program reduced her use of substances throughout the program (as indicated by self-report and regular urine toxicology screening required by the methadone maintenance program) until the week before program termination when her use sharply increased.

Table 2. SUD* program completion histories of the six participants

Patient no.	No. of previous enrollments	No. of previous completions
1	4	2
2	5	0
3	1	0
4	0	0
5	1	1
6	1	0

*SUD = substance use disorder.

ANXIETY, DEPRESSION, AND TRAUMATIC SYMPTOMS

The third and fourth hypotheses predicted that the participants would report a decline in anxiety, depression, and traumatic symptoms, as well as an increase in self-efficacy. Although the group scores of the six participants indicated a trend toward these hypotheses, none of the preenrollment to postenrollment score changes were significant when analyzed using a paired-samples t test. This was most likely due to the small sample size and the substantial variance represented therein.

One of the participants produced scores that increased from 16 at preenrollment to 139 at postenrollment. She reported during the termination interview that the therapy program had com-

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Table 3. Comparison of psychological symptom inventories[20–25] administered before program enrollment and at program termination to participants who were abstaining from substance use at the time of the termination interview (n = 4)

Measure	Preenrollment		Postenrollment		*t* test value	Two-tailed significance
	Mean	Standard deviation	Mean	Standard deviation		
General Self-Efficacy Scale[20]	52.75	9.03	58.25	12.68	1.34	.273
Social Self-Efficacy Scale[20]	16.75	4.19	18.25	2.50	0.63	.576
Beck Depression Inventory[21,*]	25.75	7.76	8.25	8.77	–2.78	.069
Spielberger State-Trait Anxiety Inventory, Form Y[22,*]	48.25	5.06	62.25	11.33	2.37	.098
Profile of Mood States (POMS) Anger[23]	9.50	13.20	3.25	5.85	–0.90	.434
POMS Confusion[23]	12.33	0.238	5.67	2.31	–1.00	.423
POMS Depression[23]	22.50	21.49	11.75	10.34	–1.21	.315
POMS Fatigue[23]	17.00	4.55	11.75	10.97	–0.93	.420
POMS Tension[23]	13.00	8.64	7.75	5.56	–0.77	.500
POMS Vigor[23]	11.00	6.78	13.25	11.56	0.53	.630
Automatic Thoughts Questionnaire[24,*]	87.75	36.40	39.50	20.29	–2.65	.077
Trauma Symptom Inventory[25,*]	147.00	50.60	96.25	23.43	–2.54	.085

*Difference between preenrollment and postenrollment scores approached significance.

pelled her to think about issues from her childhood sexual abuse that she had tried to keep blocked out of her consciousness. Individual differences such as these become more pronounced in small groups.

Symptom reduction was somewhat more significant when results were analyzed only for the four women who were abstaining from substance use at the time of the termination interview (Table 3). The reduction in preenrollment to postenrollment scores approached significance on the Beck Depression Inventory,[21] the TSI,[25] and the ATQ,[24] self-report measures indicating trends in reduction of depression and negative automatic thoughts. Anxiety symptoms, however, tended to show an increase that approached significance, as seen in the score changes on the Spielberger State-Trait Anxiety Inventory, Form Y.[22]

During the termination interview, the women indicated that they were feeling more anxious because they were worried about controlling both substance use and symptoms of PTSD after the program terminated. It should be noted that five of the participants were addressing traumatic symptoms for the first time and, in such cases, it's common to experience an increase in anxiety before learning effective coping strategies.[27]

STUDY LIMITATIONS

It's not possible to generalize the findings of this very small study to the entire population of veterans who struggle with the comorbid diagnoses of substance abuse and PTSD or a history of trauma. The study was limited further by the general lack of verification of participants' reports of substance use. The decision was made not to require the participants to provide urine samples for toxicology screening because the group met after normal business hours and arranging for such screening at those hours would have been complicated and costly.

Another limitation of this study is the lack of comparison provided between the study group and waitlist groups or groups being treated for SUD and trauma as separate disorders, which was a function of the primary investigator's time limitations. This study was designed as a pilot project and had to be proposed, developed, and completed within the primary investigator's postdoctoral fellowship year. The purpose of publishing the results of such a small study is to encourage clinicians within the VA and other programs who seek to develop effective programs for female veterans, a group that has been underserved historically.

RECOMMENDATIONS FOR FURTHER STUDY

The focus of this study was to determine whether addressing the specific needs of female veterans—by using single-gender groups and treating both SUD and traumatic symptoms together—could improve treatment outcomes for the female participants. The results show a positive trend. I would recommend that more research be conducted in this area, using larger population samples and incorporating comparison groups.

The therapeutic approach of this treatment protocol was weighted in the direction of substance abuse reduction, with a concurrent emphasis on treating trauma symptoms. During the program and subsequent analysis, however, the question arose as to whether women who had never received treatment for their original trauma should have concurrent individual therapy to address trauma issues specifically. Some of the women expressed anxiety because they were dealing with their traumatic memories for the first time and the group program was not designed to address their individual trauma histories. The cofacilitators came to believe that the participants would have benefited from participation in individual therapy that addressed their individual traumatic histories while they participated in the integrated program.

The IOPs offered at VA facilities throughout the United States have been successful in helping thousands of veterans with SUDs make changes in their lives. The results of this small study suggest to those who develop substance abuse treatment programs for female veterans that they might consider incorporating an exclusively female trauma treatment therapy program within a standard IOP psychoeducational program. I would further recommend including individual therapy so that the treatment of both substance use and posttraumatic stress may be maximized. ●

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