

Gender-Specific Treatments for Women with Alcohol Use Disorder and Co-occurring Mental Health Disorders: A Meta-Analysis and a Systematic Review

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Abstract:

This systematic review and meta-analysis examine the outcomes of integrated treatments and support for women with severe alcohol use disorder (AUD) and co-occurring disorders. The goal is to guide social workers in improving practice and policy, advocacy to expand coverage, and offering comprehensive support for women with dual diagnoses, ultimately increasing their opportunities to achieve holistic and lasting recovery.

AUD is a pervasive mental health disorder that significantly impacts public health and incurs excessive economic costs, affecting not only the individual's health but also the well-being of their family, friends, and society as a whole. Historically, however, AUD has been considered a male-driven behavior, marginalizing women's experiences and resulting in a predominantly male perspective on the disorder. With the dramatic increase in women with AUD in recent decades, there is a dire need for a deeper understanding of the disorder from a woman's perspective.

The findings suggest that the most effective treatment model is nuanced and requires additional support that addresses social and cultural considerations to sustain women's recovery.

Introduction:

AUD is one of the most pervasive mental health disorders globally, yet they remain significantly undertreated despite the negative impacts on public health (Carvalho et al., 2019).

- Alcohol consumption is the third leading cause of preventable morbidity and mortality in the United States (Peltier et al., 2019).
- Prevalence of AUDs surged by 84% among women, with a 35% increase among men between 1991-1992 and 2001-2002 (Grant et al., 2017).
- Annual number of adult women who drink increased by 6%, while it decreased by 2% for men (White, 2020).
- Women who binge drink rose by 14%, compared to only a 5% increase for men (White, 2020).
- 7.9% of adult women seek formal AUD treatment compared to 9.2% of adult men (McCrary et al., 2020).
- Women with AUD are more likely than men to have a co-occurring disorder and to have experienced traumatic life events prior to the onset of AUD (Agterberg et al., 2020; McHugh et al., 2018).

There is a need for accessible services that better address women's realities and respond to their needs. However, access to such integrated care remains disjointed and severely limited.

Methods:

The systematic review of 26 published studies from the past 30 years evaluated the efficacy of various women-focused integrated interventions targeting both AUD and co-occurring disorders.

- The study quality was assessed using the 10-point scale: 9 or 10 points were classified as high quality, 7 or 8 points as moderate quality, and 6 points or below as low quality.
- Grading criteria: study design, statistical adequacy of the sample size, sample diversity, all-women sample, duration and quality of the intervention, reliability and validity of the measures used, and inclusion of follow-up outcomes.

The meta-analysis involved evaluating the efficacy of various interventions used in the identified articles by calculating effect sizes of alcohol use, depression, anxiety, and post traumatic stress disorder (PTSD) using Cohen's *d*.

- Cohen's $d = \frac{x_{epx} - x_{cont}}{SD_{pooled}}$
- Means and standard deviations (SD) were extracted at baseline and post-intervention to calculate the initial effect size.
- Additional effect sizes were included if the articles measured follow-up outcomes.

Results:

Research Synthesis

AUD and Depression

- Interventions: Cognitive behavioral therapy (CBT), motivational interviewing (MI), prolonged exposure, mindfulness, Women's Recovery Group, Seeking Safety, SHADE therapy, and relapse prevention.
- Short-term CBT interventions may have limited effects on comorbid symptoms associated with complex trauma.
- Longer interventions lead to more substantial improvements in both alcohol consumption and depression.
- Alcohol-focused interventions were more effective for men, while depression-focused interventions were more effective for women

AUD and Anxiety

- CBT interventions: women-specific, gender-neutral, group settings, individual therapies, minority stress-focused, PTSD-focused, AUD-focused, Crossing Paths (CBT+MI), Women's Recovery.
- All studies showed a reduction in AUD and anxiety symptoms with no significant differences between treatment programs.
- Targeted interventions addressing minority stress may be beneficial for mental health.

AUD and PTSD

- Interventions: Trauma Recovery and Empowerment Model (TREM), prolonged exposure, MI, CBT, relapse prevention, Seeking Safety (SS), mindfulness, and MDMA-assisted therapy (MDMA-AT).
- Promising results in the reduction of PTSD and AUD symptoms.

Meta-Analysis

AUD and Depression

- CBT: Most studies showed significant reductions in depression and alcohol use, with improvements maintained over time. However, women with complex trauma and daily minority stress face a more challenging road to recovery and need extra support and extended treatment.
- MI is effective when combined with other modules like CBT.
- Psychoeducation: Analysis indicates promising results. Additional research is needed to clarify the efficacy.
- Mindfulness may be more effective as a supplemental intervention than a primary treatment strategy.

AUD and Anxiety

- CBT was the primary intervention studied in this analysis.
- Anxiety reduction was the greatest in a minority-stress-focused CBT intervention, however, other women-only and co-ed studies show small effect sizes. The efficacy in alcohol reduction is inconclusive.
- Further research on gender-specific interventions beyond CBT is warranted.
- Women with complex trauma and PTSD may not respond to gender-specific treatments for anxiety reduction and may require additional support for these mental health challenges.

AUD and PTSD

- TREM: AUD reduction with TREM is inconclusive, indicating that TREM is not a reliable standalone intervention for AUD reduction but a promising treatment model for PTSD.
- Exposure Therapy: Highly effective in reducing AUD and PTSD. However, gender differences were not discussed in these studies, indicating a need for further studies conducted for women.
- Psychoeducation: Studies show high efficacy in AUD and PTSD reductions however, while PTSD reductions maintained over time, AUD reverted to worse than pre-treatment.
- Integrated CBT (ICBT): Seeking Safety, a gender-specific ICBT intervention, proved to be an effective program for women with dual diagnosis. However, the lack of effective outcomes for AUD reduction suggests that ICBT modules may not be sufficient for treating AUD.
- Mindfulness and MDMA: Studies show moderate effect sizes for both PTSD and alcohol abstinent days. Further studies are warranted.

Implications:

Implications for Social Work Policy

- Policies should emphasize that recovery from AUD and co-occurring disorders is a long-term process requiring extended treatment and support.
- Private insurance and federal healthcare policies should be informed by the need for long-term support and follow-up care to prevent relapse and manage symptoms effectively.
- Policies should advocate for easier access to treatment and resources, reducing barriers and avoiding further stigmatization of individuals with AUD and co-occurring disorders.
- Adoption of harm reduction policies, even if abstinence is achieved later, to increase engagement and retention in recovery.

Implications for Social Work Practice

- Clinical practice should incorporate extended treatment plans and long-term support for women with AUD and co-occurring disorders.
- Practitioners should consider environmental factors that impact treatment acceptance and retention, beyond the nature of AUD and co-occurring disorders.
- Service providers should increase cultural competency to minimize unintended negative impacts and provide wraparound services tailored to the unique needs of individuals.
- Emphasis on community outreach to engage and support individuals in their recovery.
- Providing services without judgment and stigma to promote a supportive and effective recovery environment.

Implications for Research

- Study participants often don't represent the real-world population without considering socioeconomic and cultural factors. Research is needed on how these factors affect women with AUD, as poverty and marginalized groups (e.g., immigrants, LGBTQIA+ individuals, the unhoused, those with child welfare or criminal cases) are more at risk of AUD and less likely to sustain recovery.

Conclusions:

The findings suggest that effective treatments for women with AUD and co-occurring disorders require addressing social and cultural factors, aligning with the person-in-environment theory that emphasizes environmental influences on recovery. Women are at higher risk of co-occurring disorders due to historical treatment and stigma. Interventions must consider gender and the systems affecting women's experiences. The lack of progress among marginalized women highlights the need for culturally informed practice to empower marginalized groups and promote holistic change. Strengthening relationships through community-specific interventions supports long-term recovery. Advocacy for policy changes to reduce gender-specific barriers is crucial for ensuring equal access to resources and support for recovery.

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