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## The role of perceived treatment need in explaining racial/ethnic disparities in the use of substance abuse treatment services

M Pinedo<sup>1</sup>, AP Villatoro<sup>2</sup>

<sup>1</sup>Department of Kinesiology & Health Education, The University of Texas at Austin, 2109 San Jacinto Blvd., Stop D3700, Austin, TX 78712-1415

<sup>2</sup>Latino Research Institute, The University of Texas at Austin, 210 W. 24<sup>th</sup> Street, Stop F9200, Austin, TX 78712

### Abstract

**Objective**—The current study examined the role of perceived treatment need in explaining racial/ethnic disparities in treatment utilization for a substance use disorder (SUD).

**Methods**—We pooled data from the National Survey on Drug Use and Health survey for years 2014–2017. The analytic sample included adult white, Black, and Latino participants with a past-year SUD (n=16,393). Multivariable logistic regressions examined racial/ethnic disparities in perceived treatment need—the perception of needing mental health and/or substance use treatment services within the past 12 months—and utilization of past-year substance use, mental health, and any treatment.

**Results**—Latinos with SUD were less likely to perceive a need for treatment than whites. Black and Latino participants, relative to white participants, had lower odds of past-year treatment utilization, regardless of treatment type. In models stratified by perceived treatment need, racial/ethnic differences in the use of past-year substance use treatment and any treatment service were only significant among persons without a perceived need for treatment. We found no disparities in use of mental health treatment.

**Conclusions**—Adults with SUD have low perceived treatment need overall but especially among Latinos. Furthermore, Black and Latino disparities in SUD treatment use may be driven in part by lower perceived need for treatment. Interventions that promote better perceived need and

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Corresponding Author: Miguel Pinedo, PhD MPH, 2109 San Jacinto Blvd., Stop D3700, Austin, TX 78712-1415, Phone: 512-471-8184, mpinedo@austin.utexas.edu.

#### Author contributions

MP conceptualized, conducted the analyses, and drafted the original manuscript. AP contributed to manuscript writing, guided the analyses, and interpretation of findings. Both authors contributed significantly to all aspects of the study. This work was supported in part by the National Institute of Alcohol Abuse and Alcoholism (R01AA027767) and the Latino Research Institute at The University of Texas at Austin. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

#### Conflict of Interest

None.

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delivery models that strengthen the integration of SUD treatment in mental health services may help to reduce these disparities.

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## 1. Introduction

Current national estimates indicate that more than 18.7 million adults in the United States (U.S.) struggle with a substance use disorder (SUD) (SAMHSA, 2017). However, considerable gaps between treatment need and treatment use persist (McMorrow et al., 2015; Pinedo, 2019). In 2017, approximately 92% of individuals with an SUD had not sought treatment in the past year (SAMHSA, 2019). Even more troubling is that racial/ethnic disparities in use of treatment services continue: Latinos and Blacks with SUD are less likely to use SUD and mental health treatment services than their white counterparts (Chartier & Caetano, 2011; Pinedo, 2019; Schmidt et al., 2006; Weisner & Matzger, 2002). In general, barriers related to access and cost (e.g., having treatment covered by insurance, being employed, income, transportation issues) do not explain racial/ethnic disparities in treatment utilization (Pinedo, 2019; Schmidt et al., 2007; Verissimo & Grella, 2017). Therefore, further exploration is necessary to identify key factors that may contribute to this disparity.

A critical barrier to SUD treatment is that the majority of individuals with SUD do not perceive having a problem or needing treatment (Grella et al., 2009; Mojtabai et al., 2014; Rogers et al., 2019). The literature commonly conceptualizes perceived treatment need as a recognition by a person, who meets diagnostic clinical criteria for SUD, that their alcohol and/or drug use is problematic and that they are in need of professional help (Ali et al., 2015; Pinedo, 2020). One national study among 18,600 adults who met clinical DSM-4 diagnostic criteria for SUD found that 97% did not perceive that they needed treatment and treatment utilization was low: more than 80% never sought treatment for an SUD (Ali, et al., 2015). Conversely, the likelihood that a person with SUD will seek and use treatment significantly increases when they perceive their alcohol or drug use as problematic and that they are in need of professional help. A population-based study found that among persons with SUD, having health insurance was associated with increased odds of using treatment *only* when they perceived to need treatment (Ali, et al., 2015). Persons with SUD who did not perceive a need for treatment were less likely to use treatment regardless of insurance status. This suggests that having access to treatment is insufficient for encouraging utilization. Yet this study did not explore racial/ethnic differences in perceived treatment need and how they relate to treatment use.

To date, the literature has not clarified whether differences in perceived treatment need among racial/ethnic groups with SUD exist. For example, are racial/ethnic minorities (i.e., Black and Latino adults) with SUD less likely, more likely, or equally as likely to perceive needing treatment for their alcohol and/or drug use problem? The answer to this question remains unclear. We were only able to identify two studies that empirically examined perceived treatment need using a sample of persons with SUD by race/ethnicity. The first study used nationally representative data and found that among persons with past-year alcohol or drug dependence, racial/ethnic minorities had twice the odds of perceiving a need for help relative to whites (Grella, et al., 2009). However, this study aggregated all minority

racial/ethnic groups into one category, thereby making generalizations specifically to Black and Latino individuals difficult. The second study, using qualitative data from a nonprobabilistic sample of persons with SUD, found that Latinos more frequently described not needing treatment than other racial/ethnic groups (Pinedo et al., 2018). However, findings from this study have not been confirmed using nationally representative data. This limited knowledge base suggests that racial/ethnic differences may exist, but it is difficult to draw conclusions given the dearth of research in this area.

Cultural, sociodemographic characteristics, and normative expectations surrounding psychiatric disorders (including SUD) can influence perceptions of treatment need and utilization of services (Thoits, 2005). These characteristics also vary across social status and race/ethnicity (Thoits, 2005). Socially and economically advantaged groups (whites) may find it easier than disadvantaged groups (i.e., racial/ethnic minorities) to recognize their symptoms as problematic due to better health literacy and access to care. Racial/ethnic minorities compared to whites may also perceive greater stigma and criminalization for having an alcohol or drug problem, and thus be discouraged from recognizing a problem and a need for help (Pinedo, 2019; Pinedo et al., 2020). As such, differential perceptions of SUD problems across social status groups may generate disparities in treatment utilization. Differential perceptions of need for SUD may help to explain racial/ethnic disparities in the use of treatment services.

In the current study, we examine how perceived treatment need is associated with racial/ethnic disparities in SUD treatment utilization. Specifically, the objective of this study is to address the following two research questions, which represent a critical gap in the existing literature: (1) Do differences in perceived treatment need vary by race/ethnicity among persons with SUD? (2) Do racial/ethnic differences in perceived treatment need explain disparities in treatment utilization among those with SUD? We hypothesize that racial/ethnic minority groups (i.e., Black and Latino participants) will demonstrate lower perceived need and will be less likely to seek treatment than white participants.

## 2. Methods

### 2.1. Theoretical/conceptual framework

Commonly applied in health services research (Lê Cook, McGuire, and Zaslavsky, 2012), we adopt the Institute of Medicine's (IOM, 2003) definition of healthcare disparities to empirically examine racial/ethnic disparities in treatment utilization among persons with SUD. According to the IOM, healthcare disparities are the result of differences in the operation of healthcare systems, their legal and regulatory climate, and discriminatory practices (e.g., biases, stereotyping). This definition excludes group differences resulting from differences in clinical need (e.g., difference in prevalence of SUD) and healthcare preferences (e.g., preferring to talk to a priest rather than a medical professional). We employ this conceptualization of disparities because of its utility in health services research (Lê Cook et al., 2012).

To guide the analytic approach of the study, including variable selection, we draw on the Behavioral Model for Health Services Use (BMHSU) framework (Andersen et al., 2007).

Researchers have widely used this framework to understand factors that facilitate and impede SUD treatment use in adults (Mojtabai, 2005; Dawson, Goldstein, and Grant, 2012). The framework identifies three broad domains with individual and contextual levels of influence that affect how people engage in healthcare (Andersen, et al., 2007). These include *Predisposing characteristics* that facilitate people using health services (e.g., sociodemographic characteristics, health beliefs), *Enabling factors* that facilitate access and utilization (e.g., income, health insurance status, supply of treatment services, health policies), and *Need factors* for healthcare as defined clinically and subjectively (e.g., health status, perceived need, physical environment).

Gelberg, Andersen, and Leake (2000) expand on the BMHSU framework for vulnerable populations by suggesting that factors influencing healthcare use (predisposing, enabling, and need factors) can be divided into traditional and vulnerable domains. The traditional domain reflects factors presented in the original framework, whereas the vulnerable domain focuses on the social structures and enabling resources relevant to specific populations that may affect healthcare utilization. For instance, the *Predisposing vulnerable* domain includes social structure characteristics such as immigrant status, childhood adversity, criminal justice history, and living conditions. The *Enabling vulnerable* domain includes access to resources that may depend on social status (e.g., receipt of public benefits, access to SUD information). Finally, the *Need vulnerable* domain involves clinical and perceived needs that are specific to vulnerable populations (e.g., co-occurring mental illness). We included measures that fit within our conceptual framework in our analysis.

## 2.2. Data and study population

We pooled data from the National Survey on Drug Use and Health (NSDUH) survey for years 2014, 2015, 2016, and 2017. The NSDUH is a nationally representative, cross-sectional survey that is conducted annually among noninstitutionalized persons ages 12 and older. We recruited participants through multistage probability sampling methods, using a national sampling frame that includes all 50 states and the District of Columbia. The Substance Abuse and Mental Health Services Administration (SAMHSA) sponsors the survey, and it has been conducted annually since 1971. De-identified data are publicly available. Detailed information on the survey's methodology is published elsewhere (Quality, 2019). Given our research question, we restricted the analytic sample to adult white, Black, and Latino participants who met DSM-IV diagnostic criteria for a past-year SUD (total n=16,939; 2014: 3,510; 2015: 4,559; 2016: 4,437; 2017: 4,433). The Institutional Review Board of the University of Texas at Austin required no review or oversight as analyses are based on publicly available and de-identified data.

## 2.3. Measures

**2.3.1 Variables of interest**—Past-year SUD (coded No past-year SUD=0, Any past-year SUD=1) included those with a 12-month DSM-IV alcohol use disorder (AUD) and/or drug use disorder (DUD). We constructed this variable using the National Institute on Alcohol Abuse and Alcoholism Alcohol Use Disorder and Associated Disabilities Interview Schedule-5 (AUDADIS-5) (Grant et al., 2015), designed to measure past-year AUD and DUD based on DSM-IV diagnostic criteria.

We assessed three treatment outcomes. We defined past-year SUD treatment utilization as having used any in- or out-patient service from a hospital, rehabilitation facility, or mental health center during the past 12 months specifically for problems related to alcohol or illicit drugs use (coded No=0, Yes=1). We define past-year mental health treatment utilization as having used any in- or out-patient services in a clinical or nonclinical setting or any prescription medication to treat a mental or emotional condition (coded No=0, Yes=1). Finally, any past-year treatment indicated whether an individual received specialty SUD treatment or mental health treatment within the past 12 months (No=0, Yes=1). Variables were not mutually exclusive (we describe the rationale for this in our analytic section).

To construct our variable for perceived treatment need we combined affirmative responses to the following two questions: (1) “During the past 12 months, did you need treatment or counseling for your alcohol or drug use?” and (2) “During the past 12 months, was there any time when you needed mental health treatment or counseling?” We based our rationale for combining these two variables (i.e., perceived mental health and substance use treatment need) on the following points. Existing research demonstrates that mental illness and substance misuse are highly comorbid; addiction to alcohol and/or drugs is categorized as a mental health disorder (O’Brien, 2011). Additionally, research has shown that individuals with less severe SUD (e.g., have experienced little or no work-related or legal consequences due to their substance use), a co-occurring mental health problem, and those with SUD and no mental health disorder are more likely to use mental health services when they perceive a need for professional help with their substance use (Ali, et al., 2015; Pinedo, 2020). Thus, not including *perceived need for a mental health problem* may lead to underreporting of a subset of individuals who perceive needing help for their substance use and have sought help from a mental health professional. Past research has also operationalized perceived need for treatment by including both mental health (e.g., counseling) or SUD treatment services among persons with an SUD (Ali, et al., 2015; Mojtabai et al., 2002).

**2.3.2 Predisposing factors**—Predisposing factors included race/ethnicity (coded white=0, Black=1, Latino=2) and sociodemographic characteristics, including male gender (coded Male=1, Female=0), age (coded 18–25 years =0, 26–34 years=1, 35–49 years=2, 50 years and over=3), and marital status (coded Married=1, Not married=0). An important vulnerable predisposing characteristic that is relevant to adults with SUD is their criminal behavior and prison history. To control for this construct, we included a measure of any current parole/probation. We asked participants if they had been on parole or probation within the past year (coded No=0, Yes=1).

**2.3.3 Need factors**—Vulnerable need characteristics that are relevant to adults with SUD include problem severity, past-year co-occurring mental illness, and type of SUD (e.g., alcohol use disorder, illicit drug use disorder). We assessed problem severity using four questions that asked participants if they had experienced any of the following problems in the past year due to their drinking or drug use (asked separately for each substance): (1) problems at home or school (e.g., neglecting their children, missing work or school, doing a poor job at work or school, losing a job or dropping out of school); (2) trouble with the law; (3) problems with friends and family; and (4) continued substance use despite problems with

family and friends. We created a composite variable for problem severity by combining “Yes” responses and we created a mean score, where a higher score indicated higher severity (Cronbach’s alpha=0.82).

We measured past-year symptoms of mental distress using the Kessler 6 Distress Scale (Kessler et al., 2002), a 6-item instrument that assesses the frequency of psychological distress that persons experience during a one-month period in the past 12 months (response options range from None of the time=0 to All the time=4). Symptoms include: feeling hopeless; feeling restless or fidgety; feeling so sad or depressed that nothing could cheer you up; feeling that everything was an effort; and feeling down on yourself, no good, or worthless. We summed values across the six items to calculate a total score (total possible score=24); higher scores indicated greater psychological distress (Cronbach’s alpha=0.97). Using the recommended thresholds, we then categorized participants as having past-year symptoms of mental distress versus not (coded No=0, Yes=1).

Last, we constructed a variable to account for type of SUD. Using the AUDADIS-5, we characterized participants into four mutually exclusive groups, those with (1) an alcohol use disorder, (2) marijuana use disorder, (3) illicit drug use disorder, and (4) a co-occurring alcohol and drug use disorder. Our rationale for doing so is that using alcohol and marijuana is less stigmatizing, in part due to their being legally accessible and socially acceptable, which may shape perceptions of treatment needs.

**2.3.4 Enabling factors**—Enabling factors that could facilitate treatment utilization included: employment status (coded Employed full/part time=1, Unemployed/looking for work/disabled/keeping house full time/in school/retired/other reason=0); annual family income; urbanicity (coded large metro area=0, small metro area=1, nonmetro area=3), which is a proxy for the availability of treatment services in their area; insurance status (coded Uninsured=0, Private/public insurance=1); and survey year (coded 2015=0, 2016=1, 2017=2).

## 2.4. Analyses

We used STATA version 15 software to conduct all analyses, which we weighted to account for the complex survey sampling design. We first conducted descriptive statistics to characterize our total sample and stratified by perceived treatment need. We examined binary associations between independent variables and perceived need using chi-square tests (dichotomous/categorical variables) and t-test (continuous variables). Using the full sample of adults with SUD, we estimated a multivariable logistic regression model to evaluate racial/ethnic differences in perceived treatment need, controlling for predisposing factors, need factors, and enabling factors. We then conducted multivariable logistic regressions to examine racial/ethnic disparities in the use of past-year (1) SUD treatment, (2) mental health treatment, and (3) any treatment (i.e., SUD or mental health) among adults with SUD, controlling for predisposing factors, need factors, and enabling factors. We identified any racial/ethnic differences that remained statistically significant after adjusting for these factors as a disparity. Finally, we tested interactions between race/ethnicity and perceived treatment need for each outcome. Interactions were significant for any treatment service and

SUD treatment and nonsignificant for mental health treatment services (data not shown; available upon request). Thus, we conducted and present stratified analyses by perceived treatment need for the former two outcomes.

Additionally, we explored how the study's findings would be impacted if we categorized participants into four mutually exclusive groups in terms of their past-year treatment utilization: (1) none; (2) SUD treatment only; (3) mental health treatment only; and (4) both SUD and mental health treatment. We estimated multinomial logistic regression models using the full sample and stratified by perceived treatment need, while controlling for sociodemographic characteristics and covariates. Results were consistent with the main set of analyses (data not shown; available upon request), and thus, we present findings from the logistic regressions to facilitate interpretation.

### 3. Results

We report sample characteristics for the total sample and stratified by perceived treatment need in Table 1. Overall, only 18% (n=3,383) of adults with a past-year SUD perceived a need for treatment. Black and Latino participants were significantly less likely than whites to report needing treatment. Those who were male, older, single, unemployed, graduated from college, and reported a higher annual family household income were less likely to perceive a need for treatment. Conversely, those who reported higher problem severity and past-year symptoms of mental distress were more likely to perceive needing treatment. Within the context of SUD type, the highest proportion of those who perceived a need for treatment were those with an AUD only, followed by co-occurring AUD and an illicit drug use disorder, and those with only an illicit drug use disorder. Participants with only a marijuana use disorder were the least likely to report needing treatment. Among those who perceived a need for treatment, 37% reported using any treatment in the past year; 37% reported using mental health treatment services only; and 18% reported using only SUD treatment services. Overall, white and Black participants reported greater utilization than Latinos of any treatment service (whites: 19%, Blacks: 17%; Latinos: 12%), SUD treatment (whites: 9%, Blacks: 9%; Latinos: 6%), and mental health treatment (whites: 16%, Blacks: 13%; Latinos: 9%) (data not shown in Table 1).

#### 3.1. Do differences in perceived treatment need vary by race/ethnicity among persons with SUD?

Table 2 presents findings from the multivariable logistic regression evaluating the role of race/ethnicity on perceived treatment need. Findings suggest that when controlling for sociodemographic characteristics and contextual factors, Latinos with SUD had significantly lower odds of perceiving a need for treatment than their white counterparts. Although Black adults had lower odds of perceived treatment need than whites, these differences were not statistically significant. Factors that were positively associated with perceived treatment need included greater problem severity, past-year symptoms of mental distress, an illicit drug use disorder only, and a co-occurring alcohol and drug use disorder.

### 3.2. Do racial/ethnic differences in perceived treatment need explain disparities in treatment utilization among those with SUD?

Table 3 presents results from the multivariable models examining racial/ethnic disparities in the use of any treatment services (i.e., SUD or mental health treatment services), SUD treatment services, and mental health treatment services. Using the full sample and controlling for sociodemographic characteristics, perceived treatment need, problem severity, currently being on parole or probation, past-year symptoms of mental distress, substance use disorder type, and survey year, Black and Latino participants with SUD were significantly less likely to report *any past-year treatment use* than whites (see full sample model). Having a perceived treatment need was also associated with increased odds of any service use (data not shown). There was a statistically significant interaction between race/ethnicity and perceived treatment need ( $p=.049$ ); therefore, we stratified models by perceived treatment need for the any treatment service outcome (see perceived treatment need stratified models). Among adults with SUD who did not have a perceived treatment need, Black-white and Latino-white disparities in any treatment use were significant, with Black and Latino adults having lower odds of any past-year treatment use than their white counterparts. We did not observe racial/ethnic disparities in any service use among those with a perceived treatment need.

For *SUD treatment*, we found similar results. In the full sample, Black and Latino adults overall reported lower odds of having used SUD treatment in the past year than whites. The statistically significant race/ethnicity by perceived treatment need interaction ( $p=.022$ ) also revealed that these racial/ethnic disparities in SUD treatment utilization are more prominent among adults without a perceived treatment need rather than among those with a perceived treatment need (see perceived treatment need stratified models).

Finally, Black and Latino participants with an SUD reported lower odds of having used mental health services in the past-year than whites. Perceived treatment need was strongly associated with increased odds of having used mental health treatment services in the past year (data not shown). There was no statistically significant interaction between race/ethnicity and perceived need in the use of *mental health treatment*.

## 4. Discussion

This study examined racial/ethnic differences in perceived need for treatment and the role of perceived treatment need in explaining racial/ethnic disparities in the use of treatment services using a nationally representative sample of persons with a past-year SUD. We hypothesized that socially disadvantaged racial/ethnic groups (i.e., Black and Latino adults) would be significantly less likely than socially advantaged groups (i.e., white adults) to perceive a need for treatment, and therefore have lower use of treatment services. Our findings partly support this hypothesis in that Latinos were less likely to perceive treatment need for their substance use, and Latino-white treatment disparities were more prominent among persons without a perceived need, net of predisposing, clinical need, and enabling factors. While we did not observe Black-white differences in perceived treatment need, Black-white disparities in treatment utilization were highest among those without a perceived need for treatment. Overall, the results from this study suggest that perceived



treatment need may be a more important driver of racial/ethnic disparities than predisposing, clinical need, and enabling factors, in the use of treatment services for an SUD. These findings are noteworthy because they suggest that perceptions and attitudes toward these conditions and services, and not necessarily barriers related to access and affordability of treatment services (e.g., being employed, total family income, insurance status, urbanicity—none of which were statistically significant in our analyses), are more likely to motivate persons with SUD to seek treatment.

Our finding that Latinos with SUD are less likely than whites to perceive a need for treatment is a novel finding that has not been previously documented in a comparative study using nationally representative data. This finding is partly aligned with a recent qualitative study that compared barriers to SUD treatment among a sample of participants with SUD by race/ethnicity that found that Latinos more frequently described not needing treatment than white and Black participants, despite meeting DSM-V diagnostic criteria for SUD and reporting high problem severity (Pinedo, et al., 2018). Importantly, *why* Latinos may be less likely to perceive a need for treatment than whites is unclear. For example, findings by Pinedo et al. (2018) suggest that Latinos who are able to meet work and home responsibilities—which are aligned with strong cultural and traditional Latino values—may not perceive a need for treatment. Relatedly, studies have found that factors associated with being “high-functioning” (i.e., being able to sustain substance use without it interfering with important life aspects, such as work and career) may preclude problem recognition and discourage treatment use among persons with SUD (Nwakeze et al., 2002; Pinedo, et al., 2018; Rogers, et al., 2019). This may explain why factors in our study that may serve as proxies for being “high-functioning” (e.g., employment, education, income, insurance status) were unrelated to perceived treatment need. Conversely, factors that may impede functionality (e.g., greater problem severity, symptoms of mental distress, illicit drug use disorder, co-occurring alcohol and drug use disorder) were positively associated with perceived treatment need. In short, need factors may be stronger predictors than enabling factors in shaping perceptions surrounding the need for treatment. Nonetheless, the NSDUH does not collect data on reasons for perceiving (vs. not perceiving) a need for treatment among those with SUDs. Further research on the underlying mechanisms that influence treatment need perceptions among persons with SUDs, including Latinos, is warranted and can potentially lead to a better understanding of factors contributing to disparities in care.

Results from this study should be interpreted within the contexts of limitations. Social desirability bias may be present in our findings given stigma associated with substance use. Participants may have underreported substance use, perceived treatment need, and use of treatment services. Further, the analysis primarily examines individual-level factors of treatment use because the publicly available NSDUH dataset lacks important contextual (e.g., immigration status, acculturation) and system-level (e.g., availability and supply of SUD treatment providers) factors that may affect perceived need and treatment utilization. Omitted variable bias is also likely to result from the absence of variables that capture patient preferences, prior negative experiences with treatment, and treatment beliefs; and the limited availability of vulnerable characteristics of adults with SUD that pertain to predisposing, enabling, and need factors. Additionally, the measurement of perceived treatment need is broad; it aggregates perceived need for both SUD and mental health

treatment services, without distinguishing which led to better treatment-seeking. We were unable to examine these perceptions independently due to their small cell sizes. Moreover, the results of this study cannot establish causality, as it is unclear whether perceived need led to SUD treatment utilization or if utilization informed these perceptions. For example, for SUD treatment in particular, use of these services may not always be voluntary and people may enter treatment without perceiving a need for treatment first (Lê Cook & Alegría, 2011). This perception may be realized as a result of the individual's treatment experience.

Last, while we observed gender differences in perceived treatment need and treatment utilization in our sample (not shown), we did not further explore how perceived treatment need may explain gender differences in treatment utilization because it was beyond our study's objective. Prior studies have found that gender plays a strong role in seeking help for a substance use problem and future studies should consider how gender differences in perceived need could contribute to gender disparities in treatment use (Zemore et al., 2014). Nevertheless, the results from this study provide compelling evidence for how perceived treatment need may be associated with treatment disparities among Blacks and Latinos, thereby informing the design of future interventions.

Perceived treatment need is widely recognized in health services use frameworks like the Behavioral Model for Health Services Use. The current study highlights the importance of perceived treatment need in influencing treatment-seeking behaviors among persons with SUDs, over and above predisposing, need (clinical need), and enabling factors. Further, racial/ethnic disparities in SUD treatment are sizable and significant when there is a failure to perceive a need for treatment. The realization of this need, in contrast, narrows this treatment disparity. Yet despite the critical role of perceived need for treatment in the help-seeking process, much more research needs to be done to improve problem recognition, perceived treatment need, and increase treatment uptake among those with an SUD. Prominent health services frameworks used in SUD treatment research should emphasize the importance of perceived treatment need and extensively evaluate its role in treatment-seeking. Furthermore, researchers should develop frameworks for examining the determinants and mechanisms that lead those with SUDs to realize that they need treatment. Such research is imperative for designing effective interventions that promote perceived treatment need. In addition to refining and developing frameworks to guide future research in this area, the findings from this study point to the need for the translation of existing research to develop interventions that can effectively increase perceived treatment need across the board. Wide and targeted dissemination of these interventions would help to ensure that they reach both Latino and Black populations and help to narrow the treatment gap.

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### Highlights

- Latinos with a substance use disorder (SUD) perceive less treatment need than Whites with SUD.
- Among those with SUD, Blacks and Latinos are less likely to use treatment than Whites.
- Among those who perceive needing treatment for SUD, racial/ethnic disparities in the use of treatment were not found.
- Racial/ethnic disparities in the use of treatment services were found among those who do not perceive a need for treatment.

**Table 1.** Selected characteristics of adults with past-year substance use disorders (weighted %, unadjusted n), National Survey on Drug Use and Health, weighted n=18,528,494, unweighted n=16,939, 2014–2017.

<i>Variables</i>	Total Sample	Does not perceive a need for treatment 82%(13,556)	Perceives a need for treatment 18% (3,383)	P-value
Race/ethnicity				< 0.001
White	71% (10,592)	70% (8,329)	75% (2,263)	
Black	12% (1,927)	13% (1,601)	12% (326)	
Latino	17% (2,682)	17% (2,221)	13% (461)	
Sex				< 0.001
Female	36% (6,891)	32% (4,896)	55% (1,995)	
Male	64% (10,048)	68% (8,660)	45% (1,388)	
Age				< 0.001
18–25 years	27% (7,910)	26% (6,295)	30% (1,615)	
26–34 years	24% (3,943)	24% (3,103)	26% (840)	
35–49 years	25% (3,616)	25% (2,915)	25% (701)	
50 years and over	24% (1,470)	25% (1,243)	19% (227)	
Marital Status				< 0.001
Single	68% (13,097)	66% (10,324)	78% (2,773)	
Married	32% (3,842)	34% (3,232)	22% (610)	
Employment Status				< 0.001
Unemployed	37% (6,617)	36% (5,044)	45% (1,573)	
Employed	63% (10,322)	64% (8,512)	55% (1,810)	
Educational Attainment				< 0.001
Less than high school	13% (1,851)	13% (1,478)	13% (373)	
Graduated high school	25% (3,618)	25% (2,927)	23% (691)	
Some college	34% (4,982)	33% (3,807)	39% (1,175)	
Graduated college	28% (2,978)	29% (2,383)	25% (595)	
Total Family Income				< 0.001

	Total Sample	Does not perceive a need for treatment 82%(13,556)	Perceives a need for treatment 18% (3,383)	P-value
Less than \$20,000	23% (4,489)	21% (3,455)	28% (1,034)	
\$20,000 – \$49,999	29% (5,382)	29% (4,277)	32% (1,105)	
\$50,000 – \$74,999	14% (2,419)	14% (1,932)	14% (487)	
\$175,000 or more	34% (4,649)	36% (3,892)	26% (757)	
Insurance Status				0.065
Insured	16% (2,736)	16% (2,175)	18% (561)	
Uninsured	84% (14,203)	84% (11,381)	82% (2,822)	
Urbanicity				0.952
Large metro	57% (7,665)	57% (6,139)	58% (1,526)	
Small metro	30% (6,014)	30% (4,785)	30% (1,229)	
Non-metro	13% (3,260)	13% (2,632)	12% (628)	< 0.001
Problem severity (SD)	2.01 (2.77)	1.06 (1.71)	2.02 (2.77)	
Currently on probation or parole				< 0.001
No	92% (15,492)	93% (12,467)	90% (3,025)	
Yes	8% (1,447)	7% (1,089)	10% (358)	
Past-year symptoms of mental distress				< 0.001
No	57% (7,360)	66% (6,851)	19% (509)	
Yes	43% (6,069)	34% (3,744)	81% (2,325)	
Type of drug use disorder				< 0.001
Alcohol use disorder only	69% (11,068)	73% (9,340)	53% (1,728)	
Marijuana use disorder only	8% (1,701)	8% (1,383)	7% (318)	
Illicit drug use disorder only	11% (1,805)	9% (1,221)	19% (584)	
Co-occurring alcohol and drug use disorder	12% (2,365)	10% (1,612)	21% (753)	
Any past-year treatment use				
No	82% (13,786)	86% (11,654)	63% (2,132)	
Yes	18% (3,153)	14% (1,902)	37% (1,251)	
Past-year substance abuse treatment use				< 0.001
No	91% (12,671)	93% (10,885)	82% (1,786)	
Yes	9% (1,261)	7% (888)	18% (373)	

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	Total Sample	Does not perceive a need for treatment 82%(13,556)	Perceives a need for treatment 18% (3,383)	P-value
Past-year mental health treatment use				< 0.001
No	85% (14,390)	89% (12,133)	67% (2,257)	
Yes	18% (2,549)	14% (1,423)	37% (1,126)	
Survey Year				< 0.001
2014	22% (3,510)	23% (2,961)	17% (549)	
2015	27% (4,559)	27% (3,678)	25% (881)	
2016	26% (4,437)	26% (3,503)	27% (934)	
2017	25% (4,433)	24% (3,414)	30% (1,019)	



Weighted multivariable logistic regression model examining factors associated with perceived treatment need among adults with a past-year substance abuse disorder; unweighted n=13,552,541; unweighted n= 12,070; 2014–2017.

**Table 2.**

Variables	Perceived treatment need	
	Odds Ratio	95% CI
Race/ethnicity		
White (ref)	--	--
Black	0.85	0.70–1.04
Latino	0.74**	0.59–0.93
Male	0.50***	0.43–0.58
Age		
18–25 years (ref)		
26–34 years	1.01	0.83–1.22
35–49 years	0.93	0.76–1.15
50 years and over	0.78	0.59–1.02
Married	0.82	0.66–1.01
Employed	0.92	0.77–1.11
Educational attainment		
Less than high school (ref)	--	--
Graduated high school	0.87	0.67–1.14
Some college	0.97	0.76–1.25
Graduate college	1.05	0.79–1.39
Total Family Income		
Less than \$20,000 (ref)	--	--
\$20,000 – \$49,999	1.05	0.85–1.31
\$50,000 – \$74,999	1.04	0.83–1.30
\$175,000 or more	0.90	0.72–1.14
Insured	0.85	0.67–1.06

	Perceived treatment need	
	Odds Ratio	95% CI
Urbanicity	0.87	0.71–1.08
Large metro (ref)		
Small metro	0.92	0.80–1.05
Non-metro	0.91	0.77–1.09
Problem severity	1.09***	1.05–1.13
Currently on probation or parole	1.17	0.90–1.51
Past-year symptoms of mental distress	6.09***	5.15–7.19
Disorder type		
Alcohol use disorder only (ref)		
Marijuana use disorder only	1.20	0.96–1.50
Illicit drug use disorder only	1.51***	1.27–1.78
Co-occurring alcohol and drug use disorder	1.80***	1.43–2.25
Survey year		
2014 (ref)		
2015	1.27	1.07–1.50
2016	1.42	1.22–1.66
2017	1.65	1.39–1.96

\* p < 0.05.

\*\* p < 0.01.

\*\*\* p < 0.001.

**Table 3.** Weighted multivariable logistic regression model examining racial/ethnic disparities in the use of past-year treatment services, National Survey on Drug Use and Health, weighted n= 13,552,541, unweighted n=12,070, 2014–2017.

	Any Treatment Use				Substance abuse treatment				Mental health treatment			
	Full Sample <sup>a</sup>		Perceives a need for treatment <sup>b</sup>		Does not perceive a need for treatment <sup>c</sup>		Perceives a need for treatment <sup>b</sup>		Does not perceive a need for treatment <sup>c</sup>		Full Sample <sup>a</sup>	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Race/ethnicity												
White (ref)	-	-	-	-	-	-	-	-	-	-	-	-
Black	0.79*	0.64–0.96	1.09	0.70–1.70	0.62**	0.49–0.88	0.65*	0.46–0.91	0.54**	0.36–0.82	0.78*	0.62–0.98
Latino	0.63***	0.52–0.76	0.98	0.71–1.35	0.49***	0.39–0.63	0.60**	0.41–0.86	0.41**	0.24–0.71	0.60***	0.49–0.74

All models control for sex, age, marital status, employment status, education, income, urbanicity, insurance status, problem severity, currently being on parole/probation, Past-year symptoms of mental distress, and disorder type, and survey year; full sample models control for perceive treatment need.

<sup>a</sup>Weighted n= 13,552,541; unweighted n: 12,070

<sup>b</sup>Weighted n= 2,603,806; unweighted n: 2,566

<sup>c</sup>Weighted n= 10,948,735; unweighted n: 9,504