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A Comparative Analysis of Methamphetamine Use: Black Gay and Bisexual Men in Relation to Men of Other Races

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Abstract

We investigated the patterns and correlates of methamphetamine use among Black gay and bisexual men who participated in a large-scale study of club drug use, and sexual behavior in combination with club drug use in New York City. Almost half of the Black men (49%) in the sample indicated use of methamphetamine in the 4 months prior to assessment, a proportion somewhat lower than their White counterparts. In terms of the overall sample, the proportion of the Black men in the study was equivalent to the proportion of methamphetamine users who identified as Black. Black methamphetamine users tended not to reside in neighborhoods considered traditionally gay, were more likely to be HIV-positive, have lower educational attainment, and have lower levels of income than other methamphetamine users. In terms of frequency and reasons for use, Black methamphetamine users did not differ in any substantive way compared to other races and ethnicities. In addition, they did not differ along any key demographic lines from Black non-methamphetamine users. Poly-drug use was common among all Black men in the sample, with almost all methamphetamine users also reporting use of cocaine, but cocaine users not necessarily reporting methamphetamine use. Once a drug that was considered popular only among White gay men, methamphetamine use has been shown to transcend racial and ethnic lines. Because of the synergy that exists between use of the drug, the concentrated levels of HIV in the Black gay population, and the sexual disinhibition engendered with methamphetamine use, this drug presents a potentially mounting public health challenge.

Keywords

methamphetamine; Black; poly-drug use; club drugs; gay and bisexual

1. Introduction

Epidemiological and drug surveillance data indicate that methamphetamine abuse is a growing health concern in Black communities (Maxwell, 2004; United States General Accounting Office, 1998). This potential public health problem is supported by clinical observations at community-based substance abuse treatment settings and by empirical research with Black gay and bisexual men (Halkitis, Parsons, & Wilton, 2003; Reback & Grella, 1999; Semple, Patterson, & Grant, 2002; Semple, Zians, Grant, & Patterson, 2005). For this segment of the population, which like other Black communities across the United States is disproportionately affected by the HIV epidemic (Centers for Disease Control & Prevention, CDC, 2006), the potential for widespread methamphetamine use creates the possibility of exacerbating a “dual

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epidemic” (Halkitis, Parsons, & Stirratt, 2001). This potential is supported by the synchronous increase in methamphetamine use and HIV seroconversion in Black communities (Beatty, Wheeler, & Gaiter, 2004; Wheeler, 2005). Because of its availability, relatively low cost, recent increase in purity (Colliver & Gfroerer, 2006), devastating physical and psychological effects, and the sexual risk taking facilitated with use, methamphetamine holds the potential to cause enormous damage in the often resource-limited Black communities of New York City (Davis, Johnson, Randolph, & Liberty, 2006).

Over the last decade, gay communities of New York City have witnessed a significant increase in the use of methamphetamine (Halkitis, Fischgrund, & Parsons, 2005a; Molitor, Truax, Ruiz, & Sun, 1998; Rawson, Anglin, & Ling, 2002; Rawson et al., 2004; Shoptaw, Reback, Frosch, & Rawson, 1998). A formative study of HIV-positive gay and bisexual identified men conducted in 1997-1998 identified a prevalence rate of 7% in a New York City sample (Purcell, Parsons, Halkitis, Mizuno, & Woods, 2001), and recent investigations of club drug users have found that use transcended racial/ethnic lines. In 2005, a study of 311 “health-seeking” men-who-have-sex-with-men (MSM) attending New York City gyms, more Black MSM (BMSM) reported methamphetamine use than White men (28.1% vs. 15.2%) (Halkitis, Moeller, Siconolfi, Jerome, & et al., in press). Taken together, these findings demonstrate the growth and enormity of methamphetamine addiction in the MSM communities of New York City, and support the idea that this addiction transcends age, race/ethnicity, and HIV serostatus.

Even though there exists modest epidemiological and behavioral data on methamphetamine use in Black gay and bisexual identified men, no studies appear to have been published to date on the patterns and correlates of use in this segment of the population. Rather, the nuances of use in this specific segment of the gay and bisexual community are often masked by the study samples, as much of the current empirical research on methamphetamine use has been undertaken with mostly gay identified, White samples, thus necessitating more focused examinations of the population. As such, the purpose of our analyses was to (1) consider the frequencies and patterns of methamphetamine use among Black gay and bisexual men in comparison to men from other racial/ethnic groups and (2) to compare Black gay and bisexual methamphetamine users to their non-using counterparts. In particular, we examined the extent to which methamphetamine is used by Black gay and bisexual men, as compared to men of other races, in relation to both the use of other drugs such as cocaine, which had historically been used more in a more widespread manner in New York City and with regard to the geographic representation of our methamphetamine using sample to consider whether the drug is manifested outside traditionally gay neighborhoods of New York City. By doing so, we gain a greater understanding of the use of methamphetamine by Black gay and bisexual men who may or may not be immersed in traditional gay cultural circles. Such understandings have immediate implications for prevention efforts targeting Black gay and bisexual methamphetamine users as well as non-gay Black users of the drug, and provide a potential indicator of the movement of the drug to areas of the population outside that of gay and bisexual men. Additionally, studies on the use of methamphetamine in gay and bisexual men have immediate public health implications for the Black population of our city where Black gay and bisexual men and Black individuals in general are overrepresented among those with chronic and preventable diseases (Bowen-Reid & Harrell, 2002; Fullilove, 2006; Millett, Peterson, Wolitski, & Stall, 2006).

2. METHODS

2.1 Study Overview

Participants for this analysis were drawn from *Project BUMPS*, a large-scale (N = 450), longitudinal, mixed-methods investigation of club drug use among gay and bisexual men in New York City conducted from 2000 to 2005 and funded by the National Institute on Drug

Abuse. In this study, we sought to determine patterns of club drug use and their relation to sexual risk taking. In addition, we sought to disentangle psychosocial factors that may predispose men to use club drugs. We focused on five specific club drugs (methamphetamine, Ecstasy, ketamine, Gamma hydroxy butyrate (GHB), and powdered cocaine) and collected data in 4 waves (baseline; months 4, 8, and 12) using both quantitative measures and qualitative interviews. The baseline quantitative surveys provide the source of data for the following analysis.

2.2 Procedures

Participants were recruited using active methodologies (Halkitis, Green, & Mourgues, 2005b). In order to be eligible for the study, participants were required to: (1) be 18 years of age or older, (2) report 6 separate incidents of club drug use (any combination of 5 club drugs) in the last 12 months, (3) report at least 1 sexual encounter with another male while using a club drug before or during the sexual encounter in the past 3 months, and (4) agree to show documentation of positive HIV status or, if reportedly HIV-negative or status unknown, agree to take a confirmatory HIV antibody test. These inclusion criteria were applied to all participants including those described in these analyses.

At baseline, participants provided consent, completed both the quantitative surveys via *Audio CASI system (ACASI)*, and the qualitative interview under the guidance of a trained research associate. ACASI uses a computer and voice recordings to administer survey items so that the participant hears (through headphones) and sees (on the screen) each question and response list. ACASI has been found to be an effective interview method for people of diverse educational backgrounds, and eliminates the effects that reading ability has on internal validity (Gribble, Miller, Rogers, & Turner, 1999). Recent studies have shown that ACASI increases the proportion of individuals admitting sexual behaviors and illicit drug use (Des Jarlais, 1998;). ACASI. HIV status was also confirmed at this time. Those who self-reported a seropositive status provided proof of this status (i.e., doctor's letter, prescription bottle with participant's name, etc.). Those who self-reported as seronegative or unknown HIV status underwent mandatory HIV antibody testing via the *OraSure™* system. Participants returned two weeks later for their results. Procedures for testing and notification are described more fully in Halkitis, Green, & Carragher (2006). At the conclusion of the baseline assessment, each participant received a \$30 incentive.

The Internal Review Board (IRB) of the university with which the authors are affiliated approved all procedures.

2.3 Measures

Sociodemographics—Participants were asked to self-report their age, race/ethnicity, education level, employment status, income, and sexual orientation. As noted earlier, HIV status was also confirmed.

Methamphetamine Use—Use of the drug was measured via a drug use scale developed for a previous study by the investigative team (Halkitis et al., 2003b). In this scale, individuals were asked to provide frequency of use in two ways: on a five-point Likert scale, ranging from "Never" to "Always," and on a ratio scale, recording the number of days the drugs had been used. The Likert-scale data were converted to dichotomies (use, no use) for analytic purposes. In addition, participants were asked to identify other illicit and prescribed drugs that they had used in conjunction with methamphetamine via a checklist for the period of assessment. These included: alcohol, barbiturates, powdered cocaine, crack cocaine, ecstasy, GHB, hallucinogens, inhalant nitrates, rohypnol, marijuana, and Viagra (used recreationally). The period of recall was 4 months.

Reasons for and Contexts of Methamphetamine Use—To assess reasons for use the *Inventory of Methamphetamine Using Situations* was utilized. This measure consisted of 35 items modified from *The Inventory of Drug Taking Situations* (IDTS; Turner et al. 1997). Participants were asked to respond using a 5-point Likert scale, ranging from “Never” to “Always,” indicating how often they had used methamphetamine under various situations during the past three months. The measure included five subscales (Unpleasant Emotions, Physical Discomfort, Conflict with Others, Social Pressure, and Pleasant Times with Others) reflecting categories of situations under which drug use might occur (α 's ranged from .73 to .95) (Halkitis et al., 2005b). Participants also were asked to identify on a 5-point Likert scale the frequency with which they had used methamphetamine during the 4-month period of assessment in the following seven contexts: home alone, the home of a friend or partners, bars, bathhouses/sex clubs, circuit parties, at dance clubs, and sex parties. For analytic purposes, these items were dichotomized to indicate “use” or “no use” in each of the contexts.

2.4 Analytic Plan

The analyses first considered methamphetamine usage patterns among Black men in comparison to the other racial/ethnic groups, as well as the other key person-level characteristics of the Black methamphetamine users in comparison to the other groups, including the geographic distribution of the individuals in the study, Motivations, contexts, and poly-drug use combinations among the methamphetamine users, again with regard to Black men in comparison to the other men in the study were then considered. Ensuing analyses examined person-level differences between Black men who utilized methamphetamine as compared to those who did not use the substance. All analyses were undertaken utilizing bivariate and non-parametric procedures.

3. RESULTS

3.1 Race & Other Participant Characteristics in Relation to Methamphetamine Use

The overall sample consisted of 450 men and is more fully described elsewhere (Halkitis, Palamar, & Pandey Mukherjee, 2007). Of these men assessed at baseline, 293 (65.1%) reported use of methamphetamine in the 4 months prior to this time point. In terms of self-identified race/ethnicity, 32 of the 293 methamphetamine users (10.9%) identified as Black or African American. The other users identified as follows: White (56.3%, $n = 165$), Latino regardless of race (19.1%, $n = 56$), and mixed race/other (13.6%, $n = 40$). It should be noted that these proportions approximated the overall composition of the entire sample where 14.7% are Black, 51.1% are White, 19.8% are Latino, and 14.4% are another race/ethnicity.

Table 1 provides a snapshot of the methamphetamine users in the sample along racial/ethnic lines and in terms of key demographic factors. As is shown, the Black methamphetamine users did not differ from the others in terms of sexual orientation. However, the Black men were significantly more likely to be HIV-positive ($\chi^2(3) = 7.66, p = .05$) when compared to the other racial/ethnic groups, significantly less likely to have high levels of educational attainment ($\chi^2(9) = 25.71, p = .002$), and significantly more likely to have a lower annual income ($\chi^2(9) = 19.83, p = .02$) when compared to the White participants.

3.2 Methamphetamine Use Patterns of Black Men

Of the Black subsample, 32 men (49%) identified at least one instance of methamphetamine use in the 4 months prior to assessment at baseline. This rate differed significantly from the self-reported use among Whites (71.7%), Latinos (62.9%), and Other racial/ethnic groups (61.5%) ($\chi^2(3) = 13.03, p < .01$). However, when we examined frequency of use among those who reported using methamphetamine in the 4 months prior to baseline assessment, the frequencies did not vary across racial/ethnic lines as confirmed with both an ANOVA and

Median Test, with the total sample of methamphetamine users indicating an average of 12 days (SD = 19.24) and a Median of 5 days of use. In addition, the geographic distribution of Black methamphetamine users indicated that these men resided in different parts of New York City, and in neighborhoods that are not traditionally gay. This map is shown in Figure 1.

As poly-drug use is a common phenomenon among gay and bisexual men, use of methamphetamine in relation to other drugs that were used in combination with it were examined. These patterns along racial/ethnic lines are shown in Table 2. No statistical differences were noted along racial lines for combining methamphetamine with cocaine, GHB, rohypnol, alcohol, barbiturates, crack cocaine, hallucinogens, heroin, or inhalant nitrates. Significant differences were noted for combining methamphetamine with Ecstasy ($\chi^2(3) = 12.50, p < .01$), with only 43.8% of Black men reporting this mixture as compared to 75.0% of the Latino men. Also significant is the finding that while 49.7% of White men, 46.4% of Latino men and 47.5% of the "other men" report using methamphetamine with ketamine, only 15.6% of the Black men report this combination ($\chi^2(3) = 12.77, p < .01$). Additionally, only 21.9% of Black men report using methamphetamine with Viagra ($\chi^2(3) = 8.87, p = .03$), a rate much lower than other races/ethnicities. Similarly, only 25.0% of the Black men combined methamphetamine with marijuana ($\chi^2(3) = 11.69, p < .01$).

Finally, reasons for methamphetamine use based on Turner, Annis, & Sklar (1997) as well as contexts in which methamphetamine were assessed. No significant differences were noted for the Black methamphetamine users in comparison to the other racial/ethnic groups with regard to their reasons for use and contexts in which the drug was used. While not statistically significant, using methamphetamine to avoid physical discomfort and to avoid conflict with others, and use of the drug at home alone approached significance with Black men endorsing these reasons and context at a slightly higher level.

3.3 Black Methamphetamine Users vs. Black Non-Methamphetamine Users

Analysis of Black methamphetamine users and Black non-methamphetamine users revealed that they did not differ significantly along key factors. Black methamphetamine users were on average 32 years old (SD = 7.60), while Black non-users were 35 years old (SD = 7.23). In addition, significant differences in sexual orientation, educational level and income were not apparent when comparing Black methamphetamine users to non-users.

Since the focus of the study was on five club drugs, the use of the drugs other than methamphetamine in our sample of Black men was explored. It should be noted that across all participants, use of methamphetamine was highly related to the use of ketamine, GHB, Ecstasy, and cocaine (all $p \leq .01$). However, in the Black subsample, the use of methamphetamine was not related to the use of cocaine ($\chi^2(1) = 1.24, p = .27$). Upon further analysis, of the 66 Black men in the study, 29 (43.9%) reported the use of cocaine but not methamphetamine, whereas only 2 (< 1%) reported the use of methamphetamine but not cocaine. In fact, across all of the Black men, cocaine use was reported by 89.4% (i.e., 59 of the 66).

4. Discussion

As concerns regarding methamphetamine abuse continue to grow in the United States (Rawson et al., 2002), one area requiring attention is that of the infiltration of the drug into the Black population. Since little is known or has been documented about this matter, an analysis of the usage patterns of methamphetamine from our longitudinal investigation of club drug using gay and bisexual men was undertaken. We believe that these data, which were collected between 2000 and 2005, indicate that the drug is a reality in the lives of Black gay and bisexual men, and moreover, when coupled with recent findings (Halkitis, Pandey Mukherjee, & Palamar, 2007), suggest a potential growth of usage that may function to exacerbate the HIV epidemic

(Halkitis et al., 2001), which disproportionately impacts Black gay and bisexual men (CDC, 2006; Koblin et al., 2000).

Our findings indicate that a substantial proportion of Black club drug using gay and bisexual men use methamphetamine as one of the drugs in their repertoire. Although usage rates are lower among the Black men in relation to the White men in our study, the proportion of Black men in the study overall is equivalent to the proportion of methamphetamine users who are Black, suggesting that there is definitive use in the Black population, that might be somewhat masked given the small percentage of Black men in the study sample. However, the fact that approximately 14% of the men on the overall sample are Black and approximately 11% of the methamphetamine users are Black indicates that there is high levels use of the drug among Black men, when considering the proportions in the sample. In addition, no substantial differences in frequency of use or motivations for use are noted among the methamphetamine users of varying races and ethnicities. The fact that there are a substantial number of Black men in our study who use methamphetamine confirms previous work that shows that use of this drug transcends racial/ethnic lines (Halkitis et al., 2005a; Reback & Grella, 1999); in some studies, even higher rates of usage are noted among men of color (Fernández et al., 2005; Halkitis et al., in press). However, the data presented here may under-represent the current levels of use among Black men given the historical epoch in which the data were being collected, 2000-2005.

The Black methamphetamine users in our study were more likely to be HIV-positive, have lower educational attainment, and lower incomes, dispelling any previous “mythology” that the drug is only evident among Black middle class men who navigate in White gay contexts (Jerome, 2007). This idea is further supported by our geographic representations of these users, which indicates that the Black men do not reside in predominantly White gay neighborhoods, but rather in predominantly Black neighborhoods. Previous studies on methamphetamine use have focused on samples predominantly drawn from gay neighborhoods and venues (Green & Halkitis, 2006; Kurtz, 2005; Newmeyer, 2003), yet the data presented here suggest that the Black methamphetamine-using men in this investigation may not only reside outside these contexts but may also navigate in non-traditional gay social circles. In addition, the residences of these in diverse neighborhoods suggest the potential for the spread of methamphetamine use outside “gay ghettos” and potential infiltration into the predominantly Black communities in which they reside.

Findings gathered here also suggest that methamphetamine use among Black gay and bisexual men belongs to a larger repertoire of poly-drug use. These men also use a variety of other substances recreationally, such as alcohol, cocaine, and inhalant nitrates. These poly-drug use patterns are evident across all the racial/ethnic groups in our sample and supports previous work in this regard (Fernández et al., 2005; Halkitis et al., 2007; Lee, Galanter, Dermatis, & McDowell, 2003; Semple et al., 2005). However, the Black methamphetamine-using men in our sample were less likely to combine use of this drug with Viagra, ketamine, and Ecstasy. These patterns may be due to socialization pathways and drug use initiation patterns specific to Black community members of New York City. It also is interesting to note that when we further considered the drug use of the Black subsample, there was a high likelihood that men used cocaine and not methamphetamine, but a very low likelihood that they used methamphetamine and not cocaine. This idea is consistent with other analyses that we have undertaken (Halkitis et al., in press) which suggest that in terms of club drug use initiation, methamphetamine is often one of the last drugs used.

Finally, our findings indicate that the Black men using methamphetamine are not different in any substantive demographic manner from Black men who indicated no use of the drug. Both groups used a wide repertoire of other substances and were similar along key demographic

lines, including age and HIV status. These findings suggest that Black methamphetamine users are not a specialized sub-section of the Black gay and bisexual drug using populations and, as noted earlier, are not necessarily only those Black men who are immersed in White gay culture and context.

4.1 Limitations

As is the case with any study that utilizes self-report to capture behavioral data, the issue of social desirability may affect our findings. However, given our use of ACASI technology and our reputation as trustworthy researchers working with the gay community, we have confidence in the relative accuracy of the data that we collected. With regard to the poly-drug use patterns, we did capture data on simultaneous use of the drugs with methamphetamine; however we did not capture the relative frequency of such combinations within the period of assessment, and thus cannot disentangle combinations that were used one time, a few times, or often. Our analyses were based on a sample of 450 gay and bisexual club drug using men who had a minimum of six instances of club drug use in the year prior to baseline assessment. Thus the ability to generalize this knowledge to the gay community overall is very low. These findings must be viewed as those relating to a subset of gay and bisexual men who, by their own admission, have high levels of drug use. Furthermore, it should be noted that the data that we have captured are embedded in a historical context (i.e., 2000-2005) at a time when infiltration of methamphetamine into the Black population was emerging. Historically, cocaine was a substance that had been used widely in New York City (Fuller et al., 2005; Lee et al., 2003), and thus the data presented here may be indicative of a shift in drug use patterns among gay and bisexual men. More recent data suggest somewhat more elevated patterns of use of methamphetamine (Halkitis et al., in press; Jerome, 2007). Finally, while Black men constituted approximately 15% of our sample, these men are still a subsample of the larger study. Therefore, more nuanced questions capturing the cultural experience of Black men with regard to methamphetamine use could not be undertaken. We are currently undertaking this more focused study to understand the issues of culture and identity, which may help to further illuminate the roles that methamphetamine play in the lives of Black gay and bisexual men. Finally, within this convenience sample, the sub-sample of Black men is relatively small. Thus, the findings must be considered in light of the fact that the sample is not necessarily representative of Black club-drug-using men.

4.2 Conclusions

The patterns of methamphetamine use described here, when coupled with the recently reported rates of HIV infection among BMSM, suggest a potentially dangerous condition. Given the disproportionate impact of HIV on the Black population, even low levels of methamphetamine use in this segment of the population can cause high levels of damage. While the work presented here documents the patterns of methamphetamine use in a Black subsample of users, further, more-enumerated investigations are needed to more fully capture the intrapersonal, cultural, and contextual factors that predispose Black gay and bisexual men to use of methamphetamine.

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Figure 1.

Table 1
Sociodemographic Characteristics of Methamphetamine Users (N = 293)

	Black (n = 32)	White (n = 165)	Latino (n = 56)	Other (n = 40)
HIV Status *				
Positive	59.4%	35.8%	37.5%	30.0%
Negative	40.6%	62.4%	62.5%	70.0%
Sexual Orientation				
Gay	84.4%	93.3%	87.5%	85.0%
Bisexual	15.6%	16.7%	12.5%	15.0%
Education ***				
High School or Less	25.0%	6.1%	19.6%	10.0%
Some College	40.6%	29.1%	42.9%	27.5%
Bachelor's Degree	28.1%	45.5%	26.8%	47.5%
Graduate Degree	6.3%	19.4%	10.7%	15.7%
Annual Income **				
Less than 10K	21.9%	14.0%	12.7%	10.3%
Greater than 10K but less than 40K	59.4%	39.6%	60.0%	56.4%
Greater than 40K but less than 75K	15.6%	29.3%	18.2%	30.8%
75K or more	3.1%	17.1%	9.1%	2.6%

*
p = .05

**
p < .05

p < .01

Table 2
Poly Drug Use Patterns of Methamphetamine Users (N = 293)

	Black	White	Latino	Other
Alcohol	65.6%	64.6%	64.3%	60.0%
Barbiturates (e.g., Quaaludes)	34.4%	29.7%	28.6%	28.0%
Cocaine, Crack	12.5%	10.9%	12.5%	12.5%
Cocaine, Powdered	50.0%	30.8%	42.0%	33.3%
Ecstasy **	43.8%	53.3%	75.0%	45.0%
GHB	18.8%	30.9%	25.0%	32.5%
Hallucinogens (e.g., LSD)	3.1%	9.1%	12.5%	7.5%
Heroin	3.1%	1.8%	3.6%	2.5%
Inhalant Nitrates (i.e., poppers)	25.0%	40.0%	32.1%	34.5%
Ketamine **	15.6%	49.7%	46.4%	47.5%
Marijuana **	25.0%	35.2%	57.1%	35.0%
Rohypnol	3.1%	10.9%	10.7%	10.0%
Viagra *	21.9%	42.4%	35.7%	22.5%

*
p < .05

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p < .01