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Gender Differences in Use of Alcohol Treatment Services and Reasons for Non-Use in a National Sample

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Abstract

Background: The majority of adults with alcohol use disorders do not obtain help, and women are less likely to utilize alcohol services than men. We sought to quantify gender differences in alcohol service utilization, overall and by type, using national longitudinal data and to explore potential gender differences in perceived need for help and reasons for not seeking help.

Methods: We analyzed data from the National Epidemiologic Survey on Alcohol and Related Conditions from White, African American, and Hispanic adults ($n=2,592$) who met DSM-IV criteria for alcohol abuse or dependence at Wave 1 (2000–2001). We tested gender differences in Wave 2 (2004–2005) service utilization, perceived need for help, and treatment barriers using Rao-Scott chi-square tests and assessed predictors of outcomes in multivariable logistic regression, adjusting for problem severity, co-occurring disorders, and demographics.

Results: Women had much lower odds than men of utilizing any alcohol service (aOR 0.53; 95% CI: 0.33, 0.86), specialty services (aOR 0.41; 95% CI 0.19, 0.87), and 12-step groups (aOR 0.39; 95% CI 0.21, 0.71). Perceived need for help among those who had not used any services was very low (5%), with no gender difference. Further, men and women reported equivalent numbers of treatment barriers and the same rank order for the most frequently endorsed barriers. However, women were twice as likely as men to think a problem would get better by itself—the most frequent reason for not seeking help (47% vs. 24%, $p<.001$), and men were more likely than

women to report unsuccessful past help-seeking and not thinking anyone could help (19% vs. 3%, $p<.001$; and 17% vs. 5%, $p<.001$, respectively).

Conclusions: Consistent with previous studies, women were less likely to utilize alcohol services than men. Future interventions should address low problem recognition, and tailoring to gender-specific barriers may help close the disparity in services utilization.

Keywords

alcohol; treatment; barriers; gender; disparities

Introduction

A number of treatments for alcohol use disorders (AUD) are available and effective, including specialty psychosocial and behavioral interventions (Witkiewitz and Marlatt, 2011, Magill and Ray, 2009), screening and brief interventions (O'Connor et al., 2018, Kaner et al., 2018), medications (Jonas et al., 2014, Litten et al., 2016), and combined approaches (Donovan et al., 2008, Magill and Ray, 2009). Although 12-step groups (e.g., Alcoholics Anonymous) are not considered treatment per se, such mutual help groups appear to be effective resources for recovery (Kelly and Yeterian, 2011, Kaskutas, 2009). In addition, some people turn to alternative sources of help, such as clergy and employee assistance programs (Bohnert et al., 2010, Jacobson and Sacco, 2012); however, the efficacy of these non-specialist programs has yet to be established.

Despite the range of services available, national surveys consistently show that the majority of adults with an AUD do not receive any help for their drinking (Center for Behavioral Health Statistics and Quality, 2018, Grant et al., 2015, Chartier and Caetano, 2011). Reflecting the public health importance of treatment, *Healthy People 2020* includes an objective to increase the proportion of persons receiving alcohol treatment (SA-8.3) and notes gender differences in service utilization (Office of Disease Prevention and Health Promotion, ND). To address the population burden of alcohol-related harms, and to ensure health equity, a thorough understanding of the gender differences in alcohol services use and treatment barriers is needed in order to intervene to increase treatment access by underserved populations, such as women. The current paper addresses this need, specifically focusing on gender differences in service utilization, perceptions of need, and barriers to help-seeking among adults with AUD.

Studies on Gender Differences in Alcohol Services Utilization

Gender disparities in the utilization of alcohol treatment are long-standing, severe, and poorly understood (Green, 2006, Gombert, 2003). In past research examining those with AUD, female gender has been an extremely reliable and powerful predictor of lower alcohol services utilization, and this effect has remained robust even after accounting for alcohol severity, other clinical indicators, and demographics. For example, multiple analyses of cross-sectional and longitudinal national surveys, such as the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), National Survey on Drug Use and Health (NSDUH), National Alcohol Survey (NAS) have found that men have greater odds of

any treatment, and that this pattern has been robust across different time frames, including lifetime, past 3–4 years, and past year utilization (Alvanzo et al., 2014, Cohen et al., 2007, Ilgen et al., 2011, Chartier and Caetano, 2011, Edlund et al., 2012, Zemore et al., 2014). Moreover, analyses have indicated gender disparities of very comparable sizes in older national datasets, such as the 1995 and 2000 NAS (Schmidt et al., 2007) and the 1991–1992 National Longitudinal Alcohol Epidemiologic Survey (NLAES; Dawson, 1996), with the latter study further showing that gender disparities in receipt of treatment for AUD were greater at lower problem severity levels.

Conclusions from previous studies have been limited because there has been scant attention to gender differences across the range of different alcohol service types. To our knowledge, just two national studies have examined gender disparities in the use of different types of alcohol services. Analyzing the combined NLAES and NESARC Wave I data, Chartier and colleague's (2011) multivariate analyses showed that men were significantly more likely than women to use any alcohol services, specialty alcohol/drug programs, mental health services, and mutual help groups. Analyzing National Alcohol Survey data, Zemore and colleagues (2014) similarly found that men were more likely than women to use any services, specialty services, and Alcoholics Anonymous; however, gender differences were no longer significant in final models that accounted for demographics, alcohol problem severity, and social factors. Given both the range of different alcohol services and varying empirical support (Lyon, 2017, McGovern and Carroll, 2003, Ferri et al., 2006), additional studies that disaggregate alcohol service types are much needed to extend knowledge about gender disparities in treatment utilization.

Factors Explaining Gender Disparities

Another limitation of prior literature on gender disparities is that there has been very little formal investigation of the factors driving gender disparities in alcohol services utilization, which is in stark contrast to the large and expanding literature on racial/ethnic alcohol disparities (Vaeth et al., 2017, Grant et al., 2004, Chartier and Caetano, 2010). To achieve equity in alcohol services utilization between women and men, we must have a thorough understanding of the determinants of gender disparities in use of such services. Differences in problem recognition appear to be one such factor contributing to gender disparities. For example, some older research has found that women with substance use problems are more apt than men to view these as psychological or physical health concerns and to have histories of childhood sexual or physical abuse (Nelson-Zlupko et al., 1996, Amaro et al., 1999, Simpson and Miller, 2002), all of which may lead them to seek mental health treatment rather than alcohol-specific services (Weisner and Schmidt, 1992). Research also suggests that men's and women's differential involvement with the criminal justice system, and attendant mandated treatment, partly accounts for gender differences in service utilization (Cook and Alegría, 2011).

Notably, perhaps the single most common reason for not seeking alcohol treatment is not perceiving a need for help, and here too gender differences have been found. One early study of adults with alcohol use disorders found that women had nearly two-times higher odds than men of perceiving a need for treatment (Edlund et al., 2006); however, that study

combined alcohol, drug, and mental health services into a single outcome, thereby obscuring details about women's perceived need for alcohol-specific services. In contrast, two subsequent studies using national survey data have failed to replicate such gender differences in perceived need (Edlund et al., 2009, Grella et al., 2009); however, in one of those studies outcomes were not disaggregated between alcohol or drug treatment. A qualitative study of heavy drinking women attending Veteran's Affairs medical centers found that perceptions of drinking—driven largely by perceived control over alcohol use and drinking-related consequences—was the factor most frequently associated with alcohol services (Lewis et al., 2016). Given different legal statuses and social attitudes towards use, combining substance use treatments may obscure potentially important distinctions between men's and women's motivations and barriers by service type.

In addition to perceptions of need, other attitudinal barriers (e.g., alcoholism stigma, treatment readiness) or structural and logistical barriers (e.g., distance to treatment, cost, competing family demands) can deter help-seeking for alcohol problems and may vary by gender (Schmidt et al., 2007, Verissimo and Grella, 2017, Green, 2006). For example, in a recent study of individuals who had ever sought help for their drinking or drug use, women were found to be more likely than men to report attitudinal barriers to substance treatment, which encompassed embarrassment, fear of others finding out, fear of the treatment itself and hospitalization, belief that no one can help, and that the problem is not serious enough (Verissimo and Grella, 2017). Furthermore, Tuchman's review paper (2010) summarized treatment barriers for young women, noting evidence for ones related to pregnancy (e.g., fear of losing child custody upon the child's birth), lack of available childcare, and resistance from family members as especially salient. More generally, women have also been shown to have greater difficulties with transportation, adequate insurance coverage, and social support for treatment (e.g., from substance-using partners) than men (Tuchman, 2010). In addition, sub-groups of women may have particularly lower likelihood of utilizing services because of the combination of gendered barriers and additional social disadvantages. For instance, women's alcohol problem characteristics and barriers to alcohol services could be exacerbated by demographic and contextual factors, such as minority race/ethnicity (Zemore et al., 2014), minority sexual orientation (Pennay et al., 2017), military service (Cucciare et al., 2013), or rural residence (Booth et al., 2000).

Finally, the observed gender disparity might partially reflect women's preference for female-only treatment, and limited opportunities for this. There is some evidence of a preference for women-specific treatment although much of that literature is somewhat dated now (Beckman, 1994, Kaskutas, 1994). Some studies have reported women's openness to discussing sensitive topics such as maternal guilt and sexual abuse *only* in a women-specific program, yet studies have also pointed out that women-only programs are not a panacea (Tuchman, 2010, Neale et al., 2018). Indeed, while there have been inconsistent findings of better outcomes in gender-specific programs, the literature suggests that women's initiation and completion of treatment may be better for women-only services compared to mixed-gender programs (Greenfield et al., 2007, Duckert, 1987, Niv and Hser, 2007). If such preferences exist, they may be constrained by the scarce availability of women-only programs. For example, a recent review of Veteran's Administration data found that only 30% of facilities offered women-only group treatment (Timko et al., 2017).

Study objective

Given indications of women's greater unmet treatment need and differential barriers to alcohol services, the present study sought to assess differences between women and men in alcohol service utilization using national longitudinal data while addressing limitations of prior studies (e.g., recall bias in lifetime studies, combining treatment types for analysis). Guided by the extant literature, we hypothesized that women would report lower use of all types of alcohol services than men, even after controlling for problem severity and demographic characteristics. Although we expected to find an overall trend, we did not hypothesize uniform disparities (i.e., the same magnitude of gender difference for each type of service). Therefore, we examined specialty treatment, 12-step groups, and non-specialist services separately. Seeking to extend knowledge about determinants of service utilization—a necessary basis for interventions to close gender disparities—we also explored differences in perceived need for help and reasons for not seeking help between men and women as additional outcomes. As there are inconsistent findings in the literature, we made no directional hypothesis about differences in perceived need for help; however, we hypothesized that women would report a greater number of barriers to services than men, and that when barriers were reported by both genders there would be a stronger effect (i.e., higher levels of endorsement) among women than men.

Materials and Methods

Sample

We used longitudinal data from Wave 1 (2000–2001) and Wave 2 (2004–2005) of the National Epidemiologic Survey of Alcohol and Related Conditions (NESARC). The development and data collection methods of NESARC have been detailed extensively elsewhere (Grant and Dawson, 2006). Briefly, NESARC consisted of a nationally representative sample of the US adult population that included oversamples of racial/ethnic minorities and young adults. At Wave 1 (2000–2001), 43,093 participants completed a computer-assisted interview administered by Census Bureau professional interviewers. At Wave 2 (2004–2005), those participants were re-contacted, 34,653 of whom (approximately 80%) completed a second interview. This study's sample consisted of adults who met DSM-IV criteria (American Psychiatric Association [APA], 1994) for alcohol abuse or dependence at Wave 1 and who had complete data for AUD symptoms at Wave 1 and outcome variables at Wave 2. We further restricted the sample to African American, Hispanic, or White participants to avoid modeling problems due to the very low frequencies of other racial/ethnic groups.

The resulting analytic sample ($n=2,592$) was majority White (67%; followed by 18% Hispanic and 15% Black) and male (65%). Slightly more than half of participants (57%) had a diagnosis of alcohol abuse only, while the remainder (43%) had a diagnosis of alcohol dependence, with or without abuse. Among initial gender differences, higher proportions of women than men met the criteria for alcohol dependence (46% vs. 42%; $\chi^2=4.51$, $df=1$; $p=0.034$) and had a co-occurring psychological disorder (39% vs. 24%; $\chi^2=49.09$, $df=1$; $p<0.001$), but a slightly higher proportion of men than women had a co-occurring drug use disorder (12% vs. 11%; $\chi^2=4.24$, $df=1$; $p=0.039$).

Measures

The NESARC interview included the Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS), a validated measure of substance use and psychiatric disorders (Ruan et al., 2008) that corresponded to DSM-IV diagnostic criteria (American Psychiatric Association [APA], 1994). This study's focal predictor was gender (male vs. female), obtained via self-report at Wave 1. The first outcome of interest was any alcohol service utilization reported at Wave 2, which occurred at any time during the 3–4 year period following Wave 1. Participants received a single item asking if they had gone anywhere or seen anyone to get help because of drinking since the last interview. Those answering affirmatively then received 13 items about use of specific services. Mechanisms of behavior change, accessibility, and efficacy likely vary by type of service; however, the small number of users for some services prevented us from modeling all 13 types individually. Following similar practices (Chartier and Caetano, 2011, Schmidt et al., 2007, Zemore et al., 2009, Dawson et al., 2012), we grouped alcohol services into three conceptually similar categories: (1) specialty services (e.g., alcohol detoxification; inpatient or outpatient alcohol rehabilitation; halfway house/therapeutic community), (2) twelve-step groups (e.g., Alcoholics Anonymous), and (3) non-specialty services (e.g., social service agency; emergency room; crisis center; employee assistance program; clergy; private physician; psychiatric hospital; day/partial patient program; or any other agency or professional). These groupings generally reflect the stronger evidence base for specialty services, followed by 12-step groups, with a weaker evidence base for non-specialty services. Given the variety of non-specialty services, we conducted preliminary tests of gender differences by further disaggregating this category into social services and medical services. Although point estimates varied compared to the single category, there was no difference in the pattern of findings. None of the tested associations were statistically significant, and there was no indication of masking effects in the combined non-specialty category. Furthermore, disaggregating non-specialty services resulted in small counts under some gender and race/ethnicity combinations, which posed a problem for multi-variable regression modeling. Thus, we saw no advantage to disaggregating non-specialty services.

Participants who had not obtained any services during the follow-up period from Wave 1 to Wave 2 received an additional question inquiring whether they ever thought they should get help for drinking but did not seek any help, which constituted our secondary outcome, perceived need for help. Furthermore, those responding affirmatively were branched to a set of 27 items that assessed reasons for not seeking help (e.g., health insurance didn't cover it; didn't think anyone could help; tried getting help before and it didn't work). Previously published reports have grouped these reasons into broad classes of barriers (Verissimo and Grella, 2017, Mojtabai and Crum, 2013). We performed exploratory factor analyses (not reported here) and failed to find empirical support for grouping reasons into categories. In other words, there was no indication that any sets of items served as measures of a common latent variable (e.g., structural barrier, attitudinal barrier). Therefore, we examined individual reasons, both in the full sample and stratified by gender.

As this study excluded participants with no alcohol diagnosis, we created a descriptive binary indicator of alcohol problem type at Wave 1 (alcohol dependence [with or without

abuse] versus alcohol abuse only) based on responses to the AUDADIS. For analytic purposes, we created an AUD symptom count at Wave 1 (range 1–11) as a measure of problem severity. Additional categorical covariates were based on self-reported variables obtained as part of the standard NESARC Wave 1 interview, including race/ethnicity (White; Black; Hispanic), age (18–29 years; 30–39 years; 40–49 years; 50 years or older), educational attainment (less than high school diploma; high school diploma; some college; Bachelor's degree or higher), relationship status (married/cohabitating; widowed/divorced/separated; never married), employment status (employed full- or part-time; unemployed; out of the labor force [e.g., retired, disabled, homemaker, or student], self-rated health (excellent/very good vs. good/fair/poor), concurrent illicit drug use (any vs. none), and concurrent psychiatric disorder (any vs. none).

Analysis

First, we calculated the weighted prevalence of alcohol service utilization, our main outcome, in the full analytic sample ($n=2,592$) stratifying by gender. Significant differences between men and women in the use of any services, specialty services, twelve-step services, and non-specialty services were detected with Rao-Scott chi-square tests. We then used multiple logistic regression to estimate gender differences in odds of alcohol service utilization, controlling for alcohol problem severity and several demographic characteristics. Second, examining the sub-set of individuals who never utilized alcohol services ($n=2,420$), we used multiple logistic regression to predict perceived need for help, our secondary outcome, by gender again controlling for alcohol problem severity and several demographic characteristics. Finally, among the sub-set of individuals who perceived a need for help and did not use any services ($n=177$), we rank ordered endorsements of 27 reasons for not seeking help, in total and disaggregated by gender, and used Rao-Scott chi-square tests to assess differences between men and women. We further quantified differences in likelihood of endorsing a reason through logistic regression models that controlled for alcohol problem severity. All analyses were conducted using SAS software version 9.4 (SAS Institute Inc; Cary NC, USA). We used survey procedures (e.g., proc surveyfreq, proc surveylogistic) and sampling weights to account for the NESARC's complex survey design. The critical alpha for statistical tests for the main outcome (use of services) and secondary outcome (perceived need for help) was $\alpha=.05$. To prevent excessive Type I errors while maintaining a reasonable statistical power when testing multiple reasons for not seeking help, we used the Benjamini-Hochberg method (1995) to control the False Discovery Rate at 5% (which controls the proportion of significant results which are false to be below 5%).

Results

Service utilization

Examining any service utilization, our first outcome, we found low levels of use in the full sample ($n=2,592$), never exceeding 7% overall (Table 1). Three of four service categories showed gender differences. Specifically, smaller proportions of women than men reported use of any type of alcohol service (5% vs. 8%; $\chi^2=8.97$, $df=1$; $p=0.012$), specialty services (2% vs. 4%; $\chi^2=8.29$, $df=1$; $p=0.015$), and twelve-step groups (3% vs. 5%; $\chi^2=10.80$, $df=1$; $p=0.003$). There was no difference between women and men for utilization of non-specialist

services (e.g., social service agency, employee assistance program, clergy). After estimating the population prevalence of service utilization, we used logistic regression to further quantify differences between women and men (Table 2). Adjusting for covariates, women had approximately half the odds of utilizing any type of alcohol service (adjusted odds ratio [aOR]=0.53; 95% confidence interval [95% CI]=0.33, 0.86; $p=.005$), less than half the odds of using specialty services (aOR=0.41; 95% CI 0.19, 0.87; $p=.009$) and approximately one-third the odds of using twelve-step groups (aOR=0.39; 95% CI 0.21, 0.71; $p=.001$) compared to men. Among notable covariates, concurrent illicit drug use was associated with higher odds of any services use, but not specialty services or twelve-step groups. Alcohol problem severity, measured by symptom count, was associated with greater odds of utilization of any services, specialty services, and twelve-step groups.

Perceived need for services

Perceived need for alcohol services, the study's second outcome, was also low. Among the sub-set of participants who had not utilized any alcohol services ($n=2,420$), just 5% perceived a need for help, with equivalent levels among women and men (4.8% vs. 4.6%; $\chi^2=0.03$, $df=1$; $p=.87$). We used multiple logistic regression to identify predictors of perceived need for alcohol services (Table 3). As expected, there was no effect of gender on the outcome. Problem severity, measured by AUD symptom count, was a highly significant predictor; each additional AUD symptom was associated with 42% higher odds of perceiving a need for alcohol services (aOR=1.42; 95% CI 1.28, 1.58; $p<0.001$).

Reasons for not seeking help

Following the NESARC's branching logic, the study's third outcome, reasons for not seeking help, were assessed only among the sub-set of participants who perceived a need for alcohol services and had not used any services ($n=177$). Those participants received 27 additional items related to potential barriers (i.e., reasons for not seeking help). On average, women and men endorsed a similar number of barriers ($M=3.0$, $SD=2.23$ vs. $M=2.5$, $SD=2.24$, respectively; $t=1.07$, $df=134$; $p=.286$). Overall, the most frequent reasons for not seeking help were thinking the problem would get better by itself (31%), thinking one should be strong enough to handle it alone (28%), being too embarrassed to discuss it with anyone (23%), and not thinking the problem was serious enough to seek help (22%). This rank ordering held true for both men and women with one notable difference. Nearly half of women but approximately one-quarter of men thought the problem would get better by itself (47% vs. 24%; $\chi^2=15.16$, $df=1$; $p<.001$). We detected several additional differences by gender among less frequently cited reasons. For example, more women than men reported stopping drinking on their own as a reason not to seek help (23% vs. 9%; $\chi^2=9.40$, $df=1$; $p=.002$). In contrast, greater proportions of men than women reported trying to get help before and it not working (19% vs. 3%; $\chi^2=16.46$, $df=1$; $p<.001$), not thinking anyone could help (17% vs. 5%; $\chi^2=14.77$, $df=1$; $p=.001$), and not knowing any place to go for help (9% vs. 4%; $\chi^2=8.61$, $df=1$; $p=.003$). Several items received almost no endorsements, including being afraid of treatment, objections by a family member, difficulty arranging child care, and low English proficiency.

To better understand gender differences, we used multiple logistic regression to estimate women's likelihood (compared to men) of endorsing the reasons for not seeking help when we detected a significant bivariate test of association. Controlling for alcohol symptom count, women had nearly three-times higher odds than men of thinking that their drinking problem would get better by itself (aOR=2.89; 95% CI=1.61, 2.52) and that they would stop drinking on their own (aOR=2.88; 95% CI=1.39, 6.00). Women had significantly lower odds than men in having tried getting help before with no success (aOR=0.14; 95% CI=0.05, 0.42), not knowing anyone who could help (aOR=0.23; 95% CI=0.10, 0.53), and not knowing any place to go for help (aOR=0.39; 95% CI=0.20, 0.75).

Discussion

Consistent with prior studies (Mojtabai, 2005, Greenfield et al., 2007, Cohen et al., 2007), alcohol services utilization was low in our national sample of individuals with current alcohol abuse or dependence. This finding illustrates substantial unmet need for alcohol services and underscores the necessity of developing effective interventions to address alcohol problems. Also consistent with prior research (Alvanzo et al., 2014, Chartier and Caetano, 2011, Ilgen et al., 2011), we found several gender disparities. Our hypothesis that women would report lower use of all types of alcohol services was largely supported. Compared to men, women had one-third to one-half the odds of utilizing any alcohol services, specialty services, and 12-step groups. These starkly lower odds suggest that women should be a priority population for interventions to increase alcohol services utilization.

Two additional aspects of these findings warrant consideration as they may inform future work. First, the gender disparity was larger (i.e., women's odds ratios were lower) for 12-step groups compared to specialty services. This may be counter-intuitive as groups such as Alcoholics Anonymous could be presumed to be more accessible as they are community-based and free of charge. Future research could attempt to replicate this finding, identify women-specific barriers to mutual help groups, and develop and disseminate twelve-step facilitation programs specifically for women. Second, there was no difference between women and men in use of non-specialty services. The lack of a gender disparity suggests that non-specialty venues could play an important role in providing alcohol services to women, possibly because women feel these are more accessible or acceptable alternatives to specialty services and 12-step groups. Additionally, non-specialty venues might hold opportunities to facilitate linkages with more rigorous, evidence-based practices. For example, primary care providers might prescribe AUD pharmacotherapy for women who are unwilling or unable to seek specialty treatment or 12-step group support.

Regarding our second outcome, perceived need for help for one's drinking, we had no a priori hypotheses about the direction of gender differences given inconsistent findings in the extant literature. Indeed, our study found that women and men reported equivalent—and very low—levels of perceived need for help. At minimum, this finding underscores the importance of addressing the lack of alcohol problem recognition as all members of our analytic sample met diagnostic criteria for alcohol abuse or dependence. Moreover, it may indicate a highly relevant intervention target. We note that earlier work by Mojtabai and

Crum (2013) showed that perceived need for help was strongly associated with subsequent service utilization among individuals with past-year substance use disorders. As there was no gender difference, it is possible that strategies such as general population education campaigns or targeted screening efforts may work equally well for women and men. While this may address the overarching need to improve alcohol services utilization, it may do little to resolve gender disparities. However, further research on gender-specific factors associated with problem recognition may lead to more effective efforts. Tailored efforts to increase problem recognition among women may be necessary to close the gender disparity in services utilization.

Finally, there was no difference in the number of reasons not to seek help between women and men, and we found generally good agreement among the most frequently endorsed reasons. Indeed, although the ordering varied, we identified the same top four reasons as Oleski and colleagues (2010) in their analysis of NESARC Wave 1 data. However, in our study women were more likely to think that a problem would get better by itself—the most frequent reason for not seeking help—than men. Additionally, women were more likely than men to report stopping drinking on their own as a reason not to seek help. In contrast, more men than women endorsed the failure of previous help seeking attempts, not thinking anyone could help, and not knowing where to go as reasons not to seek help. Thus, our hypothesis that when barriers were reported by both genders there would be a stronger effect (i.e., higher levels of endorsement) among women than men received mixed support. The pattern of findings suggests gender differences in how alcohol problems and treatment services may be perceived; however, because of the small number of respondents who received items about reasons for not seeking help, results should be interpreted cautiously.

Considering the pattern of differences, we posit that women may have a more positive and self-reliant frame (i.e., a drinking problem can be resolved, and it can be done independently). On the other hand, men may hold a pessimistic outlook about alcohol services, which is based on past experiences and anticipated outcomes. Based on our findings, men may also face an additional disadvantage of low knowledge about available alcohol services. Taken together, these results could inform health services research and practice. The three common reasons that were endorsed equivalently by men and women could serve as intervention targets in widely applicable efforts to increase service utilization. Additional tailoring to gender-specific barriers may further increase the acceptability of such interventions. Better informed interventions may not only address the overall low utilization of alcohol services but also close the gender disparity.

Beyond gender as the focal predictor, the analysis of covariates provides other insights. For example, we found that greater problem severity in the form of poorer self-rated health and higher alcohol symptom count were associated with subsequent alcohol services use, which is in line with results from other studies (Chartier and Caetano, 2011, Cohen et al., 2007). While it is a positive finding that sub-groups with greater health care needs are more likely to obtain help for their drinking, in light of the very low rates of service utilization this may indicate a need to further integrate substance use services into general health care, such as expanding screening, brief intervention, and referral to treatment (SBIRT) in medical settings. We also saw that concurrent illicit drug use was associated with higher odds of any

alcohol services use, but not specialty services or twelve-step groups. This unusual finding may be an artifact of the survey design as the NESARC interview assessed use of alcohol and drug services separately. It is possible that respondents with co-occurring disorders perceived a greater emphasis on illicit drugs so did not indicate receipt of specialty alcohol services or use of 12-step groups such as Alcoholics Anonymous.

Our findings must be considered in light of several potential limitations. First, the parent study relied on self-report measures. Some variables, particularly alcohol problem characteristics, perceived need for help, and reasons for not seeking help, may be subject to social desirability and other reporting biases. Second, as a secondary analysis of existing data, the study was unable to investigate (and statistically control for) some potentially relevant variables. For example, the NESARC interview did not assess court-ordered alcohol services, which are likely to influence specialty treatment utilization among men and racial/ethnic minorities. This omitted variable may distort findings of gender differences in services utilization and perceived need for help. A portion of those who actually obtained services might have disputed the need for help and not used services without coercion. Similarly, individuals who obtained services were not asked about their motivations for seeking help, a potentially informative counterpart to reasons for not seeking help. Future studies that examine both motivations and barriers to alcohol services will provide a more comprehensive understanding of potential intervention targets. Third, the NESARC's measures and our grouping of services into three outcome variables may have limited some inferences. For example, we were unable to assess gender disparities for specific evidence-based treatments (e.g., cognitive behavioral therapy, medication-assisted therapy). However, findings may still be informative regarding differential utilization of categories of services. We look forward to future studies that are able to examine disparities and gender-specific barriers for specific treatment types. Fourth, the NESARC's branching logic constrained who received items about reasons for not seeking help, and the very small number of respondents limited statistical power for those analyses. With a larger sample, we might have detected additional gender differences or have been able to conduct more sophisticated statistical tests (e.g., multivariable regression that included additional covariates). We suggest that future studies assess reasons for not seeking help among all problem drinkers who do not obtain services, not just those who recognize a problem.

These limitations notwithstanding, the current study provides in-depth details of gender differences in treatment utilization, perceived need for help, and barriers to alcohol services utilization using nationally representative longitudinal data. Women were less likely than men to utilize alcohol services, and there was low, but equivalent, levels of perceived need for services among women and men. We identified both common and gender-specific reasons for not seeking alcohol services, which may inform future tailored interventions. There is room to further extend this work, and we look forward to future studies that examine other salient factors, such as differences in women's and men's attitudes toward treatment, alcoholism stigma, and recovery capital, among others.

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Table 1.

Alcohol services utilization at Wave 2 (2004–2005) among NESARC participants (n=2,592) with DSM-IV alcohol abuse/dependence at Wave 1 (2000–2001).

	Full sample		Men		Women		
	%	(n)	%	(n)	%	(n)	
Service utilization							
Any	7.2	(172)	8.2	(126)	4.9	(46)	*
None	92.8	(2420)	91.8	(1561)	95.1	(859)	
Type of service ¹							
Specialty service ²	3.6	(85)	4.3	(65)	2.0	(20)	*
12-step group	4.5	(110)	5.4	(82)	2.5	(28)	**
Non-specialist service ³	5.4	(126)	5.9	(89)	4.3	(37)	

NESARC = National Epidemiologic Survey of Alcohol and Related Conditions

DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, 4th Edition.

Note: Percentages are weighted; frequency counts are unweighted.

¹ Not mutually exclusive.

² alcohol detoxification, inpatient or outpatient rehabilitation, and halfway house/ therapeutic community.

³ social service agency, emergency room, crisis center, employee assistance program, clergy, private physician, psychiatric hospital, or any other agency or professional.

*
p<.05

**
p<.01

p<.001

Table 2.

Predicting alcohol services utilization at Wave 2 (2004–2005) among NESARC participants (n=2,592) with DSM-IV alcohol abuse/dependence at Wave 1 (2000–2001).

	Any service		Specialty service ¹		12-step group	
	aOR	(95% CI)	aOR	(95% CI)	aOR	(95% CI)
Gender						
Male	ref.					
Female	0.53	(0.33, 0.86)*	0.41	(0.19, 0.87)*	0.39	(0.21, 0.71)**
Race/ethnicity						
White	ref.		ref.		ref.	
Black	0.95	(0.56, 1.60)	0.93	(0.43, 1.98)	1.08	(0.56, 2.05)
Hispanic	0.87	(0.48, 1.58)	0.88	(0.37, 2.07)	1.14	(0.57, 2.28)
Age, years						
18–29	ref.					
30–39	1.31	(0.70, 2.42)	1.67	(0.67, 4.15)	1.62	(0.79, 3.32)
40–49	1.63	(0.88, 3.04)	2.01	(0.76, 5.30)	2.36	(1.11, 5.04)*
50	1.13	(0.52, 2.47)	0.64	(0.19, 2.14)	1.55	(0.60, 3.98)
Educational attainment						
Less than high school diploma	ref.		ref.		ref.	
High school diploma	1.19	(0.63, 2.28)	1.28	(0.50, 3.25)	1.10	(0.48, 2.52)
Some college	1.15	(0.62, 2.14)	1.22	(0.48, 3.09)	0.97	(0.44, 2.14)
Bachelor's degree or higher	0.68	(0.31, 1.47)	0.66	(0.20, 2.01)	0.84	(0.32, 2.19)
Relationship status						
Married/cohabitating	ref.		ref.		ref.	
Widowed/divorced/separated	1.30	(0.78, 2.27)	1.66	(0.82, 3.36)	1.96	(1.04, 3.69)*
Never married	1.19	(0.64, 2.20)	1.46	(0.54, 3.90)	1.87	(0.85, 4.10)
Employment status						
Employed	ref.		ref.		ref.	
Unemployed	1.78	(0.95, 3.33)	2.69	(1.22, 5.94)*	2.23	(1.03, 4.91)*
Not in labor force ²	1.21	(0.72, 2.04)	1.42	(0.68, 2.97)	1.81	(0.97, 3.37)

	Any service		Specialty service ¹		12-step group	
	aOR	(95% CI)	aOR	(95% CI)	aOR	(95% CI)
Self-rated health						
Excellent/very good	ref.		ref.		ref.	
Good/fair/poor	1.70	(1.12, 2.57) [*]	2.48	(1.34, 4.58) ^{**}	1.40	(0.85, 2.31)
Alcohol symptom count (range 1–11)	1.35	(1.23, 1.47) ^{***}	1.45	(1.29, 1.64) ^{***}	1.46	(1.32, 1.61) ^{***}
Concurrent illicit drug use						
None	ref.		ref.		ref.	
Any	1.80	(1.07, 3.03) [*]	1.36	(0.71, 2.63)	1.57	(0.89, 2.75)
Concurrent psychiatric disorder						
None	ref.		ref.		ref.	
Any	1.26	(0.83, 1.92)	1.01	(0.55, 1.86)	1.29	(0.78, 2.13)

NESARC = National Epidemiologic Survey of Alcohol and Related Conditions

DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, 4th ed.

¹ Includes alcohol detoxification, inpatient or outpatient rehabilitation, and halfway house/ therapeutic community.

² Retired, disabled, homemaker, or student

[†] p<0.10

^{*} p<0.05

^{**} p<0.01

^{***} p<0.001

Table 3.

Predicting perceived need for help among NESARC participants (n=2,420) with DSM-IV alcohol abuse/dependence at Wave 1 (2000–2001) who did not use any services¹ by Wave 2 (2004–2005).

	aOR	(95% CI)
Gender		
Male	ref.	
Female	1.02	(0.59, 1.77)
Race/ethnicity		
White	ref.	
Black	0.69	(0.32, 1.48)
Hispanic	0.71	(0.33, 1.50)
Age, years		
18–29	ref.	
30–39	2.13	(0.95, 4.79) [†]
40–49	3.10	(1.30, 7.41) *
50	1.00	(0.34, 2.98)
Educational attainment		
Less than high school diploma	ref.	
High school diploma	0.47	(0.23, 0.97) *
Some college	0.50	(0.23, 1.06) [†]
Bachelor's degree or higher	0.36	(0.14, 0.89) *
Relationship status		
Married/cohabitating	ref.	
Widowed/divorced/separated	0.62	(0.34, 1.15)
Never married	0.51	(0.25, 1.07) [†]
Employment status		
Employed	ref.	
Unemployed	1.09	(0.45, 2.66)
Not in labor force ²	0.80	(0.40, 1.57)
Self-rated health		
Excellent/very good	ref.	
Good/fair/poor	1.52	(0.91, 2.53)
Alcohol symptom count (range 1–11)	1.42	(1.28, 1.58) ***
Concurrent illicit drug use		
None	ref.	
Any	1.31	(0.65, 2.63)
Concurrent psychiatric disorder		
None	ref.	
Any	1.35	(0.80, 2.29)

NESARC = National Epidemiologic Survey of Alcohol and Related Conditions

DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, 4th ed.

aOR = adjusted odds ratio; 95% CI = 95% confidence interval

¹Services included 13 types, such as detoxification, in- or out-patient treatment, mutual-aid groups, and lay sources of support, among others.

²Retired, disabled, homemaker, or student

[†]
p<0.10

*
p<0.05

**
p<0.01

p<0.001

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Table 4.

Reasons for not seeking help among NESARC participants (n=177) with DSM-IV alcohol abuse/ dependence at Wave 1 (2000–2001) who perceived a need for help and did not use any services¹ by Wave 2 (2004–2005).

Did not get help because...	Full sample		Men		Women		Significant ²
	n	(%)	n	(%)	n	(%)	
Thought the problem would get better by itself	55	(31)	28	(24)	27	(47)	*
Thought should be strong enough to handle it alone	50	(28)	26	(26)	24	(39)	
Was too embarrassed to discuss it with anyone	37	(23)	20	(19)	17	(31)	
Didn't think drinking problem was serious enough	40	(22)	23	(20)	17	(27)	
Couldn't afford to pay the bill	29	(16)	19	(16)	10	(15)	
Didn't have time	26	(15)	17	(15)	9	(16)	
Tried getting help before and it didn't work	23	(14)	18	(19)	5	(3)	*
Didn't want to go	30	(14)	18	(15)	12	(12)	
Didn't think anyone could help	24	(13)	18	(17)	6	(5)	*
Stopped drinking on my own	24	(13)	11	(9)	13	(23)	*
Wanted to go but health insurance didn't cover	24	(11)	16	(11)	8	(10)	
Wanted to keep drinking or got drunk	20	(9)	9	(7)	11	(14)	
Family thought I should go but I didn't think it was necessary	16	(8)	9	(7)	7	(12)	
Didn't know any place to go for help	14	(8)	11	(9)	3	(4)	*
Afraid of what boss, friends, family, or others would think	14	(8)	9	(7)	5	(12)	
Hated answering personal questions	14	(7)	7	(5)	7	(11)	
Other reason	14	(6)	8	(6)	6	(7)	
Didn't have any way to get there	8	(5)	6	(5)	2	(3)	
Was afraid they would put me into the hospital	8	(5)	5	(4)	3	(5)	
Friends or family helped me stop drinking	8	(5)	4	(3)	4	(7)	
Had to wait too long to get into a program	6	(5)	4	(6)	2	(2)	
The hours were inconvenient	5	(5)	4	(6)	1	(4)	
Was afraid I would lose my job	5	(2)	4	(3)	1	(1)	
Was afraid of the treatment they would give me	4	(3)	4	(2)	0	(0)	
A member of my family objected	1	(1)	0	(0)	1	(4)	
Couldn't arrange for child care	1	(1)	1	(1)	0	(0)	
Can't speak English very well	0	(0)	0	(0)	0	(0)	

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DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, 4th ed.

Note: Frequency counts are unweighted; percentages are weighted.

¹Services included 13 types, such as detoxification, in- or out-patient treatment, mutual-aid groups, and lay sources of support, among others.

²P-value < .05 and Benjamini-Hochberg False Discovery Rate procedure indicates significance.