University of Kentucky Center on Drug and Alcohol Research

KTOS In-Focus

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Kentucky Women in Substance Abuse Treatment: Rural Appalachia

In-Focus Highlights

- Women receiving treatment in rural Appalachian programs have significantly different substance use and health patterns compared to women in treatment in the rest of the state
- A greater proportion of women in the rural Appalachian programs reported past 12 month use of illicit opiates and tranquilizers compared with women in non-Appalachian programs
- Fewer women in rural Appalachian programs had an AA/NA sponsor compared to women in non-Appalachian programs
- More women in rural Appalachian programs reported experiencing chronic pain lasting more than 3 months

Historically, substance abuse has primarily been viewed as a male problem [1]. However, in recent years evidence suggests substance abuse is an increasing problem for women[1]. In 2006, the National Survey on Drug Use and Health (NSDUH) reported there were as many as 7.4 million women in the United States ages 18 and older who needed substance abuse treatment[2]. In addition, recent data from the Substance Abuse and Mental Health Services Administration (SAMHSA) show similar rates of non-medical use of prescription drugs among adult women and men[3].

In fact, women may possess unique vulnerabilities to adverse consequences from substance use[4]. This may be especially true in areas with health disparities such as rural Appalachia. According to the NSDUH, areas of rural Appalachian Kentucky are in the highest prevalence group when examining illicit drug use (excluding marijuana) for persons aged 12 and older[5]. Rural Appalachia has also gotten increased media attention due to high rates of prescription opiate abuse[6].

This special KTOS In-Focus report begins by providing an overview of gender differences in Kentucky's treatment-seeking population and then focuses on highlighting differences between women receiving treatment for substance use problems in rural Appalachian programs and women in non-Appalachian programs. Appalachian areas were classified by the Appalachian Regional Commission (ARC).

For this report, state fiscal year 2006 Kentucky Treatment Outcome Study (KTOS) intake data were analyzed for 7,392 clients who entered substance use treatment between July 1, 2005 and June 30, 2006[7].

Substance Abuse Treatment Clients by Gender

Differences in all treatment clients by gender are displayed in *Table 1*. A total of 2,786 women were included in FY2006 KTOS data which made up 35.1% of the total sample. When compared with men:

- Women were significantly younger (32 vs. 34 years)
- More women were unemployed (72.9% vs. 56.0%)
- Fewer women had a high school diploma (41.6% vs. 44.8%)
- Fewer women reported an arrest in the past 12 months (52.5% vs. 60.4%)
- Women also spent fewer nights in jail over the past 12 months (41.1 vs. 46.2 nights).

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Table 1. Gender differences in substance abuse treatment clients (N = 7,932)

	Women (n = 2,786)	Men (n = 5,146)
Social and Demographic Characteristics		
Age (Average)***	32 years old	34 years old
Employment status***		
Unemployed	72.9%	56.0%
Education**		
Less than high school education	41.6%	44.8%
Criminal Justice Involvement		
Arrested in the past 12 months***	52.5%	60.4%
Average number of nights in jail in the past 12 months*	41.1 nights	46.2 nights

*Statistical significance noted at *p<.05, ** p < .01, *** p < .001*

DATA MEASURES

Demographics measures were adapted from the Addiction Severity Index (ASI).

Substance use measures were taken from the SAMHSA CSAT Government Performance and Results Act (GPRA). At intake, participants were asked if they had ever used each class of substance (e.g., alcohol, marijuana, opiates, tranquilizers, cocaine, and stimulants), and if so, how many months in the past 12.

Appalachian/Non-Appalachian measures were defined by county of treatment entry as based on classifications provided by the Appalachian Regional Commission (ARC). The ARC provides information on counties classified as Appalachian.

Physical/mental health measures included: Chronic pain as measured by asking, "Do you have any chronic physical pain (lasted more than 3 months)?" Measures of depression and anxiety were from the ASI and focused on 12 months prior to entering treatment.

Women in Substance Abuse Treatment: Appalachian and Non-Appalachian Comparison

Women entering treatment in Appalachian proograms accounted for 31.3% (n = 872) of the 2,786 women included in the FY2006 KTOS sample. *Table 2* shows the significant differences between women entering treatment in Appalachian programs compared to women entering treatment in non-Appalachian programs.

CRIMINAL JUSTICE

Of those arrested in the past 12 months, more women in treatment in Appalachian programs reported being arrested for DUI (36.0% vs. 20.4%) when compared with women in non-Appalachian programs. Conversely, controlling for race, women in treatment in non-Appalachian programs reported more nights in jail in the past 12 months (3.9 nights vs. 2.7 nights) when compared with women in Appalachian programs.

More women in treatment in Appalachian programs reported being arrested for DUI

MENTAL AND PHYSICAL HEALTH

More women in substance abuse treatment in non-Appalachian programs reported serious depression (66.6%) in the past 12 months than women in Appalachian programs (60.0%). On the other hand, more women in Appalachian programs reported experiencing chronic pain lasting more than 3 months (38.8% vs. 31.0%).

More women in Appalachian programs reported experiencing chronic pain

Table 2. Health and social characteristics of women in treatment in Appalachian vs. non-Appalachian programs

	Women in treatment in Appalachian programs (n = 872)	Women in treatment in non-Appalachian programs (n = 1,914)
Criminal Justice Involvement		
Of women arrested in the past 12 months, arrested for DUI***	36.0%	20.4%
Average number of nights spent in jail	2.7 nights	3.9 nights
Mental Health		
Serious depression in the past 12 months***	60.0%	66.6%
Physical Health		
Chronic pain (lasting more than 3 months)**	38.8%	31.0%

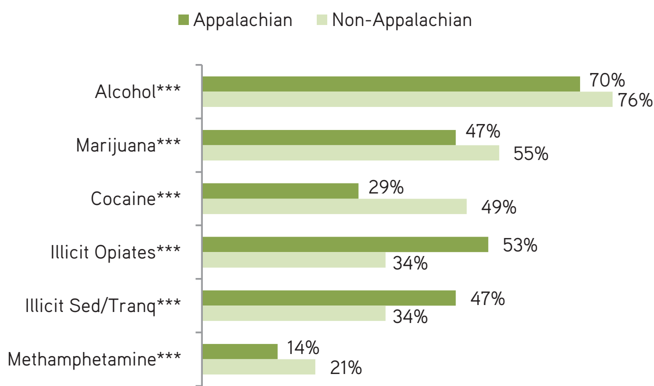
*NOTE: Statistical adjustments were made for age, race, education, and employment status; Statistical significance noted at *p<.05, ** p < .01, *** ; p < .001*

SUBSTANCE USE

Women in Appalachian and non-Appalachian programs were compared regarding substance use and treatment history. *Figure 1* shows differences in past 12 month substance use among women in Appalachian and non-Appalachian programs Women receiving treatment in a rural Appalachian program were significantly less likely to use: cocaine, methamphetamine, marijuana, and alcohol, but were more likely to report illicit opiate and illicit sedative/tranquilizer use.

A greater proportion of women in the rural Appalachian programs reported past 12 month use of illicit opiates and tranquilizers

Figure 1. Past 12 month substance use differences between women in treatment in Appalachian vs. non-Appalachian programs

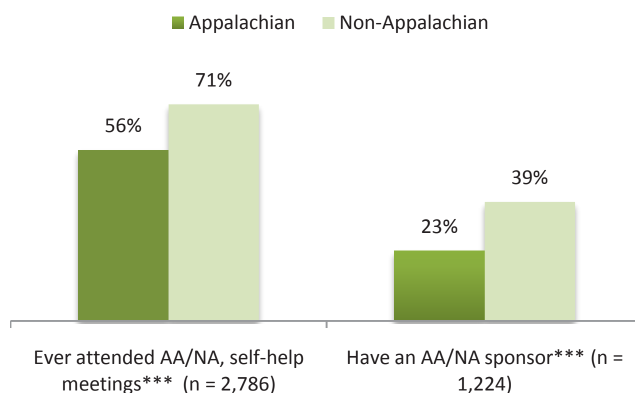


*NOTE: Statistical adjustments were made for age, race, education, and employment status; Statistical significance noted at *p<.05, ** p < .01, *** ; p < .001*

Women in Appalachian programs had an average of 1.4 prior substance use related treatment episodes compared to 1.7 for women in non-Appalachian programs. *Figure 2* shows differences in self-help group utilization for women receiving treatment in Appalachian and non-Appalachian programs. Fewer women in Appalachian programs (55.6%) reported ever attending AA, NA or other self-help group meetings than did women in non-Appalachian programs (70.6%). Of those women who did attend AA/NA meetings, less than one-fifth (22.7%) of women in Appalachian programs had a sponsor compared to 39.3% of women in non-Appalachian programs.

Only 23% of women in Appalachian programs had an AA/NA sponsor compared to 39% of women in non-Appalachian programs

Figure 2. Differences in self-help use between women receiving treatment in Appalachian vs. non-Appalachian programs



*Statistical significance noted at *p<.05, ** p < .01, *** p < .001*

Clinical Considerations

This report suggests women receiving treatment in rural Appalachian programs have significantly different substance use patterns and health conditions than women in treatment in the rest of the state. According to the FY2006 KTOS data, a greater proportion of women in the rural Appalachian programs reported past 12 month use of illicit opiates and tranquilizers compared with women in non-Appalachian programs. More specifically, women in rural Appalachian programs were 1.6 times more likely to report illicit sedative/tranquilizer use and 2.1 times more likely to report illicit opiate use than women in non-Appalachian programs. On the other hand, women in treatment in rural Appalachia were less likely to report other substance use, such as methamphetamine, cocaine, marijuana, and alcohol use. These findings are consistent with other research suggesting differences in substance use for individuals in rural Appalachian areas, particularly an increased misuse of prescription drugs (e.g., using off label or not as prescribed, using to get high)[6]. Clinicians in Appalachian programs may need to pay closer attention to health problems that result in chronic pain and misuse of prescription drugs.

Knowing the positive role of recovery support groups such as AA and NA[8] it is striking that few women in Appalachian programs engage in self-help. Anecdotal evidence indicates there are barriers to self-help recovery groups in smaller rural communities. Issues inhibiting self-help group use in Appalachian communities may include less anonymity, greater distance to travel to get to meetings, and transportation problems. Given the association of positive treatment outcomes and self-help, clinicians may need to sponsor self-help groups or help support them by inviting meetings in clinical facilities.

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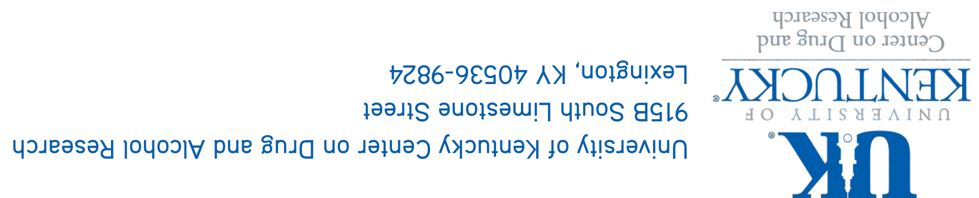

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Information contained in this report is based on the Kentucky Treatment Outcome Study data collected between July 1, 2005 to June 30, 2006.

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http://cdar.uky.edu/ktos/KTOSFollow.html

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