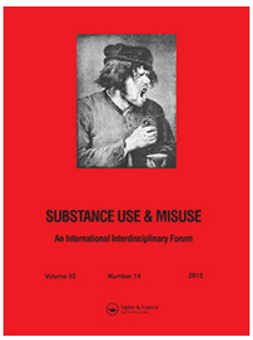

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ORIGINAL ARTICLE

How Do Females With PTSD and Substance Abuse View 12-Step Groups? An Empirical Study of Attitudes and Attendance Patterns

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Background. **Self-help groups are beneficial for many people with addiction, predominantly through 12-step models. Yet obstacles to attendance also occur.** ***Objectives.*** **We explored attendance patterns and attitudes toward self-help groups by 165 outpatient females with co-occurring posttraumatic stress disorder (PTSD) and substance use disorder (SUD), the first study of its kind.** ***Methods.*** **Cross-sectional self-report data compared adults versus adolescents, and those currently attending self-help versus not attending. We also explored attendance in relation to perceptions of the PTSD/SUD relationship and symptom severity.** ***Results.*** **Adults reported higher attendance at self-help than adolescents, both lifetime and currently. Among current attendees, adults also attended more weekly groups than adolescents. Yet only a minority of both age cohorts attended any self-help in the past week. Adults perceived a stronger relationship between PTSD and SUD than adolescents, but both age groups gave low ratings to the fact that self-help groups do not address PTSD. That item also had low ratings by both those currently attending and not attending self-help. Analysis of those not currently attending identified additional negative attitudes toward self-help (spirituality, addiction as a life-long illness, sayings, and the fellowship). Symptom severity was not associated with attendance, but may reflect a floor effect. Finally, a surprising finding was that all-female groups were not preferred by any subsample.** ***Conclusions/Importance.*** **Creative solutions are needed to address obstacles to self-help among this population. Addressing trauma and PTSD, not just SUD, was valued by females we surveyed, and may be more helpful than all-female groups per se.**

Keywords PTSD, substance abuse, 12-step groups, self-help, attitudes, females

Twelve-step self-help groups are one of the most common resources for recovery from substance use disorder. Alcoholics Anonymous (AA) is the most well-known 12-step group and, from its start in 1935, has grown to over two million members world-wide across 170 countries (Alcoholics Anonymous, 2013). Indeed, membership has increased steadily over the past 40 years (Donovan, Ingalsbe, Benbow, & Daley, 2013). There are also numerous 12-step groups for addictions of all kinds, such as Gamblers Anonymous, Overeaters Anonymous, and Sex Addicts Anonymous. The range of spin-off groups has become remarkably broad, with groups such as Clutterers Anonymous and Underearners Anonymous (Wikipedia, 2014).

Twelve-step groups have been studied primarily in relation to substances, with consistent positive findings (Donovan et al., 2013; Pagano, White, Kelly, Stout, & Tonigan, 2013; Tonigan, Toscova, & Miller, 1996). Yet repeated concerns have been raised about obstacles to 12-step attendance. Most people with addiction do not attend 12-step groups, despite the fact that they are free and exist in many geographic areas. Perceived difficulties include issues such as their spiritual focus; the assumption that addiction is a life-long disease; the emphasis on groups, which can be challenging for people with social phobia; and the predominance of men at meetings (Donovan et al., 2013; Najavits, 2002).

Aside from these general obstacles, there have been questions about whether some populations may have particular difficulty with 12-step groups—such as women, minorities, youth, and people with comorbid mental illness. Such subgroups may feel outnumbered at meetings or may feel marginalized due to their life experiences. Thus, specialized meetings have arisen for women, young people, some ethnic and racial minorities, lesbian/gay/bisexual/transgendered (LGBT), and the mentally ill (the latter with groups such as "Double Trouble" and "Dual Disorders Anonymous" groups). There

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have also been reworking of the 12-steps, such as steps for women (Kasl, 1992) and Native Americans (Travers, 2009).

One important population that has received little attention in relation to 12-step groups, despite its importance, is people with co-occurring posttraumatic stress disorder (PTSD). PTSD co-occurs frequently with substance use disorder (SUD), gambling disorder, and other addictive behavior (Najavits, Meyer, Johnson, & Korn, 2011; Ouimette and Read, 2014). The two disorders also impact each other over time, with each typically making the other worse, in a downward spiral (Najavits, Weiss, & Shaw, 1997; Najavits, 2014). Various treatment options have been developed for the comorbidity over the past two decades (Najavits and Hien, 2013), including, recently, the first pilot study of a peer-led option (Najavits et al., 2014).

Twelve-step models, which are the most widely accessible and free option for addiction, do not directly address trauma or PTSD. This is likely due to the historical development of AA, which arose in an era with little focus on trauma. The 12 steps do not focus on harm done *to* the addict, such as trauma, but rather just on harm the addict has done toward self and others. Thus, it has been unclear whether people with comorbid PTSD and addiction would find 12-step groups appealing. Some of the 12 steps could be perceived negatively by trauma survivors. For example, Step 1, "We admitted we were powerless over our addiction. . ." may be at odds with the empowerment that is emphasized as helpful for trauma survivors (Najavits, 2002). Steps 4–9 focus on the addict's shortcomings and do not address harm done to the addict: "Admitted. . .the exact nature of our wrongs", "Were. . .ready to have God remove these defects of character," "Made a list of all persons we had harmed". Also, many trauma survivors are women and the predominance of males at 12-step meetings may be intimidating to them, especially if they suffered interpersonal violence by males. Trauma survivors may avoid social interactions (especially large groups), may have difficulty trusting others and talking about their past, and may have lost faith in a higher power, thus further making self-help group attendance potentially problematic. The 12-step emphasis on the role of substance use as the primary cause of an individual's current difficulties may differ from a trauma survivor who views her PTSD symptoms as primary.

However, there are also compelling reasons to believe that 12-step groups can be healing for people with PTSD. Such groups can provide a welcoming community to help counter the isolation and stigma that are common in trauma. The openness and acceptance of 12-step groups can mitigate secrecy and shame. The groups' spirituality and sense of purpose can counteract hopelessness. Thus, various writers have stated that self-help group attendance may be a helpful component of aftercare for people with PTSD and SUD (Brown, 1994; Evans & Sullivan, 1995; Satel, Becker, & Dan, 1993), although even early on it was suggested that adaptations might be needed (Brown, 1994).

We know of no studies that have directly addressed 12-step attitudes and attendance among females with PTSD/SUD. There have been studies of male veterans with PTSD/SUD such as the research of Ouimette and colleagues (Ouimette, Moos, & Finney, 2000). However, male veterans' response to 12-step groups may be very different than community-based females. Thus, we sought to explore several key topics in relation to females with PTSD/SUD and self-help groups: (1) attendance patterns; (2) attitudes toward such groups; and (3) beliefs about the linkages between PTSD and SUD. In addition, we compared adults versus adolescents and those currently attending self-help groups versus not attending, as these subsamples may differ in their results. We also evaluated whether addiction and mental health symptom severity might help explain attendance versus nonattendance at self-help groups. We did not have a priori hypotheses on the direction of expected results as this is the first study we know of to explore this set of topics in this population.

METHODS

Participants

We used data from four datasets, all of which were originally collected with IRB approval from McLean Hospital, and on which the first author was either the principal investigator (studies #1–3 below) or co-investigator (study # 4 below). For the current paper, IRB approval for secondary data analysis was obtained in April, 2014 from Partners Healthcare System which is the current IRB of record for McLean Hospital. All four studies had rigorously diagnosed samples with current PTSD and current SUD, using DSM-IV criteria. The four studies were: (1) a pilot study of 32 adult women funded by the National Institute on Drug Abuse (NIDA; #DA-09400; Najavits, Weiss, Shaw, & Muenz, 1998); (2) a study of 34 adolescent girls funded by the National Institute on Alcohol and Alcoholism (#R21 AA-12181; Najavits, Gallop, & Weiss, 2006); (3) a study of 97 women funded by NIDA (#DA-086321; Najavits, Sonn, Walsh, & Weiss, 2004); and (4) a study of 62 women, comparing those with PTSD/SUD to those with PTSD alone funded by the Falk Foundation (Najavits, Weiss, & Shaw, 1999), from which we used only the co-morbid portion of the sample. For all studies that had data at multiple timepoints, we used only baseline data, thus using a cross-sectional design for this paper. All samples were community-based outpatients. In all three adults studies, all of the women met current criteria for substance dependence, the most severe form of SUD; and in the adolescent study, 94% had current substance dependence. All studies included both alcohol and drug use diagnoses. The average age for the adult samples ranged from 35.9 ($SD = 8.53$) to 38.17 ($SD = 8.56$); and for adolescents was 16.06 ($SD = 1.22$). The final sample size for this paper, $n = 165$, reflects those for whom data was available on either one or both of the two key measures in this paper: the self-help measure ($n = 126$) and/or the attitudes toward PTSD/SUD measure ($n = 165$), each described below. The measures were missing on some

participants due to lack of completion or, in some cases, entering the study prior to a measure being added to the assessment battery.

Measures

Diagnoses of current PTSD and SUD were obtained from the Structured Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 1996). The SCID was administered by assessors who had a degree in mental health (social work or psychology) and were trained on the measure using methods per the NIDA Collaborative Cocaine Study (Crits-Christoph et al., 1997). For self-help attitudes and attendance, the Modified Weekly Self-Help Questionnaire was used (MWSHQ; Weiss and Najavits, 1994). That measure was modified from the original Weekly Self-Help Questionnaire (WSHQ) to include questions related to PTSD. The original WSHQ had already shown strong internal consistency and has been used in other studies (Weiss et al., 1996; Weiss et al., 2005). All items from the MWSHQ that were used in this paper are listed in Tables 1 and 2. The MWSHQ items in this study had several formats: yes/no (e.g., have you attended a self-help group in the past week?); numeric (e.g., how many self-help groups have you attended in the past week); and Likert (e.g., rate how much you agree with the following statement. . .). "Self-help" in the measure refers to 12-step groups and non-12-step groups with the latter including Rational Recovery, for example. Non-12-step groups are referred to as "non-spiritual" per Tables 1 and 2. We also analyzed the Questionnaire on Attitudes toward PTSD-SUD (Najavits, 1997), for both adults and adolescents, with all items listed in Table 3. Finally, for the three adult studies, we also had the Addiction Severity Index (McLellan et al., 1992) and the Brief Symptom Inventory (Derogatis, 1983), and we used data from these in relation to our self-help questions.

Data Analysis

Data were converted to *z*-scores as needed when scaling was not consistent across measures. We used descriptive statistics and independent-samples *t*-tests or chi squares to compare subsamples (e.g., adult versus adolescents; those currently attending self-help groups versus those not attending). *T*-tests were used for continuous data and chi squares for categorical data. We did not adjust for multiple comparisons, such as Bonferroni correction, due to known problems of low statistical power and other concerns associated with such correction, particularly for exploratory studies such as this one (Nakagawa, 2004).

RESULTS

Use of Self-Help Groups

As shown in Table 1, most of the adult sample (84%) reported having attended a substance abuse self-help group at some point in their life, but only about one-third had attended a group in the past week and relatively few had a sponsor (22%). Adolescents reported generally lower self-help attendance than adults, both lifetime and in their average number of groups in the past week. Even when looking only at those currently attending self-help groups, adolescents attended fewer groups in the past week than their adult counterparts. It is also notable in Table 1 that the adult women currently attending had attended an average of over four groups per week—a large number, especially for an outpatient sample.

Attitudes Toward Self-Help Groups

To study attitudes toward self-help groups, we first compared adults and adolescents on each of the statements listed in Table 2 (except for the few that were not asked of the adolescent sample, as indicated there). *T*-tests revealed no significant differences between them on any attitudes toward self-help groups and thus the adult and adolescent data were combined in Table 2. We next compared those currently attending self-help groups versus those not currently attending, as our goal was to understand whether any particular beliefs about self-help groups might help explain attendance.

Several main results are evident in Table 2. First, the two groups (currently attending and not currently attending) differed on many attitudes. Of the 14 attitudes on which we compared the two groups, seven were significant, and in all cases those currently attending were more positive in their attitudes toward self-help groups. Second, one of the lowest-rated items for both groups related to PTSD (item 11), indicating that participants would have wanted self-help groups to address PTSD. Third, we found that there was not a strong preference for having all female self-help groups (item 13).

Beliefs About the Relationship Between PTSD and SUD

In Table 3, we explored how participants viewed the linkages between PTSD and SUD. Adults and adolescents differed significantly on all ten comparisons, and always in the same direction, with adults reporting stronger endorsement on all items. This indicated that adults viewed their PTSD and SUD as being related far more than did adolescents. In looking at the items endorsed by adults, it also appears that they viewed both disorders as important to address (e.g., items 3 and 4). There did not appear to be a pattern of them believing that one disorder was consistently more important or central than the other. We also conducted a comparison of adults who had attended a self-help group in the past week versus those who had not, and found no significant differences on any item. We were unable to examine this issue among adolescents, given the small sample size for those data. We also could not combine the adults and adolescents as they differed on this questionnaire (as detailed above), and this would have confounded age group versus attendance patterns.

Relationship Between Self-Help Use and Symptom Severity

The final question we explored was whether women currently attending versus not attending self-help groups differed in their severity of symptoms. We compared them on the Addiction Severity Index (ASI; all seven composite scores), which addresses SUD-related symptoms, and on the Brief Symptom Inventory (BSI; global severity

TABLE 1. Adult versus adolescent attendance at self-help groups

		Adults	Adolescents	Comparison
Ever attended a substance abuse self-help group	Total sample	84% ($n = 75$)	57% ($n = 21$)	$X^2(1) = 6.93^{**}$
Attended at least one substance abuse self-help group in past week	Total sample	32% ($n = 103$)	44% ($n = 23$)	$X^2(1) = 1.09$
Mean number of substance abuse self-help groups attended in past week	Total sample	1.32 ($SD = 2.31$) ($n = 103$)	.70 ($SD = .98$) ($n = 23$)	$t(82.63) = -2.02^{*}$
	Those currently attending	4.12 ($SD = 2.27$) ($n = 33$)	1.61 ($SD = .86$) ($n = 10$)	$t(38.72) = -5.23^{**}$
Currently has a sponsor	Total sample	22% ($n = 97$)	–	–
	Those currently attending	48% ($n = 31$)	–	–

$^{*}p < .05$
$^{**}p < .01$

index), which addresses general psychiatric symptoms. The two subsamples did not differ on any variable on either measure. This indicates that attendance at self-help groups cannot be explained by severity of addiction or psychiatric symptoms. Similarly, there were also no significant differences in ASI and BSI scores between women with sponsors and women without sponsors. We did not include adolescents in the analysis of the ASI or BSI as they had not completed these measures, which were designed for adults.

Qualitative Comments

Participants who did not attend self-help groups were asked why they did not. Several comments related directly to trauma: "The religious undertones trigger memories of past ritual abuse"; "I do not believe that substance abuse or PTSD are lifelong problems"; "I get very anxious"; "I get hit on by older men"; "I hate AA– people just abuse you there"; "I've never found an all-women AA group and I can't say no to sex"; and "I grew up with an alcoholic/abusive father."

Others who did not attend self-help groups focused on addiction-related points, such as: "They trigger me to drink; I am sober in a different way than AA thinks about"; "I don't go when I'm actively using"; "AA doesn't make sense—'Only God can keep me away from a drink'?"; "I don't want to eliminate alcohol"; and "I hate drunkalogs from AA members."

Some comments were highly positive about meetings: "It's a great way to slow myself down"; "I like the educational aspects which can redirect my thinking"; "It helps to know that you're not the only one!" and "They give me hope, it's good to know there are so many meetings; I can go to one anytime."

DISCUSSION

Self-help groups such as Alcoholics Anonymous have long been a prominent resource for SUD recovery. However, it is unclear how such groups are perceived by females with co-occurring PTSD and SUD. In this article, we explored women and adolescent girls' views of such groups (which are predominantly 12-step), their attendance, how severity of substance problems and mental illness relate to attendance, and beliefs about the relationship between PTSD and SUD. This is the first article we know of to empirically address these topics in this population. Other strengths of this study include participants who were rigorously diagnosed with current PTSD and SUD, and a good sample size for a descriptive study such as this.

Our first main finding was that the adult women in our sample reported significantly higher attendance at self-help groups than did adolescent girls. This result is consistent with prior research, which indicates that although adolescents are often referred to self-help groups for substance problems, their attendance is low (Kelly, Myers, & Rodolico, 2008). New developmentally appropriate interventions may be needed for adolescents who may not be mature enough to benefit from adult models such as 12-step groups. The 12-step emphasis on "hitting bottom," for example, may be more relevant to adults who have had more time and experience to observe the consequences of their addiction. In general, research finds that adolescents have better attendance at 12-step groups the more they have age similarity with attendees (Kelly, Myers, & Brown, 2005). Also, when they do attend 12-step groups, adolescents are found to show improvement on SUD, although the literature is early and methodologically limited (Bekkering, Marien, Parylo, & Hannes, in press). We know of no adolescent-specific 12-step movement that is formally part of the central service organization. Thus adolescents, when they do attend, go to groups designed for adults. We were able to identify a privately created school-based adolescent 12-step model that strives to enhance adolescent engagement through features such as an adolescent version of the 12 steps (www.teenaddictionanonymous.com, 2014). Such efforts hold promise and warrant research attention. Also, non-12-step models may also be relevant for adolescents, such as SMART Recovery. Adolescents surveyed about their attitudes towards AA, the most common 12-step

TABLE 2. Attitudes towards self-help groups[1]

	Currently Attending Self-Help Groups		Not Currently Attending Self-Help Groups			
	Mean *(SD)*	*n*	Mean *(SD)*	*n*	*t*	*df*
1. Self-help groups have helped with my substance abuse+	.63 (1.08)	7	−.43 (.76)	8	−2.23*	13
2. I like the spirituality in self-help meetings	.59 (.92)	39	−.24 (.92)	68	−4.52**	105
3. I like the 12 steps	.57 (.87)	30	−.26 (.95)	59	−4.03**	87
4. I like substance abuse self-help groups	.50 (.81)	30	−.25 (1.00)	53	−3.70**	71.26
5. I like the sayings in self-help groups (e.g., "One day at a time")+	.48 (.84)	22	−.20 (1.00)	53	−2.82**	73
6. I like the community ("fellowship") at meetings	.47 (.75)	35	−.22 (1.02)	66	−3.89**	88.71
7. I like the people I meet in spiritually-based 12-step meetings+	.42 (1.19)	9	.13 (.79)	10	−.63	17
8. I agree that addiction is a lifelong illness	.39 (.95)	39	−.15 (1.01)	70	−2.76**	107
9. I like the idea that self-help groups call alcoholism/addiction a disease+	.36 (1.25)	9	−.23 (.84)	10	−1.22	17
10. I like the people I meet in non-spiritual self-help meetings+	.18 (1.33)	9	−.26 (.49)	10	−.94	9.94
11. I like it that trauma/PTSD is not talked about at substance abuse self-help groups	.02 (1.06)	28	−.001 (.98)	59	−.11	85
12. I like non-spiritual self-help groups (*e.g.*, Rational Recovery)+	−.03 (1.28)	30	−.02 (.88)	62	.06	42.74
13. I like groups that are all-female	−.04 (.85)	38	.07 (1.06)	71	.57	107
14. Self-help groups have made my substance abuse worse+	−.25 (.61)	9	.30 (1.46)	6	1.03	13

$p < .05$

** $p < .01$

+Refers to a question not asked across all datasets (thus a lower *n*).

[1]For this analysis, adults and adolescents were combined. This table is arranged from highest to lowest endorsement of beliefs of those currently attending self-help groups.

group, express positive views of support groups per se, but less positive views of the 12-step content, with the most common concerns related to boredom and lack of fit (Kelly, Myers, & Rodolico, 2008).

With regard to PTSD, a notable finding in our study was that respondents gave low ratings to the fact that PTSD is not addressed in self-help groups. Twelve-step groups, by far the most common self-help type, was designed to address addiction only, not trauma, PTSD, or other mental health issues. Our finding suggests that more options are needed for PTSD recovery. There are currently no widely available self-help groups for PTSD or trauma. Over the years, some groups have arisen, such as Survivors of Incest Anonymous, but they have never become widespread, perhaps because the dynamics of a trauma group are different than a SUD group and because of challenges when people "spill" their trauma story, which can be destabilizing. The only PTSD/SUD model that has as yet been tested in peer-led format is Seeking Safety, with positive findings (Najavits et al., 2014). That model takes a present-focused approach that reduces the intensity of sharing trauma stories and also addresses PTSD and SUD at the same time in integrated fashion, exploring their interrelationship.

We found that the study subsamples who were not currently attending self-help—which was the majority of both adult and adolescents—had more negative views of self-help groups. They were less positive about the spiri-

TABLE 3. Beliefs about the relationship between PTSD and substance abuse

	Adults		Adolescents			
	Mean *(SD)*	*n*	Mean *(SD)*	*n*	*t*	*df*
1. My substance abuse and my PTSD are strongly related	.25 (.75)	130	−1.37 (1.09)	24	−6.99**	27.14
2. My substance abuse is a symptom of my PTSD	.22 (.87)	138	−1.24 (.80)	24	−7.71**	160
3. My substance abuse will never get better until I deal with my PTSD	.19 (.89)	137	−1.17 (.87)	22	−6.66**	157
4. My PTSD will never get better until I stop substance abuse	.18 (.89)	137	−1.13 (.94)	22	.−6.39**	157
5. If I stopped my substance abuse, my PTSD would get better	.18 (.93)	136	−1.56 (.63)	21	−8.36**	34.78
6. My substance abuse problem is worse than my PTSD	.14 (.98)	139	−.83 (.72)	23	−5.61**	36.84
7. I would be happy if my PTSD got better, even if my substance abuse didn't	.14 (1.01)	135	−.73 (.55)	26	−6.31**	62.42
8. If I stopped my substance abuse, my PTSD would get worse	.13 (.98)	135	−.85 (.69)	21	−5.72**	34.13
9. My PTSD is worse than my substance abuse	.12 (.96)	138	−.72 (.98)	22	−3.80**	158
10. I would be happy if my substance abuse got better, even if my PTSD didn't	.10 (1.02)	136	−.55 (.68)	25	−4.02**	46.33

*$p < .05$
** $p < .01$

tuality of the groups, the focus on addiction as a life-long illness, the sayings, the fellowship, etc. Although this is a fairly obvious finding—those who attend the groups like them more—on another level, it underscores that many females with PTSD/SUD may have real obstacles to self-help attendance. Such obstacles may be rooted in these types of beliefs, and also in other obstacles that were not part of the study measure. Some participants' open-response comments highlight trauma-related issues such as fear of men at meetings and feeling triggered, for example. Whatever the mix of issues that limit self-help attendance by females with PTSD/SUD, it is notable that symptom severity does not explain it, at least based on our sample in which neither SUD nor mental health severity were associated with attendance. However, these null findings likely reflect a floor effect. We used only baseline data and participants were included only if their symptom severity was sufficient to meet our entry criteria of current PTSD, which focused on past-month symptoms; and current SUD, which was substance dependence, the most severe form. Other research that explores attendance longitudinally has found, in contrast, that more severe substance use is associated with greater self-help attendance in both adults (Kelly, Stout, Zywiak, & Schneider, 2006) (Weiss et al., 2000) and adolescents (Kelly, Myers, & Brown, 2002).

It also must be emphasized that, in keeping with prior studies, some females with PTSD clearly do find self-help groups helpful. In our study, those who were attending attended a large number of week meetings (an average of four among the adults in our sample). Some participants also commented on how helpful they found the meetings.

Finally, and somewhat surprising, our sample, both adults and adolescents, did not endorse a strong preference for all-female self-help groups. This suggests that gender per se may not be the key consideration in their attitudes toward self-help groups. The sample appeared stronger in their desire for PTSD to be addressed (item 11 in Table 2). However, future research would be needed to disaggregate gender and diagnoses as our sample all shared the same gender and PTSD/SUD diagnoses.

There are many directions for future research. Our study was limited to secondary analysis and a combination of several datasets. Due to the exploratory nature of the study, there was also no control for the number of statistical comparisons. A prospective, larger study would be useful, especially if it could address how symptoms of PTSD and SUD change in relation to self-help group attendance. It may also be helpful to develop a guide to encourage self-help attendance among fe-

males with PTSD/SUD, such as the evidence-based methods of 12-Step Facilitation (Project MATCH Research Group, 1997) and Making Alcoholics Anonymous Easier (Kaskutas, Subbaraman, Witbrodt, & Zemore, 2009). Even people with SUD but no PTSD have obstacles to self-help groups (Donovan et al., 2013), which led to the development of these facilitative interventions. Adapting them for PTSD explicitly could be useful. Finally, it is worth considering new self-help models beyond traditional 12-step groups. In recent years there is greater focus on peer-led help for all sorts of mental health and medical problems (Substance Abuse and Mental Health Services Administration, 2009). Peer-led Seeking Safety (Najavits et al., 2014) can be potentially expanded and other PTSD/SUD models could also be tested in self-help format (Najavits & Hien, 2013). Prior studies have shown that patients with PTSD and SUD prefer to focus on both disorders or on their PTSD; they are least positive about focusing just on SUD (Brown, Stout, & Gannon-Rowley, 1998; Najavits, Sullivan, Schmitz, Weiss, & Lee, 2004). We must remember that recovery from SUD is more complicated in the context of PTSD. Numerous studies show that relative to individuals with SUD only, those with PTSD and SUD have greater impairment and worse outcomes (Najavits et al., 2007; Ouimette and Read, 2014). Thus, it will be important to keep refining our understanding of what makes it difficult for females with PTSD to engage in some SUD treatments, and of finding treatment options that appeal to them.

DECLARATION OF INTEREST

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

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GLOSSARY

Posttraumatic stress disorder: (PTSD) may develop after a traumatic event, which is a terrifying physical or sexually violent event that may be experienced, witnessed, or threatened, for example. Such events include combat exposure, terrorist attack, sexual or physical assault, serious accidents, and natural disasters. In DSM-5 PTSD symptom clusters are intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity.

Substance use disorder (SUD): is a condition in which the use of a substance, such as alcohol, cocaine, heroin, or others, leads to clinically significant impairment or distress. In DSM-5 it is termed "Substance-Related and Addictive Disorders" and can be classified as mild, moderate or severe depending on the number of symptoms met.

Self-help groups: Also known as support groups, and mutual aid groups, these are comprised of people who work on a volunteer basis in regular meetings to help each other with a common problem. They are widely used in the SUD field, with diverse methods, ranging from more secular to predominantly spiritual.

12-step groups: These groups are a specific type of self-help group that relies on the 12 steps, which are a set of guiding principles with a spiritual focus to help people with addiction engage in recovery. Alcoholics Anonymous is the largest and earliest of all 12-step programs, but the model is also used by Narcotics Anonymous, Cocaine Anonymous and many others.

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