

Summer 8-21-2016

## Capstone: Women, Addiction, and Gender-Sensitive Treatment: A Review of the Literature

Rae L. Rabideau  
DePaul University, rrabidea@depaul.edu

Follow this and additional works at: [https://via.library.depaul.edu/csh\\_etd](https://via.library.depaul.edu/csh_etd)

 Part of the [Psychology Commons](#)

---

### Recommended Citation

Rabideau, Rae L., "Capstone: Women, Addiction, and Gender-Sensitive Treatment: A Review of the Literature" (2016). *College of Science and Health Theses and Dissertations*. 188.  
[https://via.library.depaul.edu/csh\\_etd/188](https://via.library.depaul.edu/csh_etd/188)

This Thesis is brought to you for free and open access by the College of Science and Health at Digital Commons@DePaul. It has been accepted for inclusion in College of Science and Health Theses and Dissertations by an authorized administrator of Digital Commons@DePaul. For more information, please contact [digitalservices@depaul.edu](mailto:digitalservices@depaul.edu).

Women, Addiction, and Gender-Sensitive Treatment:

A Review of the Literature

Rae L. Rabideau

DePaul University

### **Introduction**

Historically, substance abuse treatment and research was centered on a male model. Treatment programs for alcohol and drug use disorders were tailored to meet the needs of men and substance abuse was considered to be a male problem. Only more recently has research demonstrated that women and men's rates of substance use have become more similar (McPherson, Casswell, & Pledger, 2004). Accordingly, researchers and clinicians in the field of substance abuse have recognized the importance of understanding and meeting the specific needs of women with substance use disorders (SUDs).

Women make up approximately one-third of the population with alcohol problems and nearly half of those who have problems with other drugs (Greenfield, Manwani, & Nargiso, 2003). Women who develop substance abuse problems report problems of greater severity and experience more health-related consequences compared to men (Bradley, Badrinath, Bush, Boyd-Wickizer, & Anawalt, 1998). Also, women's substance abuse related problems appear to interfere with functioning in more areas of life than men's (Fillmore, Golding, Leino, Motoyoshi, Shoemaker, et al., 1997). Generally, women are older than men when they develop a pattern of regular intoxication, however, once this pattern is established women tend to encounter drinking-related problems more quickly than men, and they lose control over their drinking more quickly than men (Randall, Roberts, Del Boca, Carroll, Connors, & Mattson, 1999).

In addition to the greater problem severity, women are more likely than men to encounter barriers that prevent them from seeking or following through with treatment (Brady & Ashley, 2005). Family responsibilities, shame and embarrassment, and co-occurring mental illness are just a few reasons women may be less likely to seek or complete treatment (Brady & Randall, 1999). For example, as compared to men, anxiety and depressive disorders tend to be more

severe and prevalent among women with SUDs (Hesselbrock & Hesselbrock, 1997). As recent as 2007, evidence from a meta-analysis including 280 relevant articles suggested that women with SUDs are less likely to enter treatment compared to their male counterparts (Greenfield et al., 2007).

In 2008, Christine Grella published an article that outlines the evolution of treatment approaches for SUDs. In the 1960s, treatment for substance abuse was “*generic*” and the client base was male. In the 1970s, women were finally included in treatment for SUDs, and *gender differences* (e.g. biological, psycho-social, and parenting) were recognized. *Gender-specific* treatment (meaning segregation of men and women) was not introduced until the 1980s. At this time, separate facilities for women began to emerge along with special groups and services, such as child live-in programs and childcare accommodations. *Gender-responsive* programs were not introduced until the 1990s and 2000s; finally, trauma-informed, strength-based programs were beginning to be developed for women. Treatment services that are “trauma-informed” do the following: take the trauma into account; avoid triggering trauma reactions; support the woman’s coping capacity; and allow survivors to manage trauma symptoms (Harris & FalLOT, 2001). Trauma-informed treatment services incorporate five core values: (1) safety, (2) trustworthiness, (3) choice, (4) collaboration, and (5) empowerment (Fallot & Harris, 2008). Gender-responsive programs recognize the prevalence of trauma exposure faced by women with SUDs and include specific treatment modalities that address their unique needs. The following is a list of gender-responsive principles: gender, environment, relationships, services, socioeconomic status, and community (Bloom, Owen, & Covington, 2003). Other terms commonly used to describe “gender-responsive” treatment include “women-focused” and “women-” or “gender-sensitive” treatment.

Stephanie Covington is a leading researcher in the field of addiction research, particularly around women's treatment needs and outcomes. In 2008, Covington developed the *Women's Integrated Treatment* (WIT) model. The theoretical framework for her model includes three foundational theories: relational-cultural theory, addiction theory, and trauma theory. The WIT model is centered on gender-responsive and trauma-informed principles and it is based on multi-dimensional therapeutic interventions. In her 2013 article, "*Understanding and applying gender differences in recovery*," Covington notes that several studies show positive results for the WIT model. To date, seven theoretically supported and trauma-informed manualized curricula have been designed based on the WIT model.

The purposes of this review are (1) to emphasize the prevalence of co-occurring mental illness among women with SUDs, (2) to demonstrate the need for substance abuse treatment that addresses the unique and specific needs of women, and (3) to highlight the need for further research on effective treatment practices that are exclusively tailored to meet the needs of women with SUDs.

### **Section I: Women, Substance Use and Co-Occurring Disorders**

For more than 25 years, researchers have been interested in studying gender differences in substance use disorders (SUDs). Understanding gender differences and what makes substance abuse treatment successful for women has been an ongoing objective for researchers in the field for decades. Studies show that women with SUDs and co-occurring conditions experience problems in many areas of life (Alexander, 1996; DiNitto, Webb, & Rubin, 2002; OAS, 2004a). Due to the high number of women with co-occurring disorders, treating SUDs in women has proven to be a persistent challenge. Recent studies have provided evidence for the effectiveness of gender-sensitive and trauma-informed treatment for women with SUDs and co-occurring

conditions (CSAT, 2005; Drake et al., 2001; RachBeisel, Scott, & Dixon, 1999; SAMHSA, 2002).

One study conducted by Brady, Grice, Dustan, and Randall (1993) sought to examine gender differences in psychiatric comorbidity and personality disorders in individuals with SUDs. The researchers found that women were significantly more likely than men to have an axis I disorder, particularly an anxiety disorder, in addition to an SUD. Interestingly, these gender differences were not considerably different from the gender prevalence of these disorders in the general population. Another finding of this study was that women were significantly more likely than men to suffer the onset of panic disorder before the onset of the SUD. The authors concluded that panic disorder in women indicates a particular vulnerability to substance abuse, and using alcohol or other drugs may be an attempt to self-medicate symptoms of panic (Brady, Grice, Duncan, & Randall, 1993). These findings suggest that there are gender differences in what motivates substance use prior to the onset of an SUD.

One literature review found that 30-59% of women with substance use disorders have co-occurring PTSD (Najavits, Weiss, & Shaw, 1997). The same review by Najavits, Weiss, and Shaw (1997) found that rates of physical or sexual abuse among treatment seeking women with substance use disorders ranged from 55-99%. Another study examined the association between the experience of violent events, trauma, and posttraumatic stress disorder (PTSD) among 105 women drug users. Of the 105 women, 104 reported trauma in at least one of 14 categories of traumatic events. The authors found that women in recovery from drug addiction are more likely to have a history of violent trauma (compared to other forms of trauma) and are at a high risk for PTSD (Fullilove et al., 1993).

In 1998, Najavits et al. conducted a study with 122 cocaine-dependent subjects in outpatient treatment. Findings from this study revealed that a history of traumatic events was common among these patients. One interesting finding was that men were more likely to experience trauma related to crime and disasters, while women experienced more physical and sexual abuse than men. The rate of PTSD was 30.2% among women and 15.2% among men (Najavits et al, 1998). Brunette & Drake (1997) found that women have a higher frequency of violent victimization compared with men in a study they conducted with men and women presenting co-occurring schizophrenia and SUDs. These statistics indicate that sexual and physical abuse as well as other forms of interpersonal violence disproportionately affects women. Furthermore, the results of these studies suggest that there is a difference between men and women in the origins underlying the onset of PTSD.

According to the 2002 results of the National Survey on Drug Use and Health, two million women aged 18 or older had co-occurring substance use disorders and serious mental illness (OAS, 2004b). More recently, several studies have found that women with substance use disorders are more likely to have co-occurring psychiatric disorders compared to men (Conway, Compton, Stinson, et al., 2006; Goldstein, 2009; Holderness, Brooks-Gunn & Warren, 1994; Stewart, Gavric & Collins, 2009). Substance abusing women with co-occurring disorders experience multiple barriers to treatment because of the intensity and number of presenting problems they suffer (Alexander, 1996). Additionally, women with co-occurring disorders can be difficult to successfully treat and retain in treatment (Brown, Huba, & Melchior, 1995). Unfortunately, many substance-abusing women with co-occurring disorders do not have access to or do not attend treatment designed to treat both substance abuse problems and mental health issues (CSAT, 2005; Epstein, Barker, Vorburger, & Murtha, 2004; OAS, 2004c). Studies have

found that compared to women with either mental illness or substance use disorders alone, women with co-occurring disorders are more likely to go through multiple episodes of treatment for substance abuse (OAS, 2002) and have higher rates of relapse and hospitalization (Drake et al., 2001). Based on these earlier studies, researchers clearly identified women's propensity for panic disorder, high rates of abuse, and a history of traumatic events.

Recent research has revealed several advantages of offering gender-sensitive treatment to women with SUDs and co-occurring mental disorders. In 2005, Morrissey et al. conducted a 9-site quasi-experimental study of women with mental health and substance use disorders who have a history of physical or sexual abuse. The women in this study were enrolled in either integrated, comprehensive, and trauma-informed services (N = 1023) or usual care (N = 983). The women who engaged in more integrated, trauma-informed treatment demonstrated more positive mental health and substance use outcomes than the women in the "usual care" condition. One purpose of this review is to argue that in order for substance abuse treatment to be truly comprehensive, integrated, and trauma-informed it should be gender-sensitive.

Women who engage in gender-sensitive as opposed to mixed-gender programs often report that they are more willing to attend group sessions because they feel more comfortable addressing experiences of trauma (Rachbeisel, Scott, & Dixon, 1999; Watkins, Shaner, & Sullivan, 1999). Some programs have seen higher attendance rates when offering women-only groups in treatment for SUDs (CSAT, 2005). It has been argued that integrative services and trauma-informed care may be key to improved substance abuse outcomes among women (Clark & Power, 2005). Clark and Power insist that further research is needed regarding gender-sensitive and trauma-informed treatment designed for women.

Women with substance use disorders are more likely than men to have a co-occurring mental disorder and substance-abusing women are less likely to seek treatment that is designed to treat their co-occurring conditions. Women experience trauma prior to developing SUDs at a higher rate than men and the types of trauma experienced by men and women differ. It is critical that substance abuse treatment programs are designed to meet the specific needs of women, particularly those who suffer from co-occurring conditions and have a history of trauma.

### **Section II: Is a gender-specific environment enough?**

After several years of research around substance use disorders and specific challenges and barriers faced by women, it became increasingly clear that modifications were needed regarding treatment for women with SUDs. In recent years, gender-sensitive treatment models have been developed and demonstrated positive outcomes for women with SUDs. More specifically, manualized curricula based on the WIT model have proven to be particularly effective (e.g. the Seeking Safety curriculum).

In 2001 a researcher by the name of Brian E. Bride reviewed a study that addressed whether simply separating clients by gender has an effect on outcomes, or if women require different treatment approaches in addition to a gender specific environment” (Bride, 2001). The study he reviewed included 404 participants in either mixed-gender treatment (n = 174; 47 female) or single-gender treatment programming (n = 230; 52 female). Findings of this review suggested that providing a gender-specific environment alone for the treatment of chemically dependent women does not increase treatment retention and completion. Based on these findings, Bride concluded that in order to improve treatment outcomes for substance-abusing women, women-only programs must do more than provide traditional treatment in a single-gender environment. Although earlier studies clearly showed the importance of a gender-specific

environment, it is evident that treatment approaches need to be adapted in order to address the specific needs of substance-abusing women, especially those with a history of trauma and/or co-occurring conditions.

In 2001, researchers Orwin, Francisco, & Bernichon conducted a meta-analysis of published and unpublished treatment outcome studies on the effectiveness of treatment for women. They sought to compare women-centered treatment to (1) no treatment, (2) mixed-gender treatment, and (3) enhanced women-centered treatment. In their analysis, the authors included 33 studies conducted between 1966 and 2000. Eight outcome domains were included in their analysis: alcohol use, other drug use, psychiatric symptoms, psychological well-being, attitudes/beliefs, HIV risk behavior, criminal behavior, and pregnancy outcomes. In the treatment vs. no treatment comparison notable differences were seen in psychiatric symptoms and pregnancy outcomes. In the women-centered vs. mixed-gender treatment comparison psychiatric problems were significantly fewer in the women-centered group. Finally, Positive impacts were seen on psychological well-being, attitudes/beliefs, pregnancy outcomes, and HIV risk behaviors for the enhanced women-centered treatment group compared to the standard women-centered treatment. The authors of this meta-analysis provided implications for research, policy, and practice initiatives. Their implications for further research included (1) expanded studies of substance abuse treatment for women, (2) improved reporting of substance abuse treatment research, and (3) an expanded range of treatment outcomes measured by studies. The authors emphasize that there is a shortage of information on women-centered treatment. They include that their analysis supports the enhancement or expansion of substance abuse treatment designed specifically to meet the needs of women. Lastly, the authors suggest that awareness of the need for enhanced services for women in substance abuse treatment be promoted.

In 2003, Ashley, Marsden, and Brady conducted a literature review that included 38 studies on the extent and effectiveness of substance abuse treatment programming for women. Six components of substance abuse treatment for women were examined: childcare, prenatal care, women-only programs, supplemental services and workshops that address women-focused topics, mental health programming, and comprehensive programming. The results of this review revealed positive associations between the six components of programming and treatment outcomes including program completion, length of stay, decreased use of substances, reduced mental health symptoms, improved birth outcomes, employment, self-reported health status, and HIV risk reduction. Based on their findings, the authors concluded that there is a continued need for well-designed studies of treatment modalities specific to women. This review reveals that gender-sensitive substance abuse treatment that is modified to meet the needs of women generates an increase in positive outcomes. However, following this study it appears clear that further research is needed for the development of evidenced-based treatment models for women with SUDs and co-occurring conditions.

Researchers have consistently suggested that women have distinct treatment needs, and for some women gender-sensitive treatment is critical. However, according to Grupp (2006), it has been repeatedly affirmed that despite women's needs, "the costliness of specialized treatment" hinders the development of treatment specific to women. Unfortunately, most treatment programs are designed around a tradition male model.

A study conducted by Hser, Evans, Huang, & Messina (2011) examined the long-term outcomes of pregnant or parenting women in women-only (WO, n = 500) versus mixed-gender (MG; a matched sample of 500) substance abuse treatment programs. Data analyses confirmed difference between women treated in the WO setting and those in the MG setting at admission to

treatment, with women in the WO programs demonstrating greater problem severity in many key life domains at intake. Of the total sample, more than 80% of women reported an arrest history, with more than 40% having an arrest record during the year prior to treatment entry. During the first year following treatment in both WO and MG programs, women showed significant reductions in arrests. Findings showed that significantly fewer women in the WO program (vs. MG program) were arrested during the first year after treatment. However, differences between the two groups became smaller as time passed. Mixed-modeling results indicated that arrest trajectories significantly decreased across years ( $p < .01$ ). Although no long-term differences were found between the two groups, the findings demonstrate a positive short-term impact of WO vs. MG programs with regard to arrest. The findings of this study suggest the added benefit of specialized WO treatment programs.

Compelled by the lack of empirical research on gender-based recovery models for women, Najavits and colleagues (2007) conducted a pilot study that evaluated a women's manual-based substance use disorder recovery model. Participants ( $n = 8$ ) were opioid-dependent women who received 12 group sessions of the gender-based model over two months. Although the sample size was small, it was a one-group cohort, and there was no control group, findings indicated significant improvements on key variables (the ASI drug composite, impulsive-addictive behavior, global improvement, and knowledge of the workbook concepts) from intake to the two-month follow-up. Significant improvements in drug use were verified by urinalysis. Findings from this study provide additional support for the use of gender-based recovery models for women in treatment for SUDs and co-occurring conditions. These articles illustrate with increasing clarity, simply separating SUD clients by gender is not sufficient for producing

positive treatment outcomes, rather modifications to various modes of treatment are needed in order to address the specific needs of women.

Grella conducted studies on program completion and retention rates among women with SUDs based on program type. Grella's 1999 study compared the characteristics of 4117 women in publicly funded residential drug treatment programs (women-centered treatment vs. mixed-gender treatment) between 1987 and 1994. Using a logistic regression analysis, Grella determined predictors of program completion. Despite having more problems at intake, women in the women-centered treatment programs spent more time in treatment and were more than twice as likely to complete treatment compared to the women in mixed-gender programs. Later, in 2000, Grella, Joshi, and Hser used multilevel modeling to assess program characteristics associated with treatment retention among 637 women in 16 residential drug treatment programs. The researchers of this study found that women with higher rates of retention were in programs that provided more services related to women's needs. They also found that longer retention was associated with higher rates of abstinence following treatment. The authors conclude that specialized services and programs for women help improve outcomes of drug abuse treatment.

A study conducted by Pedergast, Messina, Hall & Ward (2011) assessed the relative effectiveness of women-only (WO) outpatient programs compared with mixed-gender (MG) outpatient programs with regard to four outcomes: drug and alcohol use, criminal activity, arrests, and employment among substance abusing women. Outcomes at the follow-up assessment were compared and yielded mixed results. The sample included 259 women (135 WO, 124 MG). One year post-treatment, women in the WO program reported significantly less substance use and criminal activity than women in MG programs. On the other hand, there were no significant differences between the groups in arrest and employment status. However, women

in both groups improved their employment status from baseline to follow-up. Although results were mixed, it is notable that participants in the WO programs were significantly less likely to report substance use at follow-up compared to women in MG programs, especially considering that the primary purpose of substance abuse treatment programs is to reduce substance use.

Niv & Hser (2007) conducted a longitudinal study that examined service needs, utilization and outcomes for 189 women in women-only (WO) programs and 871 women in mixed-gender (MG) programs. Clients' problem severity and outcomes were assessed using the Addiction Severity Index (ASI) at both intake and a 9-month follow-up interview. To measure service utilization, the Treatment Service Review was given at a 3-month interview. Arrests and treatment completion were based on official records. At intake, women in WO programs had greater problem severity in several areas including alcohol, drug, family, and medical and psychiatric domains. Women in the WO programs utilized more treatment services and had better drug and legal outcomes at follow-up compared to women in MG programs. Based on their findings, women treated in WO programs had better drug and legal outcomes despite their greater problem severity; Niv and Hser concluded that specialized services in WO programs are filling an important gap in addiction treatment.

Treatment options have historically been fewer for women and the social stigma around women with SUDs has been greater (Armstrong, 2008). This conclusion maintains that treatment professionals have limited evidence-based guidance for women with SUDs and their process of recovery due to an ongoing lack of research.

Evans, Li, Pierce, & Hser (2013) conducted a research study that looked at long-term outcomes of women in mixed-gender (MG) vs. women-only (WO) drug treatment 10 years after admission. The study included a sample of 789 mothers in California. After controlling for

patient characteristics at intake, WO (vs. MG) treatment increased the odds of successful outcome by 44% at the time of the 10-year follow-up interview.

While the need for continued research is great, some conclusions have been drawn. For example, it is not uncommon for individuals with substance use disorders (SUDs) to experience employment problems. Finding and retaining employment, and being productive on the job are often a struggle when substance abuse is involved (Substance Abuse and Mental Health Services Administration [SAMHSA]/Center for Substance Abuse Treatment [CSAT], 2000). A study conducted by Kissin et al. (2015) looked at the link between gender-sensitive (GS) substance abuse treatment and employment outcomes among substance abusing women. The sample included 5,109 women admitted to 13 mixed-gender intensive inpatient programs (IIPs). The programs were ranked from low (0) to high (3) gender sensitivity based on a composite of three gender-sensitive scales. Of the women in this study, nearly three quarters completed IIP treatment. Consistent with findings reported by Evans and colleagues (2010), treatment completion was a positive predictor of employment outcome. Furthermore, gender sensitivity had a positive effect on the post-treatment linear slope ( $OR = 1.07, p < .01$ ), so for each unit increase in GS treatment level, women's odds of being employed after treatment increased by 6.3% per month (the linear effect), starting the month after the treatment admission month.

Based on several studies it is clear that simply segregating SUD clients based on gender is not sufficient for producing positive outcomes. It is imperative that treatment programs for substance abusing women adopt models that meet the specific needs of women, especially those who have a history of trauma and co-occurring conditions. Of the few treatment programs that have adopted gender-sensitive models to address women's needs, positive outcomes include

higher rates of treatment completion and retention, higher rates of employment following treatment, better substance use outcomes, and better legal outcomes, to name a few.

### **Section III: A Need for Research**

Although clinical and scientific advances have been made in recent years in favor of women-centered substance abuse treatment, there remain significant gaps in the research. There continues to be a need for well-designed studies that demonstrate the effectiveness of women-centered programming in SUD treatment settings. Providing adequate treatment that addresses the specific needs of women with addiction has been recognized as a major issue. It is important that clinicians in the field of addiction work toward developing therapies for women with SUDs. Furthermore, it is critical that future studies focus on identifying which specific therapies are most effective for treating women with SUDs.

In their review, Ashley, Marsden, and Brady (2003) point out the lack of substance abuse treatment programs that offer specialized services for women. The review also notes that the effectiveness of such programs has not been thoroughly evaluated. The authors reviewed results from 38 studies that researched the effect of substance abuse treatment programming for women on treatment outcomes. Specifically, the authors examined six components of substance abuse treatment: childcare, prenatal care, women-only programs, supplemental services and workshops that address women-focused topics, mental health programming, and comprehensive programming. It was found that the six components of substance abuse treatment were positively associated with treatment completion, length of stay, decreased use of substances, reduced mental health symptoms, improve birth outcomes, employment, self-reported health status, and HIV risk reduction. Ashley, Marsden, and Brady (2003) concluded that there is a continued need

for well-designed studies of substance abuse treatment programming for women in order to improve the future health and well-being of women and their children.

In her editorial, Weisner (2005) notes a lack of research in the area of women-centered substance abuse programs. She states, “The question of whether programs targeted at women are more beneficial than mixed gender programs is a key clinical and policy issue.” In the 1990s, Institute of Medicine studies argued that women-centered programs might attract women to treatment who would not go otherwise (Institute of Medicine 1990; Edmunds et al. 1997). Weisner concludes her editorial by indicating the ongoing need for more rigorous research in the area of women-centered treatment for substance abuse. Weisner’s labeling of women-centered SUD programming as a “key clinical and policy issue” underscores the urgency of researching the benefits of gender-specific treatment.

Najavits (2009) reviewed several therapies for co-occurring trauma and substance abuse in her article. The author noted positive growth in the availability of new therapy models for women in treatment for substance abuse, but stated there is limited empirical work in the area. Najavits expressed a need for more empirical studies on new models of therapy for co-occurring trauma and substance abuse in women.

Despite the progress made in recent years toward the development of gender-responsive treatment models for women with SUDs, major gaps in the research remain. The development of new therapy models for women makes it clear that a need for specialized treatment exists. The lack of well-designed studies being identified as a major clinical and policy issue further supports the need for continued research. With new therapies designed for women being developed, it is essential that these therapies be tested and modified as necessary.

### **Conclusion**

Throughout the past several decades, researchers have provided a large body of evidence suggesting that women have unique needs when it comes to treatment for substance abuse. Time and time again studies have identified trauma as playing a major role in the lives of women, especially those with SUDs. A history of trauma, anxiety and depression are just a few of the co-occurring conditions that substance-abusing women suffer at higher rates compared to men. Only recently, treatment approaches have evolved to address the unique needs of women. However, women continue to face barriers to treatment and not all treatment programs have adopted treatment models that are gender-sensitive and trauma-informed. Women-only, gender-responsive programs break down many of the treatment barriers that women continue to face.

Only a handful of treatment facilities are truly women-only, gender-responsive, and trauma-informed. Many substance abuse treatment facilities are mixed-gender, but have a women-only wing or division. Moreover, many facilities that are women-only provide some groups and services for women, but are still based more generally on a traditional male treatment model. It is imperative that women receive integrated treatment that incorporates a gender-sensitive, trauma-informed framework in a women-only environment. As William L. White (2002), a pioneer in the field of addiction research once said, “The day that a woman could enter an addiction treatment program anywhere in the country and find treatment designed for her has been a vision for more than 150 years. It is time that vision was fulfilled.”

### References

- Alexander, M.J. (1996). Women with co-occurring addictive and mental disorders: An emerging profile of vulnerability. *American Journal of Orthopsychiatry*, 66(1), 61-70.
- Armstrong, M. (January 01, 2008). Foundations for a Gender Based Treatment Model for Women in Recovery from Chemical Dependency. *Journal of Addictions Nursing*, 19,2, 77-82.
- Ashley, O. S., Marsden, M. E., & Brady, T. M. (January 01, 2003). Effectiveness of substance abuse treatment programming for women: a review. *The American Journal of Drug and Alcohol Abuse*, 29, 1, 19-53.
- Bloom, B., Owen, B., & Covington, S. (2003). Gender-responsive strategies: Research, practice, and guiding principles for women offenders. Washington, DC: National Institute of Corrections.
- Brady, T. M., & Ashley, O. S. (Eds.). (2005). *Women in substance abuse treatment: Results from the alcohol and drug services study (ADSS)*.
- Brady, K. T., Grice, D. E., Dustan, L., & Randall, C. (January 01, 1993). Gender differences in substance use disorders. *The American Journal of Psychiatry*, 150, 11, 1707-11.
- Brady, K.T., and Randall, C.L. Gender differences in substance use disorders. *Psychiatric Clinics of North America* 22:241–252, 1999.
- Bradley, K. A., Badrinath, S., Bush, K., Boyd-Wickizer, J., & Anawalt, B. (1998). Medical Risks for Women Who Drink Alcohol. *Journal of General Internal Medicine*, 13(9), 627–639.
- Bride, B. E. (December 01, 2001). Single-Gender Treatment of Substance Abuse: Effect on Treatment Retention and Completion. *Social Work Research*, 25, 4, 223-32.
- Brown, V.B., Huba, G.J., & Melchior, L.A. (1995). Level of burden: Women with more than one co-occurring disorder. *Journal of Psychoactive Drugs*, 27, 339- 346.
- Brunette, M.F., & Drake, R.E. (1997). Gender differences in patients with schizophrenia and substance abuse. *Comprehensive Psychiatry*, 38(2), 109-116.
- Covington, S., “Chapter IV: Understanding and Applying Gender Differences in Recovery.” *Dawn Drug Alcohol Woman Network: Promoting a Gender-Responsive Approach to Drug Addiction (a Collection of Good Practices)*. Turin, Italy: United Nations Interregional Crime and Justice Research Institute (UNICRI), December 2013.
- Clark, H. W., & Power, A. K. (January 01, 2005). Women, Co-occurring Disorders, and Violence Study: a case for trauma-informed care. *Journal of Substance Abuse Treatment*, 28, 2, 145-6.
- Covington, S., & Bloom, B. (January 01, 2006). Gender Responsive Treatment and Services in Correctional Settings. *Women & Therapy*, 29, 9-33.
- Center for Substance Abuse Treatment. (2005). *Substance abuse treatment for persons with co-occurring disorders*. Treatment Improvement Protocol (TIP) Series, Number 42. DHHS Publication No. (SMA)
- Conway, K.P.; Compton, W.; Stinson, F.S.; et al. Lifetime comorbidity of DSM–IV mood and anxiety disorders and specific drug use disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry* 67(2):247–257, 2006.
- DiNitto, D.M., Webb, D.K., & Rubin, A. (2002). Gender differences in dually-diagnosed clients receiving chemical dependency treatment. *Journal of Psychoactive Drugs*, 34(1), 105-117.

- Drake, R. E., Essock, S.M., Carey, K.B., Kola, L., Osher, F.C., & Clark, R.E. et al. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52, 469-476.
- Edmunds, M., Frank, R., Hogan, M., McCarty, D., Robinson- Beale, R. & Weisner, C. (1997) *Managing Managed Care: Quality Improvement in Behavioral Health*. Washington, DC: National Academy Press.
- Epstein, J., Barker, P., Vorburger, M., & Murtha, C. (2004). *Serious mental illness and its co-occurrence with substance use disorders, 2002* (DHHS Publication No. SMA 04-3905, Analytic Series A- 24). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Evans, E., Li, L., Pierce, J., & Hser, Y. I. (January 01, 2013). Explaining long-term outcomes among drug dependent mothers treated in women-only versus mixed-gender programs. *Journal of Substance Abuse Treatment*, 45, 3, 293-301.
- Fallot, R.D., & Harris, M. (2008). Trauma-informed services. In G. Reyes, J. D. Elhai, & J. D. Ford (Eds.), *The Encyclopedia of Psychological Trauma* (pp. 660-662). Hoboken, NJ: John Wiley.
- Fillmore K.M., Golding J. M., Leino E. V., Motoyoshi M., Shoemaker C., Terry H., Ager C. R., Ferrer H. P. Patterns and trends in women's and men's drinking. In: Wilsnack S. C., editor. *Gender and alcohol. Individual and social perspectives*. New Brunswick: Rutgers Center of Alcohol Studies; 1997. pp. 21-48.
- Fullilove, M. T., Fullilove, R. E., Smith, M., Winkler, K., Michael, C., Panzer, P. G. and Wallace, R. (1993), Violence, trauma, and post-traumatic stress disorder among women drug users. *J. Traum. Stress*, 6: 533-543.
- Goldstein RB. Comorbidity of substance use disorders with independent mood and anxiety disorders in women: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. In: Brady KT, Back SE, Greenfield SF, editors. *Women and addiction: A comprehensive handbook*. New York, NY: Guilford Press; 2009. pp. 173-192.
- Greenfield, S.F.; Manwani, S.G.; and Nargiso, J.E. Epidemiology of substance use disorders in women. *Obstetrics & Gynecology Clinics of North America* 30:413-446, 2003.
- Greenfield, S. F., Brooks, A. J., Gordon, S. M., Green, C. A., Kropp, F., McHugh, R. K., Lincoln, M., Hien, D., and Miele, G. M. (January 01, 2007). Substance abuse treatment entry, retention, and outcome in women: A review of the literature. *Drug and Alcohol Dependence*, 86, 1, 1-21.
- Grella, C. (1999). Women in residential drug treatment: Differences by program type and pregnancy. *Journal of Health Care for the Poor and Underserved*, 10(2), 216-229.
- Grella, C. E. (November 01, 2008). From generic to gender-responsive treatment: Changes in social policies, treatment services, and outcomes of women in substance abuse treatment. *Journal of Psychoactive Drugs*, 40, 327-343.
- Grella, C.E.; Joshi, V. & Hser, Y.I. 2000. Program variation in treatment outcomes among women in residential drug treatment. *Evaluation Review* 24 (4): 364-83.
- Grupp, K. (January 01, 2006). Women One Year Following Gender-Specific Treatment for Alcohol and/or other Drug Dependency. *Journal of Addictions Nursing*, 17, 1, 5-11.
- Harris, M., & Fallot, R. (2001). *Using Trauma Theory to Design Service Systems*. San Francisco: Jossey-Bass.

- Hesselbrock, M.N., and Hesselbrock, V.M. Gender, alcoholism, and psychiatric comorbidity. In: Wilsnack, R.W., and Wilsnack, S.C., eds. *Gender and Alcohol: Individual and Social Perspectives*. New Brunswick, NJ: Center of Alcohol Studies, Rutgers University, 1997. pp. 49–71.
- Holderness, C. C., Brooks-Gunn, J., & Warren, M. P. (July 01, 1994). Co-morbidity of eating disorders and substance abuse review of the literature. *International Journal of Eating Disorders*, 16, 1, 1-34.
- Hser, Y.-I., Evans, E., Huang, D., & Messina, N. (September 01, 2011). Long-term outcomes among drug-dependent mothers treated in women-only versus mixed-gender programs. *Journal of Substance Abuse Treatment*, 41, 2, 115-123.
- Institute of Medicine. Medicare: A strategy for quality assurance. Vol. 1. National Academies Press; Washington, DC: 1990.
- Kissin, W. B., Tang, Z., Arieira, C. R., Claus, R. E., & Orwin, R. G. (April 13, 2015). Women's Employment Outcomes Following Gender-Sensitive Substance Abuse Treatment. *Journal of Drug Issues*, 45, 2, 166-179.
- McPherson, M.; Casswell, S.; and Pledger, M. Gender convergence in alcohol consumption and related problems: Issues and outcomes from comparisons of New Zealand survey data. *Addiction* 99:738–748, 2004.
- Morrissey, J. P., Jackson, E. W., Ellis, A. R., Amaro, H., Brown, V. B., & Najavits, L. M. (January 01, 2005). Twelve-month outcomes of trauma-informed interventions for women with co-occurring disorders. *Psychiatric Services (Washington, D.C.)*, 56, 10, 1213-22.
- Najavits, L. M. (January 01, 2009). Psychotherapies for trauma and substance abuse in women: review and policy implications. *Trauma, Violence & Abuse*, 10, 3, 290-8.
- Najavits, L. M., Gastfriend, D. R., Barber, J. P., Reif, S., Muenz, L. R., Blaine, J., Frank, A., ... Weiss, R. D. (January 01, 1998). Cocaine dependence with and without PTSD among subjects in the National Institute on Drug Abuse Collaborative Cocaine Treatment Study. *The American Journal of Psychiatry*, 155, 2, 214-9.
- Najavits, L. M., Rosier, M., Nolan, A. L., & Freeman, M. C. (January 01, 2007). A New Gender-Based Model for Women's Recovery From Substance Abuse: Results of a Pilot Outcome Study. *The American Journal of Drug and Alcohol Abuse*, 33, 1, 5-11.
- Najavits, L.M., Weiss, R.D., and Shaw, S.R. (1997). The link between substance abuse and post-traumatic stress disorder in women: A research review. *American Journal on Addictions* 6(4): 273–283.
- Niv, N., & Hser, Y.-I. (March 16, 2007). Women-only and mixed-gender drug abuse treatment programs: Service needs, utilization and outcomes. *Drug & Alcohol Dependence*, 87.
- Office of Applied Studies. (2002). *The DASIS report: Dually diagnosed female substance abuse treatment admissions: 1999*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Office of Applied Studies. (2004a). *The DASIS report: Admissions with co-occurring disorders*. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved July 3, 2016, from <http://www.oas.samhsa.gov/2k4/dualTX/dualTX.pdf>
- Office of Applied Studies. (2004b). *The NSDUH report: Women with co-occurring serious mental illness and a substance use disorder*. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved July 3, 2016, from <http://www.oas.samhsa.gov/2k4/femDual/femDual.pdf>

- Office of Applied Studies. (2004c). *The DASIS report: Admissions with co-occurring disorders*. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved July 3, 2016 from <http://www.oas.samhsa.gov/2k4/dualTX/dualTX.pdf>.
- Orwin, R., Francisco, L., & Bernichon, T. (2001). Effectiveness of women's substance abuse treatment programs: A meta-analysis. Washington, DC: National Evaluation Data Services, Center for Substance Abuse Treatment.
- Prendergast, M. L., Messina, N. P., Hall, E. A., & Warda, U. S. (January 01, 2011). The relative effectiveness of women-only and mixed-gender treatment for substance-abusing women. *Journal of Substance Abuse Treatment*, 40, 4, 336-48.
- RachBeisel, J., Scott, J., & Dixon, L. (1999). Co-occurring severe mental illness and substance use disorders: A review of recent research. *Psychiatric Services*, 50(11), 1427-1433.
- Randall, C. L., Roberts, J. S., Del, B. F. K., Carroll, K. M., Connors, G. J., & Mattson, M. E. (January 01, 1999). Telescoping of landmark events associated with drinking: a gender comparison. *Journal of Studies on Alcohol*, 60, 2, 252-60.
- Stewart, Sherry H.; Gavric, Dubravka; Collins, Pamela Brady, Kathleen T. (Ed); Back, Sudie E. (Ed); Greenfield, Shelly F. (Ed). (2009). *Women and addiction: A comprehensive handbook* (pp. 341-359). New York, NY, US: Guilford Press, xvii, 526 pp.
- Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment. (2000). *Integrating substance abuse treatment and vocational services* (Treatment Improvement Protocol (TIP) Series 38, DHSS Publication No. SMA-00-3470). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Services Administration. (2002). *Report to congress on the prevention and treatment of co-occurring substance abuse disorders and mental disorders*.
- Watkins, K.E., Shaner, A., & Sullivan, G. (1999). Addictions services: The role of gender in engaging the dually diagnosed in treatment. *Community Mental Health Journal*, 35(2), 115-126.
- Weisner, C. (January 01, 2005). Substance misuse: what place for women-only treatment programs?. *Addiction*, 100, 1.)
- White, W. (2002) Women, addiction, and recovery: A historical review. *Counselor*, 3(4), 52-54.