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Journal

The American Journal of Drug and Alcohol Abuse, 44(2)

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Publication Date

2018

DOI

10.1080/00952990.2017.1357183

Peer reviewed



Published in final edited form as:

Am J Drug Alcohol Abuse. 2018 ; 44(2): 252–262. doi:10.1080/00952990.2017.1357183.

Homeless women's service use, barriers, and motivation for participating in substance use treatment

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Abstract

Background—Homeless women are at high risk for substance use disorder (SUD), and are a growing proportion of the homeless population. However, homeless women experience barriers to engaging in substance use services.

Objectives—Among homeless women with SUD, to explore service use, motivation to change, service barriers, and willingness to have substance use and mental health problems addressed in primary health care.

Methods—Women with SUD were sampled from 11 Health Care for the Homeless (HCH) primary care clinics in 9 states, yielding 241 with either an alcohol or drug use disorder who then completed questions about SUD services.

Results—Over 60% of women with dual alcohol and drug use disorders used some type of SUD service in the past year, while 52% with a drug only disorder, and 44% with an alcohol only disorder used services. The most mentioned barrier to service use was depression, but cost, wait time, where to find treatment, and facilities located too far away, were also frequently noted. A large proportion across all groups indicated high motivation for treatment and willingness to discuss their SUD in a primary care setting.

Conclusion—There are continued barriers to SUD service use for homeless women despite high motivation for treatment, and willingness to be asked about SUD and mental health problems in primary care. HCH primary care sites should more systematically ask about SUD and mental

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Financial Disclosures: The authors report no relevant financial conflicts.

health issues and address women's expressed need for support groups and alternative therapies to more holistically address their SUD needs.

Introduction

Homeless women are at high risk for substance use disorders (SUD). Studies of street and shelter populations report one-quarter to one-third have alcohol use problems, while around half have used or abused illegal drugs.^{1,2} A recently conducted study which gathered data from women coming to homeless health care primary care clinics found 17.3% met past year criteria for alcohol abuse or dependence, while 24.1% met criteria for drug abuse or dependence (authors, under review). In contrast, the National Survey on Drug Use and Health (NSDUH) based on a general population sample of women, found a rate of 4.2% past year alcohol use disorder and 1.9% drug use disorder.³

Women are also an increasing proportion of the homeless population in the US, reaching 39% in 2015.⁴ Women tend to less often live in 'street locations' (e.g. in abandoned buildings, parks, cars etc.) where SUD may be the highest, but risk of SUD is still very high among women across various types of unstable living conditions (authors, under review). Despite this high risk, one study of homeless individuals found less than one-third of women with substance use problems had any treatment contact in the last year, and 51% reported an unmet need for SUD treatment.⁵ Persons who are homeless experience specific hurdles to overcome in seeking treatment, for example, not having a place to live makes it difficult to engage in outpatient treatment, and being discharged from a detox or short term residential program without transitional services is a major risk for relapse.^{6,7} Lack of health insurance among the homeless as well as the general population is also an issue.⁷⁻⁹

Homeless women may have other special barriers to accessing and using services, for example one study found that homeless women with a past year SUD who had a minor child were significantly less likely to have received SUD treatment.¹⁰ In addition, there is evidence that women do not feel the mostly male dominated SUD programs meet their needs.¹¹⁻¹³ In the general population of women 18 and older, use of SUD treatment also remains low. A recent national population study found about 32% of women with past year drug use disorders and 12% with past year alcohol use disorders, received past year SUD treatment of any type.³

Given the extent of the SUD problem and barriers to SUD services for both the general population of women, and the homeless, models for connecting individuals to treatment in the primary health care setting have been advocated.^{9,14-18} These include increasing primary care screening, brief clinician intervention, and referral for treatment,¹⁹⁻²² as well as using a chronic care model to engage and support individuals to address their SUD as a chronic condition.²³⁻²⁵

A large primary care program for persons who are homeless was mandated to provide just such integration of general health care and addiction services. The Health Care for the Homeless (HCH) Program is a national network of almost 300 primary health care clinics funded by the Health Services and Resources Administration (HSRA) under Section 330(h)

of the Public Health Service Act,²⁶ that serve over 890,000 individuals in all 50 states, almost half of whom are women. They are a key resource for the homeless population seeking health care, and since they are mandated to deliver primary care as well as mental health and addiction services, they provide an opportunity to identify needs and barriers to SUD services for women experiencing homelessness. The current study was designed to explore use and barriers to SUD services, motivation for SUD treatment, and acceptability of addressing SUD in primary care among a proportional random sample of 780 women seeking health care in 11 HCH sites in 9 states. Specific questions were: 1) what proportion of women reporting past year alcohol or drug use disorders also report past year use of SUD treatment services?; 2) what types of barriers to SUD treatment do they report?; 3) what is their level of motivation for SUD treatment?; 4) what proportion had ever been asked about needs for mental health and substance use services in the current primary care setting?; and 5) whether asked or not, how willing were they to be asked about mental health and substance use by their HCH clinic?

Method

Data were drawn from a self-administered survey collected in clinic waiting rooms over several months in 2015 that was part of a larger study examining prevalence of SUD in the study sites.²⁷ Proportional random sampling yielded a sample of 780 fully or partially completed surveys, and 241 women who screened positive either for alcohol or drug abuse or dependence or both in the past year. The sampling plan was created by weighting the total population of women seen annually in each clinic and assigning each a sample size as a proportion of the total sample set at n=750 respondents. Random sampling of women within each site was conducted by randomly selecting clinic sessions and inviting every second or third woman on the schedule to respond until the total sample size for that site was filled. The Institutional Review Board of University of Massachusetts Medical School deemed the study exempt from written consent because no identifying information was collected, but a discussion of study procedures and a fact sheet reviewing participant rights was provided to all potential participants, and verbal consent was obtained. Women understood they were completing an anonymous survey of their health, mental health, and substance use.

Measures

Demographics, health, mental health, and health risk behaviors—Demographic questions were drawn from prior studies, including age, race/ethnicity, education, income, and partner and child status.²⁸ Information on housing and homelessness were adapted from Lewis et al., and the US Department of Housing and Urban Development (HUD),^{29,30} and included place slept last night as well as length of time and number of episodes of homelessness. Health conditions were drawn from the National Health Interview Survey (NHIS)³¹ and NESARC.³² and were summed. These included items such as hypertension, asthma, diabetes, cardiovascular disease, stroke and cancer. In addition, the 10-item Global Health Scale from the PROMIS item bank was used to calculate global physical and mental health status scores. The PROMIS measures have had extensive development and testing. Four items (α reliability =.81) yield a general physical health T-score and an additional four items (α reliability=.86) yield a mental health T-score that places the respondent in a

continuum of the responses of the general population.³³ Questions about health risk behaviors, including trading sex for money or drugs, and number of sexual partners were drawn from prior studies of homeless women.^{34,35} The PHQ-8 was used as the depression measure due to its high sensitivity and specificity for detecting major depression in the general population.³⁶

Substance use disorder—The list of problem drug use was drawn from the National Epidemiological Survey on Alcohol and Related Conditions (NESARC) and from the National Institute on Drug Abuse,^{37,38} and included common street names for categories such as marijuana, cocaine, inhalants, heroin/opioids, stimulants, hallucinogens, sedatives and tranquilizers. Participants were asked about any past year use of alcohol or drugs, and then about 11 behavioral consequences of past year substance use to indicate abuse or dependence according to DSM-IV, with one set using the words related to drinking alcohol and the other set using words related to using drugs.^{39–41} Because of more recent DSM-5 classification of substance use disorders,⁴² we combined women who met DSM-IV criteria for abuse or dependence into one group for subsequent analyses.

Service use—Participants who indicated having a past year SUD, were asked separately for alcohol or drugs, to identify what types of SUD services they had used in the past year, if any, across 6 types of common SUD services: detox, sober housing, counseling, residential treatment, medication and Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or Cannabis Anonymous (CA) meetings. For purposes of investigating factors associated with service use, separate models were created for use of any formal service and for AA/or NA/CA.

Motivation for treatment—A set of six motivation-to-change questions were administered, three for alcohol and three for drugs. The items addressed readiness, importance and confidence, respectively for alcohol and drug use, with response options ranging from 0 to 10, and were drawn from prior studies of motivation to change substance use behavior, including samples of homeless women.^{43–45} Groups of numbers were bracketed and given a label: 0 was labeled “*I don’t drink/use drugs;*” 1–3 were labeled, “*not important,*” “*not ready,*” or “*not confident;*” 4–6 were labeled, “*somewhat important,*” “*somewhat ready,*” or “*somewhat confident;*” and 7–10 were labeled, “*very important,*” “*very ready,*” or “*very confident.*” Responses were dichotomized at 7 or greater indicating high motivation.

Service use barriers—Twelve different service use barriers drawn from the literature were listed separately for alcohol and drug use services. Women were asked to check all that applied.

Primary care screening for mental health and substance use problems—A set of three questions, asked separately for alcohol use, drug use, and emotional/mental health concerns, indicated if the participant had ever been asked if they needed help for this issue from the current primary care clinic. Response options were: “*yes;*” “*no;*” “*don’t know;*” and “*never been to the facility before.*” Only the proportion of “*yes*” responses was examined. These questions were then followed by three parallel questions about whether the participant

would be “*very willing*”, “*somewhat willing*”, “*would not want to discuss*” or “*don’t know*” if they would be willing to discuss each of the three issues with a health care provider at the current clinic.

Open-ended feedback—An open-ended question was posed at the end of the survey: *Please describe what types of help or services you would like to obtain from this clinic to assist you with any of your emotional/mental health or substance use needs (for example, providing special medication, providing therapy, assisting with enrolling in drug or alcohol detox or housing programs, providing group support activities, etc.).*

Analysis Plan

Descriptive statistics as appropriate (Chi-square or t-tests) were calculated to compare basic demographics, health, health risk behavior, mental health and use of specific drugs among women who had an alcohol use disorder, a drug use disorder, or meeting criteria for both. We then explored differences in service use, barriers to services, motivation for treatment, and willingness to be asked about substance use and mental health issues in primary care by these three groups using Chi square statistics and applied Bonferonni corrections. In addition, after basic descriptive frequencies were explored, all the demographic, mental health, and risk behavior variables indicated in Table 1, and the three motivation variables, were examined for their association with receipt of either formal services, or peer-led groups (AA or NA/CA), and those that were significantly associated ($p < .05$) at the bivariate level were entered into separate logistic regression equations to determine associations with service use. Since all three motivation variables were highly correlated for all three SUD groups, we chose the “ready to change” variable to use in the regression models. Other variables were not highly correlated and therefore if significant at the bivariate level, were each entered into the logistic regression models. To control for participants who had dual SUD, a dummy variable for dual disorder was used in each regression model. For the open-ended question, responses were typed into a data program and the study team used a summative content qualitative coding process to develop categories and achieve agreement. This was done by generating content themes from reading through the text entries, agreeing on content themes between two raters, and then coding and counting frequencies across themes following procedures outlined in other health-related qualitative studies.⁴⁶

Results

Demographic characteristics of sample

Table 1 provides data on the 241 women who reported a SUD and compares women who had alcohol versus drug versus both types of disorders. The groups were not significantly different on most characteristics with the exception that women with alcohol use disorders were significantly older than women with drug use or combined disorders, and women with drug use or dual use disorders used all classifications of drugs at a significantly higher rate. In addition, women with drug use, or both alcohol and drug use disorders, were significantly more likely to engage in trading sex for money or drugs, and had a larger number of sexual partners.

Service use

Over 60% of women with dual alcohol and drug use disorders used some type of service, while 52% with a drug only disorder, and 44% with an alcohol only disorder used services (Table 2). While women with dual disorders used services in higher proportions across all types of identified services (except the ‘other’ category which included such services as acupuncture, herbs, etc.), the only service type for which there was a significant difference in use was for residential treatment, which was accessed more often by women with dual disorders.

Service use barriers

The most frequently mentioned barrier to service receipt, although not significantly different by group (indicated by 35% of women with alcohol disorder, 34% of those with drug disorder, and 50% with dual disorders) was “feeling depressed/not up to going to treatment.” Five of the twelve service use barriers were significantly different among the three groups (see Table 3). In all cases the group reporting higher rates of barriers was the dual disorder group, indicating wait times, being too busy, help not effective, don’t know where were to find treatment, and programs don’t understand women’s needs significantly more frequently than women with drug only disorder or alcohol only disorder.

Motivation for treatment

Because of highly skewed distributions, the responses on the scale of 0–10 were dichotomized, with scores of 7 or above indicating high motivation. In addition, while some participants answered motivation questions about both drug and alcohol use, we examined only the alcohol use items for those with AUD, and drug use items for those with DUD. Due to the location of this question at the end of survey there were also more missing data, although the proportion of missing was similar across the three types of SUD. Overall, a majority of participants with either or both disorders expressed high importance, readiness, and confidence in changing their substance use (Table 4). However, the motivation to change was higher among those with a DUD, and among those with dual disorders, motivation to change drug use was higher than motivation to change alcohol use.

Primary care screening for mental health and substance use problems

A set of three questions queried whether participants had ever been asked if they needed help for: 1) emotional/mental health concerns, 2) drug use, and 3) alcohol use in their current HCH primary care clinic. They were then asked how willing they would be to discuss each of the three concerns (very willing, somewhat willing, not want to discuss, don’t know). There were no significant differences between women with alcohol only, drug only, or dual substance use disorders on report of whether they were asked or their willingness to be asked. However, women in all substance disorder groups were not asked as frequently about their drug and alcohol use as they were about mental health concerns. For example, the gap between willingness to be asked about drug use (70.1%), among the drug only disorder group, and report of ever being asked (49.1%) was over 20 points. This gap was about 10% for women with alcohol use only disorders (66.7% very willing versus

55.6% ever asked). All groups also reported somewhat more willingness to discuss emotional/mental health concerns than their substance use.

Factors associated with service use

Factors significantly associated ($p < .05$) with women with alcohol use disorders reporting any formal alcohol-related service use in the last year were a high readiness to change, lower global mental health score, having more health conditions, having more sexual partners, and using painkillers, sedatives, cocaine, or stimulants (data not shown). In the logistic regression, only high readiness to change (OR=12.96, 95% CI, 2.90, 58.04), and a lower global mental health score (OR=0.86, 95% CI, 0.77, 0.98), remained significant. Having a co-occurring drug use disorder was not significant. Factors significantly associated ($p < .05$) with AA use included high readiness to change, a larger number of health conditions, being of White ethnicity, and using painkillers or sedatives. In the logistic regression, only high readiness to change (OR=7.99, 95% CI, 2.42, 26.44), and White ethnicity (OR=2.73, 95% CI, 1.07, 6.97) were significantly associated with AA use by women with alcohol use disorders. Having a co-occurring disorder was not significant.

For women with drug use disorders, factors significantly associated ($p < .05$) with use of any formal drug-related service were high readiness to change, a lower global mental health score, more sexual partners, being of White ethnicity, having children with them, engaging in sex in trade for drugs or money, and using painkillers, cocaine, stimulants, or heroin (data not shown). In the logistic regression, only high readiness to change (OR=4.83, 95% CI, 1.70, 13.69), having children with them (OR 10.56, 95% CI, 1.57, 71.27), and using heroin (OR=1.89, 95% CI, 1.04, 3.47) were associated with more reported use of drug-related services. Co-occurring alcohol use disorder was not significant. Factors associated with using NA/CA meetings were high readiness to change, more sexual partners, trading sex for drugs or money, and using painkillers, sedatives, cocaine or heroin. However, in the final logistic regression, only high readiness to change (OR=12.88, 95% CI, 2.45, 67.59), and using heroin (OR=1.91, 95% CI, 1.09, 3.36), were associated with attending NA/CA.

Participant requests for services related to mental health and substance use needs

A total of 176 (73%) participants provided written comments in response to the question about the types of mental health and substance use services they would like to receive (see Table 6). About a quarter of the comments ($n=48$) indicated that the respondent did not need any services, were receiving everything they needed, or made positive comments about the services. The remaining responses were largely to request currently known services and there were only a few responses that offered new ideas. For example, two respondents mentioned wanting groups for women's issues (not just addiction focused), and one asked for music or art therapy. Two suggested they would like to volunteer to help others in the same circumstances. *"If anything I can volunteer with I would like to do so and help...."* The most frequent request for services ($n=56$) was for help with mental health/emotional problems. A few comments emphasized counseling specifically for drug use: *"I would like to get someone to talk and really understand me and don't judge me."* *".....increased MH services are needed and need to be better, waits too long for substance residential treatment."*

Not surprisingly, a number asked for assistance with housing, but few specifically asked for inpatient substance abuse treatment or sober housing. Many (n=21) asked for medications for mental health problems, some indicating they had been on medication previously. Only two, however, asked specifically for medication for substance use problems, one of these mentioned wishing the current clinic offered methadone. Interestingly, one respondent commented on how her emotional needs should be addressed: *“I think the PCP should ask how I am generally feeling during each visit.”*

Discussion

The focus of the current study was to elucidate service use and perceived barriers to addiction services among women meeting criteria for a SUD (either alcohol or drug use) who were seeking primary care in HCH clinics in 11 sites across the US. Identified through a proportional random sample of women approached to be surveyed in clinic waiting rooms, we found that those with a SUD had high rates of health problems, poor mental health, and engagement in high risk behavior such as trading sex for money or drugs. Regardless of whether experiencing an alcohol or drug use disorder, participants reported using a range of illegal drugs. Women with either or both disorders did not differ significantly on most demographic and health characteristics, but women with drug use disorders, or both alcohol and drug use, tended to be younger, had more sexual partners, engaged more often in trading sex for money or drugs and used all the classes of drugs at higher rates than women with alcohol only disorder.

Encouragingly, substantial proportions of women with SUD disorders had used services in the last year, although the proportion for those with alcohol only disorder was somewhat lower. The greater use of services by women with dual disorder is consistent with other studies of homeless women that have found that a higher number of negative consequences of using drugs or alcohol is associated with more positive attitudes toward changing substance use.^{44, 47, 48} Interestingly, however, women with dual disorders also reported more barriers to service use, which may be due to more interaction with the service system and therefore more opportunities to experience barriers. These data indicate significant engagement with services in the study population compared with a nationally representative sample of females aged 12 or older, from the 2015 NSDUH, where only 17.5% of women with drug dependence and 8.4% of those with alcohol dependence reported receiving past year treatment including both formal services and self-help groups.³ These rates of service use are also higher than some other samples of homeless women and may have something to do with being connected to multiservice HCH clinics.^{5, 49}

Similar to other studies of homeless women,^{14, 48} participants reported strong motivation to address their SUD as well as willingness to have it addressed by primary health care.⁴⁴ This result should begin to dispel what has been identified as a potential bias among primary care clinicians against offering SUD treatment.^{50, 51} In addition, participants systematically reported a greater willingness to be asked about their substance use problems, than they reported actually being asked by the health care clinic. A gap of over 10 percentage points for women with alcohol use disorder, and 20 points for women with drug use disorder, was found between those who reported being willing to discuss substance use, and whether they

had been asked about drug or alcohol problems. Higher rates of reporting being asked about mental health problems than substance use also suggests these health care settings may be more prepared to address mental health than substance use problems, despite mandates to provide comprehensive services. It may also be due to clinician stigma associated with addressing substance use disorders in a health care setting versus separate settings, even though there is growing acceptance of the need for multi-problem focused care, especially for this high risk population.

In terms of barriers to services, feeling depressed/not up to treatment was the most mentioned issue by participants with both alcohol and drug disorders, however, screening scores for depression were not significantly associated with use of services. This may be due to a more global discouragement about seeking treatment among respondents than actual clinical depression. However, since depression is commonly noted as a risk factor for substance use among homeless women,⁵² this points to the strong need for integrated mental health and substance use services. Women with in this sample also reported costs of services, waiting lists, location, and inability to find service as barriers to SUD treatment, in addition to being “too busy”. These proportions are generally higher than NSDUH data on reasons for not receiving services in the general population.³ Four to seven times as many women in the current sample also reported that treatment wasn’t effective, compared to only 3.4% in the NSDUH survey.³

While only a small number of participants reported having children as a barrier to entering treatment, other studies have found that to be a significant predictor of lower SUD service use.^{10,53} In contrast, in this study, having children with them was the single strongest predictor of women with drug use disorders using services, and therefore suggests this subgroup may be specifically motivated to addressing drug use disorders (although legal or child protection requirements may also play a role). Interestingly, housing type and housing instability (as indicated by number of times homeless or total time homeless) were not clearly associated positively or negatively with receipt of SUD services. This is in contrast to prior studies of homelessness that found limited contact between the homeless population and SUD services, large unmet needs, and lack of stable housing interfering with engaging in out-patient SUD services.^{5, 7, 54}

While service use is higher among this population than the general population with SUD,^{3,9} this is clearly a high-risk, high-need population. Factors associated with service use such as poorer mental health and sexual risk behavior are similar to what has been found to exacerbate homeless women’s substance use in prior studies,^{47, 52} although in this sample readiness to change appeared to be a more potent factor associated with service use. The interrelationship of women’s depression, sexual risk behavior, and lack of social support, has led to continued calls for homeless SUD services to provide more holistic programs to address mental health, coping, social support, and basic needs.^{52,55,56} Recent innovations in the delivery of primary care (e.g. Primary Care Medical Home), and integration of behavioral health and primary care,⁹ are also the cornerstone of HCH primary care programs. Participants also expressed the desire for more innovative, “whole person” services that might better meet their needs, such as support groups and wellness activities.

Limitations of the study include that this was primarily self-report, so some participants were inconsistent in answering different sections of the survey. For example some reported no substance use, or identified no current drugs of use, but also then indicated one or more SUD consequences in the last year, or reported a SUD, but failed to complete the motivation to change items. They were retained in analyses and may bias some of the results in unknown ways. Further, the study data were collected when DSM-IV was in place, with slightly different criteria than DSM-5, and combining those who met earlier criteria for abuse and dependence may have misclassified some participants. We also do not have information on frequency or intensity of service use, so we cannot conclude anything about the adequacy of services received by participants. Finally, while geographically disbursed, this sample may not be reflective of similar HCH populations in other locations and the wide distribution of locations prohibits drawing conclusions about specific regional differences, such as in patterns of drug use or reported barriers to services. The findings also would not be generalizable to community populations seeking health care in other settings.

Conclusions

Women with SUD, seeking primary health care in HCH clinics have substantial physical and mental health comorbidity. While substantial proportions reported using some type of SUD services, significant proportions also report barriers to services such as costs, access (wait times and distance), and effectiveness. At the same time, women with both alcohol and drug use disorders report high importance and readiness to change their alcohol and drug use, as well as willingness to be asked about mental health and substance use problems in the primary care clinic where they were seeking care. However, there was a gap in whether or not they report being asked about these problems, especially about alcohol and drug use problems. Given the focus of HCH clinics and the direction of primary health care to provide more integrated mental health and substance use services, attention to improving identification of this high-risk population and developing effective service models in primary care, or closely linked with primary care, have the potential to better address the health, substance use, and mental health burden of this population.

Acknowledgments

This work was supported by the National Institute of Alcohol Abuse and Alcoholism, Grant # R21AA020871. The research methods, results, and conclusions are solely the responsibility of the authors and not the funding source. The authors wish to thank the work of Research Associates from both the National Health Care for the Homeless Council (Claudia Davidson, MPH and Molly Meinbresse, MPH) and the Department of Family Medicine and Community Health at the University of Massachusetts Medical School (Elizabeth Lawson, BA and Kate Sullivan, BA) for their coordination and data management work. We also wish to thank the leadership, data collection staff and volunteers, and the patients, from the 11 participating HCH sites for contributing to the conceptualization, and implementation of the study, and for meeting all data collection goals. These sites were: Mercy Care, Atlanta Georgia; Care Alliance, Cleveland OH; Health Care for the Homeless, Houston TX; Duffy Health Center, Hyannis, MA; JWCH Institute, Los Angeles CA; Catholic Medical Center/Health Care for the Homeless, Manchester NH; Contra Costa County Health Services, Martinez CA; Care for the Homeless, NYC; Charles Drew Health Center, Omaha NE; Maricopa County Health Care for the Homeless, Phoenix AZ; and Health Care for the Homeless/Mercy Health Center, Springfield MA.

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Table 1

Demographic, health, and mental health characteristics of women with past year alcohol and drug use disorders identified in HCH primary care clinics

Variable M (SD) or Proportion (n)	Alcohol use disorder (n=55)	Drug use disorder (n=108)	Both Alcohol and Drug use disorders (n=78)
Age ¹	45.25 (11.21)	40.54 (11.01)	39.58 (12.00)
Ethnicity			
Hispanic	16.36% (9)	15.74% (17)	16.67% (13)
White/non Hispanic	38.18% (21)	39.81% (43)	39.74% (31)
Black	40.00% (22)	34.26% (37)	39.74% (31)
Asian, Native American, Mixed or Other	5.45% (3)	10.19% (11)	3.85% (3)
Education Mean years	12.02 (2.06)	11.57 (2.41)	11.64 (2.64)
Have children living with you Annual income	18.18% (10)	8.33% (9)	12.82% (10)
No income or < \$5000	56.60% (30)	67.62% (71)	67.11% (51)
\$5,001–\$10,000	11.32% (6)	19.05% (20)	11.84% (9)
\$10,001–\$20,000	24.53% (13)	8.57% (9)	14.47% (11)
>\$20,000	7.55% (4)	4.76% (5)	6.58% (5)
Slept last night			
Transitional shelter/program	30.91% (17)	37.96% (41)	40.26% (31)
Emergency Shelter	30.91% (17)	34.26% (37)	23.38% (18)
Own apartment/home	20.00% (11)	6.48% (7)	10.39% (8)
With family/friends	12.73% (7)	12.04% (13)	6.49% (5)
Street	1.82% (1)	4.63% (5)	12.99% (10)
Other (motel, etc)	3.64% (2)	4.63% (5)	6.49% (5)
Mean times homeless since age 18	3.32 (6.30)	3.70 (3.43)	4.44 (5.88)
#chronic health conditions	2.85 (2.84)	2.85 (2.78)	3.05 (2.62)
Global Physical Health Score	40.31 (5.79)	39.12 (4.39)	38.90 (4.03)
Global Mental Health Score	45.63 (4.96)	45.42 (5.69)	45.68 (5.42)
Positive for major depression	43.64 (24)	61.11 (66)	58.97 (46)
Ever engaged in sex in exchange for money or drugs ²	40.00% (22)	50.93% (55)	66.67% (52)
# Sexual partners last 12 months ² (missing=42)	(missing=14)1.24 (1.04)	(missing=9)2.67 (3.84)	(missing=19)4.24 (5.92)
Past year drug use ²			
Marijuana	25.45% (14)	63.21% (67)	61.04% (47)
Painkillers	20.00% (11)	50.48% (53)	44.87% (35)
Tranquillizers	16.36% (9)	40.95% (43)	41.56% (32)
Sedatives	10.91% (6)	37.74% (40)	38.96% (30)
Cocaine	12.96% (7)	46.23% (49)	58.44% (45)
Stimulants	5.45% (3)	39.05% (41)	41.33% (31)
Heroin	10.91% (6)	35.51% (38)	20.78% (16)
PCP, Hallucinogens, inhalants	1.82% (1)	10.38% (11)	29.87% (23)

¹ p-value from one-way ANOVA, p<.05

²p-value from Likelihood Ratio Chi Square, $p < .01$; each drug class $p < .01$ with lower use among group with alcohol use disorder

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Table 2

Use of SUD services in the past year by type of SUD

Service	Alcohol use disorder (n=55) Proportion (n)	Drug use disorder (n=108) Proportion (n)	Both alcohol and drug use disorders (n=78) Proportion (n)
Used any service	43.6% (24)	51.85% (56)	60.3% (47)
Detox	27.3% (15)	21.3% (23)	35.9% (28)
Counseling	32.7% (18)	33.3% (36)	44.9% (35)
Residential Treatment*	20.0% (11)	32.4% (35)	55.1% (43)
Sober Housing	18.2% (10)	22.2% (24)	32.1% (25)
AA or CA/NA	36.4% (20)	35.2% (38)	51.3% (40)
Medication	18.2% (10)	19.4% (21)	32.1% (25)
Other (e.g. acupuncture, herbs, etc.)	3.6% (2)	12.0% (13)	5.1% (4)

* Likelihood Ratio Chi-Square, p-value from a Bonferroni Adjustment; Women with dual disorders significantly more likely to have used residential treatment than women with either single disorder, $p < .01$

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Table 3

Barriers to using substance use services among women with a SUD

Service Barrier	Alcohol use disorder (n=55)	Drug use disorder (n=108)	Both Alcohol and Drug use disorders (n=78)
Wait too long ¹	18.8% (9)	11.4% (12)*	31.0% (22)*
Costs	19.2% (9)	22.6% (24)	36.6% (26)
Too busy ²	14.6% (7)*	26.4% (28)	35.2% (25)*
No programs	19.2% (9)	17.0% (18)	28.2% (20)
Help not effective ¹	14.9% (7)	7.6% (8)*	26.4% (19)*
Programs won't take me with my children	4.3% (2)	2.9% (3)	11.3% (8)
Feeling depressed/not up to treatment	35.4% (17)	34.0% (36)	50.0% (36)
Don't know where to find treatment ²	10.6% (5)*	20.0% (21)	30.1 (22)*
No one to take care of children while in treatment	4.3% (2)	2.9% (3)	8.5% (6)
Programs don't understand women's needs ²	6.4% (3)	3.8% (4)*	15.5% (11)*
Hours for treatment not convenient	8.5% (4)	5.7% (6)	14.1% (10)
Facility too far	19.2% (9)	10.5% (11)	23.9% (17)

¹ p-values from Likelihood Ratio Chi-Square with Bonferroni Adjustment $p < .01$, asterisks show groups that are significantly different

² p-values from Likelihood Ratio Chi-Square with Bonferroni Adjustment $p < .05$, asterisks show groups that are significantly different

Table 4Proportion with high motivation to change drug or alcohol use⁺

	Alcohol use disorder (n=49-50)	Drug use disorder (n=99)	Both Alcohol and Drug use disorders (n=62-72 ^l)
Very important to change drug use		71.7% (71)	69.0% (49)
Ready to change drug use*		73.7% (73)	76.1% (54)
Confidence in changing drug use		75.8% (75)	69.4% (50)
Very important to change alcohol use	63.3% (31)		63.1% (41)
Ready to change alcohol use*	64.0% (32)		67.7% (42)
Confidence in changing alcohol abuse	66.0% (33)		71.9% (46)

⁺Proportion who indicate 7 or above on a scale of 0–10 for each variable^lMore responded to the drug use questions (n=71–72) than the alcohol use questions (n=62–65).

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Table 5

Primary care screening about substance use and mental health concerns

	Alcohol use disorder (n=55)	Drug use disorder (n=108)	Both Alcohol and Drug use disorders (n=78)
Ever asked about emotional/mental health concerns	65.5% (36)	69.2% (72)	75.6% (59)
Ever asked if you needed help for drug use	38.5% (20)	49.1% (53)	52.0% (40)
Ever asked if you needed help for alcohol use	55.6% (30)	41.4% (43)	49.4% (38)
Very willing to discuss emotional/mental health concerns	68.5% (37)	78.1% (82)	66.2% (51)
Very willing to discuss drug use	52.1% (25)	70.1% (75)	59.0% (46)
Very willing to discuss alcohol use	66.7% (34)	60.8% (62)	61.5% (48)

¹None of the differences by type of SUD were statistically significant using the Likelihood Ratio Chi Square

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Table 6

Women's responses to open-ended query about what type of services they needed (n=176 responses)

Type of service requested	N (%)
No service need identified/ receiving everything needed	48 (27.3%)
Help with mental health/emotional issues	56 (31.8%)
Housing assistance	27 (15.3%)
Medication for mental health issues	21 (11.9%)
Substance abuse services (unspecified)	12 (6.8%)
Inpatient substance abuse treatment	5 (2.8%)
Any available mental health or SUD service	4 (2.3%)
Detoxification program	3 (1.7%)
Medication assisted SUD	2 (1.1%)
Women's groups	2 (1.1%)
Music or Art therapy	1 (0.6%)
Smoking cessation	1 (0.6%)

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