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Perceived Discrimination Among Racial and Ethnic Minority Drug Users and the Association with Health Care Utilization

Courtney McKnight, DrPH,

Assistant Director of Research, Chemical Dependency Institute, Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, NY, USA

Martha Shumway, PhD,

Associate Professor, Department of Psychiatry, UCSF School of Medicine, San Francisco, CA, USA

Carmen L. Masson, PhD,

Associate Professor, Department of Psychiatry, UCSF School of Medicine, San Francisco, CA, USA

Enrique R. Pouget, PhD,

Principal Investigator, National Development and Research Institutes, Inc., New York, NY, USA

Ashly E. Jordan, MPH,

Associate Research Scientist, School of Nursing, New York University, New York, NY, USA

Don C. Des Jarlais, PhD,

Director of Research, Chemical Dependency Institute, Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, NY, USA

James L. Sorensen, PhD, and

Professor, Department of Psychiatry, UCSF School of Medicine, San Francisco, CA, USA

David C. Perlman, MD

Professor, Department of Medicine, Infectious Diseases, Mount Sinai Beth Israel, New York, NY, USA

Abstract

People who use drugs (PWUDs) are at increased risk for several medical conditions, yet they delay seeking medical care and utilize emergency rooms (ERs) as their primary source of care. Limited research regarding perceived discrimination and PWUDs' use of health care services exists. This study explores the association between interpersonal and institutional racial/ethnic and drug use discrimination in health care settings and health care utilization among respondents (N = 192) recruited from Methadone Maintenance Treatment Programs (36%), HIV Primary Care Clinics (35%) and Syringe Exchange Programs (29%) in New York City (n = 88) and San Francisco (n = 104). The Kaiser Family Foundation Survey of Race, Ethnicity and Medical Care

questionnaire was utilized to assess perceived institutional racial/ethnic and drug use discrimination.. Perceived institutional discrimination was examined across race/ethnicity and by regular use of ERs, having a regular doctor and consistent health insurance. Perceived interpersonal discrimination was examined by race/ethnicity.

Perceived interpersonal drug use discrimination was the most common type of discrimination experienced in health care settings. Perceptions of institutional discrimination related to race/ethnicity and drug use among Non-Hispanic Whites did not significantly differ from Non-Hispanic Blacks or Hispanics. A perception of less frequent institutional racial/ethnic and drug use discrimination in health care settings was associated with increased odds of having a regular doctor. Awareness of perceived interpersonal and institutional discrimination in certain populations and the impact on health care service utilization should inform future intervention development to help reduce discrimination and improve health care utilization among PWUDs.

Keywords

Discrimination; Persons Who Inject Drugs; Health Care Access; Stigma; Persons Who Use Drugs; Drug Use

Introduction

Illicit drug use is associated with a myriad of health conditions, including human immunodeficiency virus (HIV), hepatitis C virus (HCV), hepatitis B virus (HBV), heart disease, liver disease, soft tissue infections, hypertension, and depression (Centers for Disease Control and Prevention (CDC), 2001; Chen, Huang, Yeh, & Chien, 2015; Coughlin & Shang, 2011; D C Des Jarlais et al., 2007; Doherty et al., 1996; Kessler et al., 1996; Lucas et al., 2016; Stein, 1999; Walker, Pratt, Schoenborn, & Druss, 2016)). Despite being at increased risk for several co-morbidities, people who use drugs (PWUDs), compared with the general population, are more likely to delay seeking medical care when necessary, are less likely to utilize primary medical care and are more likely to utilize emergency rooms as their primary source of care (Chen et al., 2015; Chitwood, McBride, French, & Comerford, 1999; French, McGeary, Chitwood, & McCoy, 2000; McGeary & French, 2000).

While PWUDs, in general, have higher rates of several medical conditions, racial/ethnic minority PWUDs, in particular, face a disparate burden of HIV infection, decreased physical health and are less engaged in health care (Don C. Des Jarlais et al., 2012; Hall et al., 2013; Sanchez et al., 2015). In order to increase the number of PWUDs, and particularly racial/ethnic minority PWUDs, engaged in medical care, it is important to understand the factors that may deter them from initiating or remaining in medical care. This study explored PWUDs' experiences with perceived discrimination and the relationship between perceived discrimination and health care access and utilization.

Perceived Discrimination and Health

Perceived discrimination is associated with worse physical and mental health, fewer health-promoting behaviors and under-utilization of needed health care services (Pascoe & Smart Richman, 2009). Experiencing perceived discrimination based on race/ethnicity has

measurable adverse impacts on physical and mental health, including increased blood sugar or A1C levels (an indicator of increased risk of diabetes), high blood pressure, increased risk for breast cancer, and increased levels of stress, anxiety and depression (Banks, Kohn-Wood, & Spencer, 2006; Crouter, Davis, Updegraff, Delgado, & Fortner, 2006; Piette, Bibbins-Domingo, & Schillinger, 2006; Steffen, McNeilly, Anderson, & Sherwood; Taylor et al., 2007). Perceived racial/ethnic discrimination is also associated with increased alcohol use, cigarette smoking, illicit substance use, and HIV risk behaviour (Borrell et al., 2007; Gee, Delva, & Takeuchi, 2007; Hurd, Varner, Caldwell, & Zimmerman, 2014; Kalichman et al., 2006; Nancy Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005; Landrine & Klonoff; Williams & Mohammed, 2009; Yen, Ragland, Greiner, & Fisher). Perceived racial discrimination also influences patterns of health care utilization, including choosing a doctor of the same racial/ethnic background, reductions in the perceived quality of and satisfaction with medical care and delays in seeking needed medical and mental health care (Burgess, Ding, Hargreaves, van Ryn, & Phelan, 2008; LaVeist, Nickerson, & Bowie, 2000; Malat & van Ryn, 2005; Sorkin, Ngo-Metzger, & De Alba, 2010).

Given the illicit and highly stigmatized nature of substance use, PWUDs may experience discrimination related to their drug use, particularly when attempting to access social and medical services (Miller, Sheppard, Colenda, & Magen, 2001). Discrimination based on drug use is associated with depression and lower overall self-reported mental and physical health (Ahern, Stuber, & Galea, 2007). Among Black and Hispanic PWUDs, perceived drug use discrimination is the most common form of discrimination reported and is associated with decreased mental health status, increased levels of depression and more chronic medical conditions; however, only 18% of Black and 29% of Hispanic PWUDs reported that drug use discrimination prevented them getting medical care (Minior, Galea, Stuber, Ahern, & Ompad, 2003; Michael Young, Stuber, Ahern, & Galea, 2005).

Perceived discrimination can occur at multiple levels, including interpersonal, or discrimination between individuals; institutional, or within institutions such as schools, housing or health care; and structural, which includes multiple social forces that are not necessarily driven by individuals (Gee & Ford, 2011; N Krieger, 1999; Shavers et al., 2012). Most research focuses on interpersonal discrimination, or does not distinguish between types of discrimination (Williams & Mohammed, 2009). Among the few prior studies investigating drug use discrimination, individual experiences with perceived discrimination, or interpersonal discrimination has been the focus. This study aimed to contribute to the existing literature on interpersonal drug use and race/ethnicity discrimination, as well as extend it to include perceptions of institutional drug use and race/ethnicity discrimination within health care settings. To do this, we investigated discrimination among PWUDs in three ways: 1) a comparison of the frequency with which PWUDs believe perceived racial/ethnic and drug use-based discrimination occurs in health care settings (institutional discrimination) by race/ethnicity; 2) an exploration of the association between perceived institutional racial/ethnic and drug use discrimination within health care settings and: (a) regular use of emergency departments, (b) access to a regular health care practitioner, and (c) consistent health insurance coverage; and 3) an examination of perceived interpersonal racial/ethnic and drug use discrimination by race/ethnicity.

Methods

Data Source

Between June 2008 and April 2009, 192 individuals were recruited from three types of programs serving PWUDs, at six sites in total: (1) One Methadone Maintenance Treatment Programs (MMTP) in New York City (NYC) and one in San Francisco (SF); (2) One HIV Primary Care Clinics (HIVPCC) in NYC and one in SF; and, (3) One Syringe Exchange Programs (SEP) in NYC and one in SF. Sites were chosen to ensure representation of PWUDs in and out of substance use treatment and those with and without a regular doctor. Participants of each program were selected as they entered program sites using a random number table that identified potential subjects randomly within race/ethnicity to ensure equal representation across Non-Hispanic Blacks, Hispanics and Non-Hispanic Whites and to minimize selection bias. Potential subjects were approached by study staff who explained the study to them and verified their age and drug use experience... Eligible study participants (i.e., 18 years of age and older, used heroin, cocaine and/or methamphetamine within the past 12 months, and received services from an opioid treatment program, HIV primary care or a syringe exchange) were consented and completed laptop-based interviews with trained research assistants. Interviews required approximately 30 minutes and participants were compensated \$20 for their time. The study was approved by the Institutional Review Boards at Mount Sinai Beth Israel in New York City and University of California, San Francisco.

Instrument and Measures

Perceptions of racial/ethnic discrimination in health care settings were assessed using the Kaiser Family Foundation (KFF) Survey of Race, Ethnicity and Medical Care questionnaire (Lillie-Blanton, Brodie, Rowland, Altman, & McIntosh, 2000). The KFF questions were also adapted to assess perceptions of drug use discrimination and discrimination specifically related to HIV and HCV care. None of the questions asked about a specific site of care or doctor, but rather about perceptions of discrimination in healthcare settings more generally.

Perceived institutional discrimination related to race/ethnicity in health care settings was assessed using 7 items: (1) how often the health care system treats people unfairly based on their race/ethnicity; (2) how often the health care system treats people unfairly based on their ability to speak English; (3) how often a person's race/ethnicity affects their ability to get routine medical; (4) ... HIV care; (5) ... HCV care; (6) how often racism occurs when a patient and doctor are of different racial or ethnic backgrounds; and (7) how often racism occurs when a patient and doctor are of the same racial or ethnic backgrounds. All items used a 4-point response scale, ranging from 1 (very often) to 4 (never), with lower ratings indicating a higher frequency of perceived discrimination.

Perceived institutional discrimination related to drug use in health care settings was assessed using 5 items adapted from the KFF survey: (1) how much of the time the participant can trust his/her doctor or other health care provider to do what is best for drug users; (2) how often the health care system treats people unfairly based on their drug use; (3) how often a person's drug use affects their ability to get routine medical; (4) HIV care; and (5) HCV

care. All items used a 4-point response scale, ranging from 1 (very often) to 4 (never), with lower ratings indicating a higher frequency of perceived discrimination.

Perceived interpersonal discrimination was assessed via two yes/no questions : “Have you ever experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior, because of your race or ethnicity?”; and, for perceived discrimination related to drug use, or interpersonal drug use discrimination, “Have you ever experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior, because of your drug use?”.

Finally, study participants reported the type of discrimination they most frequently experienced in health care settings by choosing one response to the following statement: I have been discriminated against more often in health care settings because of my: (1) race/ethnicity (2) drug use (3) HIV status (4) HCV status (5) class status (poverty) (6) I have not been discriminated against (7) don’t know. All study participants, regardless of race/ethnicity, were asked all survey questions, with Non-Hispanic Whites serving as the reference group for questions related to race/ethnicity discrimination.

Data Analysis

Separate exploratory factor analyses (principal axis extraction with Varimax rotation using SAS PROC FACTOR) were performed on the 7 items related to perceived institutional racial/ethnic discrimination in health care settings and the 5 items related to perceived institutional drug use discrimination in health care settings to create scales for each discrimination type. Kaiser-Meyer-Olkin sampling adequacy was well above the standard cutpoint of 0.5 (0.88 for racial/ethnic discrimination and 0.68 for drug use discrimination), indicating that the discrimination items are appropriately correlated for factor analysis. In both cases, inspection of the scree plots and factor loadings suggested a single factor solution for each type of discrimination. Examination of internal consistency reliability for the two resulting scales revealed that one institutional drug use discrimination item inquiring about health care providers doing what is best for drug users was not correlated with the other items, and was therefore removed. The final alpha for the racial/ethnic institutional health care discrimination scale was 0.87 and the final alpha for the drug use institutional health care discrimination scale was 0.81.

The Pearson chi-square test and Wilcoxon signed-ranked test were used to detect demographic differences related to race/ethnicity in the sample. General linear models were used to estimate the association between race/ethnicity and perceived institutional racial/ethnic and drug use discrimination in health care settings. Logistic regression was used to estimate the associations between perceived institutional racial/ethnic and drug use discrimination in health care settings on having a regular doctor, a regular source of medical care and consistent health insurance over the previous 6 months. Logistic regression was also used to estimate the association between race/ethnicity and the dichotomous indicators of interpersonal perceived racial/ethnic and drug use discrimination. All analyses were performed using SAS Statistical Software, version 9.3.

Results

Characteristics of the Sample

Table 1 displays the demographic characteristics of the sample. Of the 192 PWUDs in this sample, approximately one-third were recruited from MMTP (36%), SEP (35%) and HIVPCC (29%), and about half in San Francisco (54%) and New York City (46%). Nearly two-thirds of the sample was male (64%) and the race/ethnicity composition was approximately one-third for each of the racial/ethnic groups represented (i.e., Non-Hispanic Blacks, Hispanics and Non-Hispanic Whites). The mean age of participants was 45 years (range: 21–67 years).

Self-reported HIV and HCV status indicated 63% HCV prevalence and 39% HIV prevalence (the high HIV prevalence was due to one of the three recruitment sites being an HIV Primary Care Clinic whose patients were all HIV+). More than half of the sample (54%) was injecting drugs at the time of the study. The majority of participants (71%) had a regular doctor, almost one-third (29%) utilized the emergency department (ED) as their regular source of medical care, and 68% had consistent health insurance over the previous 6 months.

Almost three-quarters of the sample (72%) reported having experienced some form of perceived interpersonal discrimination in health care settings. Among these individuals, 67% cited drug use as the most common reason for interpersonal discrimination in health care settings, as compared to the two next most frequently cited reasons, class (13%) and race/ethnicity (11%).

Participant demographic characteristics were compared across recruitment city and venue. There were no statistically significant demographic differences between cities. One difference was observed across recruitment venues. A similar number of men and women were recruited from methadone maintenance programs, but more men than women were recruited from HIV primary care clinics (78.2% vs 21.8%) and syringe exchange programs (68.2% vs 31.8%; $p=.007$).

Perceived Institutional Discrimination in Health Care Settings

General linear model analyses indicated that racial/ethnic group membership was not associated with perceptions of institutional racial/ethnic discrimination ($F_{2,188}=.60$, $p=.55$) in health care settings. When the scale scores were expressed as the mean of the individual items, members of all 3 racial/ethnic groups had mean scores in the range of 2.57 to 2.71. These scores fell between the response options indicating that institutional discrimination occurs “somewhat often” (2) and “not too often” (3). The association between racial/ethnic group membership and perceptions of institutional discrimination related to drug use in health care settings approached statistical significance ($F_{2,191}=2.73$, $p=.07$). Post-hoc comparisons showed that Hispanic respondents (item mean = 2.41) reported less perceived institutional drug use discrimination in health care settings than Non-Hispanic Whites (item mean=2.12) ($t<1.97$, $p<.05$).

Perceived Institutional Discrimination and Health Care Utilization

Results from the three logistic regression models predicting ED use, having a regular doctor, and consistent health insurance coverage are displayed in Table 2. Neither perceptions of institutional racial/ethnic discrimination (OR=1.17; 95% CI 0.73–1.87) nor institutional drug use discrimination in health care settings (OR=1.32; 95% CI 0.85–2.04) were associated with using the ED as a regular source of medical care. Having a perception of less frequent institutional racial/ethnic discrimination in health care settings was associated with increased odds of having a regular doctor (OR=2.10; 95% CI 1.28–3.47). Similarly, having a perception of less frequent institutional drug use discrimination in health care settings was associated with increased odds of having a regular doctor (OR=1.68; 95% CI 1.06–2.67). Finally, neither perceptions of institutional racial/ethnic discrimination (OR=1.43; 95% CI 0.90–2.26) nor institutional drug use discrimination (OR=1.38; 95% CI 0.89–2.13) were associated with having consistent health insurance over the last 6 months.

Interpersonal Experiences with Perceived Discrimination

Logistic regression models examined associations between interpersonal experiences with perceived discrimination related to race/ethnicity and drug use. Age was included in the model because univariate analysis suggested that older age was associated with increased odds of experiencing perceived interpersonal racial/ethnic discrimination. In the multivariate model, however, age was not associated with perceived interpersonal discrimination related to race/ethnicity (OR=1.03; 95% CI 0.99–1.06) or drug use (OR=0.98; 95% CI 0.94–1.02). Non-Hispanic Blacks and Hispanics did not differ from Non-Hispanic Whites in their experiences with perceived interpersonal discrimination related to race/ethnicity (Non-Hispanic Black: OR=1.79; 95% CI 0.81–3.97; Hispanic: OR=1.13; 95% CI 0.54–2.34) or drug use (Non-Hispanic Black: OR=1.5; 95% CI 0.60–3.76; Hispanic: OR=0.62; 95% CI 0.28–1.39).

Discussion

Experiences with perceived interpersonal discrimination and perceptions of health care settings as discriminatory were widespread in this sample. When asked to identify the most common form of interpersonal discrimination experienced in health care settings, study participants overwhelmingly reported discrimination related to drug use. This finding is consistent with prior research that has found perceived interpersonal discrimination related to drug use to be the most common form of discrimination experienced by racial/ethnic minority PWUDs (Minior et al., 2003; M Young, Stuber, Ahern, & Galea, 2005). When examining perceptions of institutional drug use discrimination in health care settings across racial/ethnic groups, we did not find a significant difference between Non-Hispanic Whites and Non-Hispanic Blacks or Hispanics. Post-hoc comparisons suggested, however, that Hispanics reported less perceived institutional discrimination related to drug use in health care settings. In the Minior et al (2003) study, Hispanics, as compared to Non-Hispanic Blacks, reported more interpersonal drug use discrimination when accessing medical care.

This study also found that perceiving health care settings as less discriminatory toward drug users (institutional discrimination) was associated with increased odds of having a regular

doctor. Within a sample of Black and Hispanic drug users, Hispanics were more likely to report that interpersonal drug use discrimination from health care providers prevented them from receiving needed medical care, as compared to Blacks (Minior et al., 2003). Our study investigated specific measures of health care utilization (i.e., emergency department use and consistent health insurance) and institutional drug use discrimination but did not find significant associations. In the context of emergency department utilization, other factors associated with chronic drug use such as unstable housing, physical and mental illness may be more important determinants of seeking emergency care. Similarly, the lack of association between perceived institutional drug use discrimination and having consistent health insurance coverage may be explained by other unmeasured individual-level and macro-level structural factors such as geographic variations in health care policy. Finally, unlike many PWUDs, this sample was largely insured (68%) and the majority had a regular doctor (71%). This is likely due to the fact that two-thirds of the sample was recruited from locations where medical care and assistance with obtaining health insurance coverage are provided. Future research should investigate perceptions of interpersonal and institutional discrimination in health care settings among a sample of out-of-treatment and/or HIV negative PWUDs.

Contrary to a prior assumptions, our analyses found that, when controlling for age, Non-Hispanic Whites did not differ from Non-Hispanic Blacks or Hispanics in their experiences with perceived interpersonal racial/ethnic discrimination. Several other studies suggest perceived interpersonal discrimination is more common among racial/ethnic minorities (Blanchard & Lurie, 2004; Kessler, Mickelson, & Williams, 1999; Pew Research Center, 2013; Sorkin et al., 2010); however, prior research on this topic has not included racial/ethnic minority PWUDs. This finding may be explained in part by the wording of the institutional discrimination questions. Respondents were asked a series of questions about “how often the health care system treats people unfairly based on their race/ethnicity” and “...their ability to speak English”, as well as how often a person’s race/ethnicity affects their ability to receive various types of medical care. Because respondents are not asked about the impact of their own attributes on their ability to receive care, it is plausible that these questions may be interpreted differently based on the respondent’s attributes (i.e., a Non-Hispanic White may believe the healthcare system treats Non-Hispanic Blacks unfairly, but not necessarily Non-Hispanic Whites). Future research should word such questions to reflect the impact of a respondent’s attributes on their ability to receive health care.

The unexpected finding regarding a lack of difference between race/ethnicity and institutional racial/ethnic discrimination may also be explained by considering intersectionality theory. Intersectionality, or the theory that multiple social identities can intersect to create privilege and/or oppression, can be particularly useful when examining discrimination and/or disparate health outcomes by considering the multiplicative effect of marginalized identities (Bowleg, 2012; Warner, 2008). It is expected that PWUDs, and particularly minority PWUDs, experience discrimination related to various aspects of their identity, including race/ethnicity, gender and sexuality, both simultaneously and distinctly. Within the context of this research, due to the small sample size, multiple demographic characteristics were not accounted for in these analyses, therefore an intersectionality approach was not utilized. Future discrimination or stigma related research with PWUDs

employing an intersectionality approach would provide critical insight into the ways in which multiple stigmatized identities impact PWUDs in general, and in particular, how these intersecting identities affect health care access and utilization. Similar to the findings regarding perceptions of institutional drug use discrimination in health care settings and health care utilization, perceiving health care settings as having less racial/ethnic discrimination was associated with increased odds of having a regular doctor, but was not associated with having consistent health insurance or emergency department utilization. Other studies have found similar associations between either perceived interpersonal racial/ethnic discrimination in health care settings or perceived institutional racial/ethnic discrimination and reductions in the utilization of health care services. However, these associations have not been investigated in populations of PWUDs (Burgess et al., 2008; Lee, Ayers, & Kronenfeld, 2009; Van Houtven et al., 2005). The lack of association between two of our measures of health care access and utilization may be due in part to the relatively high rate of PWUDs with health insurance and regular doctors in this sample.

The literature regarding discrimination usually examines perceived interpersonal discrimination. Few investigations have assessed the influence of perceptions of institutional discrimination (Shavers et al., 2012). Future research should focus on examining the independent and combined effects of both interpersonal and institutional discrimination on health, particularly for marginalized groups such as PWUDs that tend not to be engaged in regular medical care. We hypothesize that there is likely overlap between these two categories, such that individuals that perceive they were discriminated against by a medical provider or other personnel within health care settings might believe that those settings, in general, are discriminatory. However, having direct experiences with perceived discrimination, as opposed to perceiving an entire system as discriminatory, may have a different impact on the health or health-seeking behaviours of individuals. Research suggests that people who have a regular doctor are more connected to care and more likely to receive care (Atlas, Grant, Ferris, Chang, & Barry, 2009; Lambrew, DeFrieze, Carey, Ricketts, & Biddle, 1996; Sizemore, Sanders, Lackey, Ennis, & Hook, 2003). Understanding the interaction between personal experiences and institutional perceptions, particularly among PWUDs, would be an important contribution to the literature.

There are some possible limitations to this study that must be noted and potentially explored in future research. Mono-lingual Spanish speakers were not included in the study due to a lack of bilingual staff. It is plausible that perceived racial/ethnic or drug use discrimination among monolingual Spanish speakers differs from individuals who are bilingual (English/Spanish); therefore, future research on this topic should include both mono- and bilingual Hispanic participants. Additionally, the finding reported by Mancini et al. of higher lifetime prevalence of illicit drug use among U.S. born versus foreign born Hispanics suggests that nativity is an important characteristic to examine in future work (Mancini, Salas-Wright, & Vaughn, 2015).

The sample for this study was too small to detect several differences in associations, including whether perceptions about either type of discrimination differed by HIV and HCV status, PWID status and several other potentially important demographic factors. While this study found perceived discrimination related to drug use to be the most common form of

discrimination experienced in health care settings, regardless of race/ethnicity, we were not able to examine how race/ethnicity may mediate the health care utilization associations.

This study assessed perceived institutional discrimination related to drug use by adapting questions that were developed to assess perceived institutional racial/ethnic discrimination. It is possible that the factors influencing perceived institutional discrimination related to drug use may be different from those influencing race/ethnicity. Future research should draw more heavily on the development of assessments related to perceived drug use discrimination from the literature regarding stigma related to drug use.

Finally, this study assessed interpersonal and institutional racial/ethnic discrimination and drug use discrimination in health care settings separately. However, as mentioned previously, for racial/ethnic minority PWUDs, it is likely that these types of discrimination and/or beliefs about the health care system being discriminatory occur simultaneously and may have a synergistic effect on health and health behavior. It is also likely that the experiences of discrimination vary based on the intersecting identities of race/ethnicity and PWUD status. Future research might investigate the heterogeneity of discriminatory perceptions and experiences related to drug use among individuals with multiple, intersecting identities. With respect to interpersonal discrimination within health care settings, it may also be helpful to quantify PWUDs' perceptions of the various types of discrimination occurring in health care settings in order to gain a better understanding of the multiple and complex ways in which PWUDs perceive discrimination.

Overall, this study provides an important contribution to the literature regarding PWUDs' interpersonal experiences with perceived racial/ethnic and drug use discrimination, as well as perceptions of institutional discrimination within health care settings. The findings from this study demonstrate that experiences with interpersonal perceived discrimination are extremely common among PWUDs and that negative perceptions about institutional discrimination are associated with PWUDs use of health care services. In order to engage more PWUDs in necessary medical treatment and preventative care, it is critical that we develop a greater understanding of the ways in which factors such as discrimination and stigma influence the type, frequency and overall engagement that PWUDs have with health care services. The findings from this study should inform the development of future interventions seeking to reduce discrimination at both the interpersonal and institutional level, and potentially increase PWUDs engagement in medical care.

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Table 1:

Demographic and Clinical Characteristics of Sample

	n (%)
	N=192
City	
San Francisco	104 (54%)
New York City	88 (46%)
Recruitment Site	
Methadone Maintenance Treatment Program	69 (36%)
Syringe Exchange Program	67 (35%)
HIV Primary Care Clinic	56 (29%)
Sex	
Male	123 (64%)
Female	65 (34%)
Transgender	3 (2%)
Race/ethnicity	
Non-Hispanic Black	69 (36%)
Hispanic	66 (34%)
Non-Hispanic White	57 (30%)
Age	44.7 (range: 21–67)
HCV+	111 (63%)
HIV+	74 (39%)
Current PWIDs	103 (54%)
Has a Regular Doctor	137 (71%)
Uses an ED as regular source of medical care	56 (29%)
Had health insurance consistently over last 6 mos	128 (68%)

Table 2:

Perceived Racial/Ethnic and Drug Use Discrimination in Health Care Settings and Health Care Utilization

	Model 1: Uses ED for Regular Medical Care		Model 2: Has a Regular doctor		Model 3: Had consistent health insurance coverage in last 6 months	
	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
Perceived Racial/Ethnic Discrimination	1.17 (0.73–1.87)	0.51	2.10 (1.28–3.47)	0.004	1.43 (0.90–2.26)	0.13
Perceived Drug Use Discrimination	1.32 (0.85–2.04)	0.22	1.68 (1.06–2.67)	0.03	1.38 (0.89–2.13)	0.15

Note: Higher ORs indicate a reduced frequency of perceived discrimination