Drug-Use Patterns Among Men Who Have Sex with Men Presenting for Alcohol Treatment: Differences in Ethnic and Sexual Identity

Thomas W. Irwin and Jon Morgenstern

ABSTRACT *Two important gaps in our current understanding of drug and alcohol use among men who have sex with men (MSM) are that, first, little is known about the extent of drug- and alcohol-use disorders among MSM and, second, how these may vary among MSM who differ by ethnic/racial or sexual identity. This article is a descriptive study of the alcohol- and drug-use patterns and alcohol and drug diagnoses in an ethnically and sexually diverse sample of treatment-seeking MSM whose primary diagnosis is either alcohol abuse or alcohol dependence. The severity of alcohol problems did not vary by either ethnic or sexual identity, although the types of drugs that were used by participants did. African Americans reported a significantly higher number of drinks per drinking day compared with those in the other ethnic categories. Gay-identified men and those identified as either non-Hispanic Whites or Hispanic/Latino were significantly more likely to have used stimulant drugs (amphetamine or methamphetamine) in the past 6 months, and non-Hispanic Whites were less likely to have used marijuana compared with the other ethnic groups. A very high rate of comorbidity of drug- and alcohol-use disorders was found in this sample of ethnically diverse MSM. These results have important implications for the design of effective treatment interventions.*

KEYWORDS *Alcohol use, Drug use, Racial/ethnically diverse gay and bisexual men.*

INTRODUCTION

Difficulties conducting population-based sampling techniques among men who have sex with men (MSM) have led to speculation regarding the accuracy of drug- and alcohol-use indices among this group. During the past decade, however, improved sampling strategies have resulted in better estimates of alcohol and drug use among MSM.^{1,2} Although much remains unknown, there are some conclusions that can be drawn from this research. In a review of studies on alcohol abuse among MSM, Bux³ concluded that (1) MSM are less likely to abstain altogether from alcohol use, (2) MSM do not seem to be at a higher risk of developing alcohol-use disorders than men in general, (3) rates of drinking among MSM have decreased over the past 15 years, which may be due, in part, to community norms in response to growing concerns regarding HIV/AIDS. Given that in some communities the only “safe”

Drs. Irwin and Morgenstern are with Mount Sinai School of Medicine, New York, New York; and Dr. Morgenstern is with the National Center on Addiction and Substance Abuse, Columbia University, New York, New York.

Correspondence: Thomas W. Irwin, PhD, Columbia Addiction Services and Psychotherapy Intervention Research, 1775 Broadway, #1404, New York, NY 10019. (E-mail: thomas.irwin@mssm.edu)

meeting places for MSM are bars and other venues where alcohol use is common, it may be less surprising that MSM drink as much as they do, than that they do not drink more.⁴ Stall et al.² used random digit dialing to interview MSM in several urban areas in the United States and reported that they do not drink at more problematic levels than men in general. However, drug use was found to be more prevalent among MSM, with almost 20% indicating frequent use. Stall and Wiley¹ summarize the literature on MSM and drug use by making three main points: first, multiple drug use is more common among MSM than among heterosexual men; second, some types of drugs are used more often among MSM than among the general population (e.g., nitrate inhalants and stimulants); and third, although MSM tend to use a variety of drugs, they generally do not use a single drug at any given time, which would be indicative of having a substance-use disorder.

Understanding the extent of alcohol- and drug-use disorders in the MSM population is critical for developing effective drug treatment programs. Treatment of alcohol abuse and dependence is often complicated by co-occurring drug use, but little is known about the extent of their co-occurrence and about disorders in co-occurring drug and alcohol use among MSM. Moreover, little is known about drug- and alcohol-use patterns among MSM of color or among non-gay-identified MSM, or whether patterns of substance use differ among MSM by race/ethnicity or sexual identity.

This study is an exploration of drug-use patterns and drug abuse/dependence diagnoses in a racially/ethnically diverse sample of MSM who presented for alcohol treatment and who had a primary diagnosis of either alcohol abuse or dependence.

METHODS

Participants

Data for this study come from Informed Choices for Men (IC4M), a randomized clinical trial comparing two types of behavioral interventions for alcohol-use disorders and HIV risk behavior among 198 HIV-negative MSM. Inclusion criteria for IC4M were (1) being male, (2) being HIV negative (identified by self-report), (3) having had sex with men in the previous 90 days, (4) a diagnosis of alcohol abuse or dependence in the past 12 months, and (5) having had alcohol in the past 30 days. Participants who showed evidence of thought disorder or severe cognitive impairment were excluded. In addition, participants were excluded if their drug-use disorder diagnosis was more severe than their alcohol-use disorder diagnosis or if they reported injection drug use or crack cocaine use in the past 6 months. This analysis focused on comorbid drug use and drug-use disorders among MSM with a primary diagnosis of either alcohol abuse or alcohol dependence.

The mean age of participants was 35 years and most of the sample identified as gay (Tables 1 and 2). Men who did not identify as gay (i.e., bisexuals, heterosexuals, or unwilling to be classified) were grouped in one category, "non-gay identified." For ethnicity, 60.6% of participants identified as MSM of color, and "Other" was used for the few who were Asian/Pacific Islander and Native American. The sample was relatively well educated, with less than half fully employed.

TABLE 1. Demographic information

Age (mean ± SD)	35.7 ± 8.6
Education [n (%)]	
No diploma	8 (4.04)
Completed high school	23 (11.62)
Some college	66 (33.33)
College graduate	63 (31.82)
Graduate/professional degree	38 (19.19)
Employment [n (%)]	
Employed full time	82 (41.41)
Employed part time	47 (23.74)
Disability	10 (5.05)
Unemployed	39 (19.70)
Student	20 (10.10)
Income (per annum) [n (%)]	
<20,000	79 (40.31)
20,000–50,000	68 (34.69)
>50,000	49 (25.00)

Procedures

A targeted sampling strategy was used to recruit ethnically diverse MSM from various community-based venues where MSM were known to frequent. If interested, potential participants were asked to use a 1-800 number to learn more about the study. They would be given a brief telephone screen regarding alcohol use and sexual risk behaviors. Those eligible were then invited to come to the research site to participate in the intake assessment interview. Before the intake assessment, all participants provided written informed consent. Interviewers with extensive didactic and experiential training in the administration of the study’s various measures administered the intake interview. Participants were asked to provide a urine screen to test for recent use of drugs. All intake assessments were audiotaped.

Measures

The intake evaluation included assessments of alcohol and drug disorders, depression, suicidality, and thought disorders, and residential stability. Also, it included the Timeline Follow-back Interview for alcohol and sexual behavior during the previous 90 days, as well as instruments to measure behavior change processes

TABLE 2. Ethnicity by sexual identity [n (%)]

	African American	Non-Hispanic Whites	Hispanic/Latino	Other	Total
Gay identified	34 (61.82)	66 (83.54)	33 (68.75)	12 (75.00)	145 (73.23)
Bisexual or heterosexual	21 (38.18)	13 (16.46)	15 (31.25)	4 (25.00)	53 (26.77)
Total	55 (27.92)	79 (40.10)	48 (24.37)	16 (8.08)	198 (100.00)

associated with alcohol use and sexual risks (e.g., constructs for self-efficacy, perceptions of risk, readiness to change, and decisional balance). Measures used in this analysis include the following.

Demographic Information Demographic information comprised gender, age, sexual identity, education, income, ethnicity, and residential status.

Drug- and Alcohol-Use Disorders A semi-structured interview adapted from Composite International Diagnostic Interview⁵ was used to assess abuse and dependence of alcohol and of drugs in accordance with the Diagnostic and Statistical Manual–IV (DSM–IV) diagnostic criteria. For this purpose, substance abuse is use of a substance despite potential risks, and dependence is continued use of a substance despite serious problems associated with its use.

Comprehensive Timeline Follow-back Interview^{6,7} Comprehensive Timeline Follow-back Interview was used to obtain a daily history of drinking and of drinks per drinking day during the 90-day period before intake.

RESULTS

Alcohol Use

Participants in the sample overwhelmingly met criteria for DSM–IV alcohol dependence (Table 3), including almost 88% for alcohol dependence and almost 12% for alcohol abuse. The average number of drinks per drinking day was 10.31, but those who did not self-identify as gay reported more drinks (11.98, SD=8.9) per drinking day than those who identified as gay (9.70, SD=7.74). African Americans reported significantly more drinks per drinking day (12.94, SD=9.04) compared with the other race/ethnicity groups ($F=2.94, P<.035$).

Drug Use

Many participants were found to have a comorbid drug-use disorder. Almost 45% of men met criteria for drug dependence, and just over 15% met criteria for drug abuse. Thirty participants (15.15%) met drug-use disorder criteria for

TABLE 3. Drug and alcohol use diagnoses by ethnic and sexual identity [n (%)] LL

	Alcohol abuse	Alcohol dependence	No drug-use disorder	Drug abuse	Drug dependence
Ethnicity					
African American (N=55)	6 (10.91)	49 (89.09)	25 (45.45)	7 (12.73)	23 (41.82)
Non-Hispanic Whites (N=79)	8 (10.13)	71 (89.87)	36 (45.57)	13 (16.46)	30 (37.97)
Hispanic/Latino (N=48)	7 (14.58)	41 (85.42)	15 (31.25)	5 (10.42)	28 (58.33)
Other (N=16)	3 (18.75)	13 (81.25)	3 (18.75)	5 (31.25)	8 (50.00)
Sexual identity					
Gay identified (N=145)	21 (14.48)	124 (85.52)	63 (43.45)	20 (13.79)	62 (42.76)
Non-gay identified (N=53)	3 (5.66)	50 (94.34)	16 (30.19)	10 (18.87)	27 (50.94)
Total	24 (12.1)	174 (87.9)	79 (39.9)	30 (15.2)	89 (44.9)

TABLE 4. Comparison of gay and non-gay-identified participants on substance use during the past 6 months [n (%)]

	Gay	Non-gay	Chi-square (P value)
Marijuana	76 (52.41)	33 (62.26)	1.5219 (0.217)
Opiates	17 (11.72)	5 (9.43)	0.2061 (0.650)
Cocaine	51 (35.17)	18 (33.96)	0.0250 (0.874)
Amphetamine/methamphetamine	19 (13.10)	1 (1.89)	5.3776 (0.020)
Hallucinogens	9 (6.21)	1 (1.89)	1.5106 (0.219)
Other (ketamine, Ecstasy, and gamma-hydroxybutyrate)	29 (20.0)	6 (11.32)	2.0092 (0.156)

two or more illicit drugs. Overall, 138 (69.7%) of the 198 men reported that they had used some drugs in the 6 months before intake, including marijuana (55%), cocaine (35%), and club drugs (20%) such as methylenedioxymethamphetamine/ Ecstasy , ketamine, and gamma-hydroxybutyrate . Hispanic/Latino participants met criteria for drug dependence more (60%) than any other ethnic group.

Specific drugs of abuse (Table 4) differed among MSM who self-identified as gay, bisexual, or heterosexual. Nineteen (13.1%) of men who self-identified as gay reported stimulant use (specifically of methamphetamine) in the past 6 months, compared with only one (1.82%) man who did not identify as gay ($\chi^2=5.37$, $P<.02$). Stimulant use differed by ethnic group (Table 5). Non-Hispanic Whites and Hispanic/Latinos reported significantly more use than African Americans and others (9.92, $P<.019$). Compared with non-Hispanic Whites, men in the other ethnic groups reported significantly more use of marijuana (17.93, $P<0.01$).

DISCUSSION

Participants in this study were found to have severe alcohol-related problems. The number of alcohol abusers was expected to be roughly equivalent to the number of alcohol-dependent men in the sample, and alcohol-dependent men constituted 85–90% of this diagnosis depending on ethnic group. Non-gay-identified participants met criteria for alcohol dependence more than MSM who self-identified as gay. African American men reported more drinks per drinking day than other ethnic groups.

TABLE 5. Comparison of ethnic groups on substance use during the past 6 months [n (%)]

	African American	Non-Hispanic Whites	Hispanic/ Latino	Other	Chi-square (P value)
Marijuana	33 (60.00)	30 (37.97)	33 (68.75)	13 (81.25)	17.9324 (0.0005)
Opiates	1 (1.82)	10 (12.66)	8 (16.67)	3 (18.75)	7.4459 (0.0590)
Cocaine	21 (38.18)	20 (25.32)	22 (45.83)	6 (37.50)	6.0312 (0.1101)
Amphetamine/ methamphetamine	0 (0)	9 (11.39)	8 (16.67)	3 (18.75)	9.9216 (0.0192)
Hallucinogens	1 (1.82)	4 (5.06)	3 (6.25)	2 (12.50)	3.1939 (0.3627)
Other (ketamine, Ecstasy, and gamma-hydroxybutyrate)	4 (7.27)	15 (18.99)	13 (27.08)	3 (18.75)	7.1156 (0.0683)

A surprisingly high proportion of participants also met diagnostic criteria for drug abuse and dependence. Although concurrent use of both alcohol and drugs is not uncommon in the general population,^{8,9} these findings suggest that it may be higher among MSM. The National Drug and Alcoholism Treatment Unit Survey indicates that about 40% of those who receive substance-abuse treatment have disorders related to both alcohol and drug abuse.¹⁰ In this study, roughly 60% of the men met DSM-IV criteria for both drug- and alcohol-use disorders. The types of drugs used among the MSM varied by race/ethnicity and sexual self-identity. More than 60% of MSM of color had used marijuana in the past 6 months, compared with less than 30% of non-Hispanic Whites.

Stimulant use was much higher among non-Hispanic Whites compared with Hispanic/Latinos. Gay-identified MSM were more likely to be non-Hispanic Whites and to have used stimulants during the past 6 months. Stimulant use, specifically methamphetamine use, has increased dramatically in recent years among urban, gay-identified men. This suggests that a combination of factors, including sexual self-identity, race/ethnicity, urbanism, and other social and cultural factors, need to be considered when examining substance-use patterns among MSM.

There were several limitations in this study, including its limited (not representative) sampling method, small sample, and nonresponse rate. Moreover, the data are from a larger study of alcohol use and dependence among MSM who expressed concern about their drinking and later sought treatment. Nonetheless, the findings presented here suggest that both drug and alcohol abuse and dependence may be extensive among MSM, despite variations in the types of drugs used by different racial/ethnic groups of MSM and among MSM who do not self-identify as gay. This high level of comorbidity, combined with reports showing that people presenting with problems related to both alcohol and drugs generally have poorer treatment outcomes than do individuals who present with alcohol-only problems,^{11,12} suggests the need for specialized substance-abuse treatment services for MSM with both drug and alcohol abuse and dependence disorders.

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