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Drug-using men who have sex with men: sexual behaviours and sexual identities

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Men who have sex with men (MSM) and use drugs are at high risk for HIV. This study assessed drug and sex-related risk behaviours and sexual identities for MSM drug injectors and crack smokers. One hundred and forty four MSM drug injectors and crack smokers from five USA cities were interviewed. One-third of the men were current injectors, twice as many reported lifetime injection. Most (56%) reported sex with women in the prior year; sex trading was reported by 32% with males and 53% with females. There were significant differences between private and public sexual identities. For example, while 31% reported being behaviourally bisexual, only 17% identified themselves to others as bisexual. Drug using MSM are clearly a heterogenous group and prevention messages addressing this diversity are needed.

Introduction

Men who have sex with men (MSM) and men who inject drugs account for 86% of AIDS cases among adult males in the USA (Centers for Disease Control and Prevention 1999). Crack use has also increasingly been associated with HIV risks for both men and women, through unprotected heterosexual transmission (Edlin et al. 1994). Although research has been conducted on risk factors and interventions among MSM (e.g. Penkower et al. 1991, Kelly et al. 1992, Lemp et al. 1994, Carballo-Dieguez and Dolezal 1996) and among injecting drug users (IDUs) and crack smokers (e.g. Booth

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et al. 1993, Brown and Beschner 1993, Czajkoski and Singer 1996), only recently has attention been focused on MSM who are also injectors or crack smokers.

Several articles have identified the importance of differences between sexual self-identity and sexual behaviour among MSM. For example, Lewis and Watters (1994) examined data on sexual identity and sexual behaviour among a sample of male IDUs in San Francisco, and found that almost half of the behavioural bisexuals identified themselves as heterosexuals. Significant differences in HIV seroprevalence among IDUs have also been found by sexual identity, generally indicating that the highest rates of HIV infection were among gay-identified MSM, lowest among heterosexual injectors and an intermediate rate among bisexuals (Deren et al. 1997, Lewis and Watters 1994). In a multi-site study of drug-injecting and crackusing MSM, a significant difference was found in HIV seroprevalence between gay-identified men (57.1% HIV+), compared with 25.4% of bisexuals and 7.4% of heterosexuals (p = 0.001) (Deren et al. 1997). This same study also found that in a sample of male IDUs and crack users, being a self-identified gay drug user was the strongest predictor of serostatus, especially in communities with low seroprevalence among injectors. Other behavioural risks for HIV among drug-using MSM include trading of sex for drugs or money (Doll and Beeker 1996). Recent research on networks (Neaigus et al. 1996, Trotter et al. 1996) also indicates that the characteristics of network membership may be related to the risk of HIV-related behaviours.

Research on risk behaviours of drug-using MSM and their relationship to sexual activities and identities can be helpful in focusing prevention efforts. While sexuality is considered to be a multidimensional concept (Sell 1997), there is considerable disagreement on its different components (Chung and Katayama 1996, Gonsiorek et al. 1995, Klein et al. 1985, Young 2000). This study, conducted in five different geographic sites in the United States, was undertaken to assess sexual behaviours of drug injectors and crack smokers who are MSM, and to compare public and private differences in self-identification of sexual orientation. Preliminary data on networks were also collected to assess size of social and risk networks.

Methods

Five sites that were participants in the co-operative agreement research initiative funded by the National Institute on Drug Abuse (NIDA) were selected to recruit subjects for a study of injectors and crack smokers who were also MSM. These were located in East Harlem, New York City; Long Beach, California; Dayton/Columbus, Ohio; St. Louis, Missouri; and Portland, Oregon. Funds from the Centers for Disease Control and Prevention and NIDA supported the study. Each site recruited approximately 25 men who met the following criteria: self-report as a biological male, reported having sex with another man in the past 12 months, and reported injecting drugs or smoking crack in the prior 30 days, or had been a participant in the co-operative agreement project in that city (which

required that subjects had either injected drugs or used crack in the prior 30 days).

Participants were recruited from street-based hang-outs and shelters by trained outreach workers who were familiar with the particular communities and had experience with the population. Individuals who were recruited were also asked to refer eligible friends who might be interested in the study. Additional recruitment occurred by contacting former male participants in the parent NIDA study who had identified themselves as gay, homosexual or bisexual to review their eligibility for the study and their interest in participating (see Rhodes *et al.* 1999, 2000 for a more detailed description of recruitment procedures).

All subjects participated in a structured interview and were invited to participate in up to two focus groups. The focus group questions centred around issues regarding the drug and sex scenes in the particular communities as well as issues regarding outreach and prevention efforts needed. The structured interviews included questions on demographic characteristics, drug and sex behaviours, sexual identity and networks. This paper will focus on the results from the structured interview. There were three questions regarding self-characterization based on sexual behaviour or sexual identity: (1) 'Considering just the type of sexual activity you have with others, do you consider yourself to be: heterosexual, gay, homosexual, bisexual, other?' (sexual activity); (2) 'Privately, what do you consider your sexual orientation or identity to be?' (private identity); and (3) 'How do you usually identify yourself to other people?' (public identity). Items (2) and (3) provided the same response choices as item (1)

Data were also collected on the number and characteristics of people who study participants had spent time with in the past 30 days (network members). Descriptions and results of the focus groups were prepared by each site. Papers integrating these summaries (Rhodes *et al.* 1999) and the individual site reports (Rhodes *et al.* 2000) are available.

Participants were interviewed after signing an informed consent form. Data collection occurred from autumn of 1995 until January 1996. A total of 144 eligible participants completed the interview. Approximately one-third of these (35%) had been co-operative agreement participants, ranging from 0% to 50% across the five sites.

Results

Each site contributed from 25 to 32 men to the final sample. Study participants were primarily African-American (55%) and white (31%) and their mean age was 35.8 years (see table 1).

Respondents were permitted multiple responses to the item regarding present relationship status, and the majority of men (58%) reported not presently being in a relationship. About one-quarter responded that they were part of a gay couple, had a regular boyfriend, or were seeing several men. Nearly one-third (32%) reported that they were either married to a woman, had a regular girlfriend, or were dating several women.

Table 1. Characteristics of drug using men who have sex with men.

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Recruitment Site (%)		
Columbus/Dayton	25	17
Long Beach	27	19
Portland	31	22
St Louis	29	20
New York	32	22
Ethnicity (%)		
African American	79	55
Hispanic	13	9
White	45	31
Other	7	
Age (Mean)	35.8	
HIV Positive (%)	22**	
# Times tested for HIV	5.1	
Relationship Status*		
Part of gay couple	29	29
Regular boyfriend	34	24
Dating several men	42	29
Married to a woman	9	6
Have regular girlfriend	5	4
Dating several women	31	22
Not presently in a relationship	82	58

^{*}More than one response possible.

Almost all respondents (92%) had been tested for HIV in the past, with a mean number of 5.1 times. Of those who had been tested, 85% returned for their test results the last time they were tested. Almost one-fifth (17%) reported being HIV positive, ranging from 11% in St. Louis to 21% in Long Beach.

Data on drug use behaviour indicated that even though only 37% reported injecting in the prior 30 days, almost twice as many men (64%) reported injecting at some time in their life (see table 2). Of those currently injecting, heroin (57%) and methamphetamines (47%) were the drugs most frequently injected. Although the sample size was relatively small, it appeared that

Table 2. Drug injection and crack use by recruitment site.

	Total	Columbus/ Dayton	Long Beach	Portland	St Louis	New York
	(n = 144)	(n=25)		(n = 31)	(n = 29)	(n = 32)
Injected in last 30						
days* (%)	37	24	44	74	10	28
Crack use in last 30						
days* (%)	76	92	85	29	100	81
Ever injected* (%)	64	64	63	97	45	50

^{**}Based on n = 132, who were HIV tested.

Table 3. Male and female sex partners in prior year.

	Gender of Sex I	Partner Females
# of sex partners in prior year (%)		
0	*	44
	18	6
2–5	41	29
6–10	17	9
11–50	17	9
50+	6	3
Provided sex for drugs or money (%)	32	53
Provided drugs or money for sex (%)	51	21

^{*}Note: one of the criteria for recruitment was that subjects had at least one male sex partner in the prior year.

heroin and speedball (heroin and cocaine used together) were primarily used by injectors in the eastern locations (e.g. speedball injection was reported by 56% of injectors in NY and 33% in Columbus/Dayton versus 17% in Portland and 17% in Long Beach, p < 0.05) and methamphetamines were primarily used in the West (92% in Long Beach, 48% in Portland versus 11% in NY and 0% in Columbus/Dayton (p < 0.001).

More than one-half of the sample (56%) reported also having sex with women during the prior year, with 21% reporting six or more female partners (see table 3). Almost twice as many men (40%) reported having six or more male partners during the same time period. Trading sex for money or drugs with a male partner was reported by one third (32%) of the men and by over one-half (53%) with female partners. More than half the men (51%) reported providing drugs or money for sex with a male partner and 21% reported doing so with a female partner. A summary of the responses to the three sexual identity-related questionnaire items is presented in table 4. There were significant differences between self-identified characterization based on sexual activity, private identity and public identity. Whereas 31% reported that they were behaviourally bisexual, only 17% identified themselves to others as bisexual (p < 0.001). The most frequently used public identity (i.e. used for identifying oneself to others) was heterosexual (42%); however, only 23% considered themselves behaviourally heterosexual. It

Table 4. Term selected by subjects to describe their sexual activity and sexual identity.

	Term Selected to Describe		
	Sexual activity	Private identity (privately, what you consider yourself)	Public identity (how you identify yourself to others)
Heterosexual (%)	23	25	42
Gay (%)	20	20	22
Homosexual (%)	21	19	12
Bisexual (%)	31	28	17
Other/don't know (%)	5	8	7

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Table 5.	Network	characteristics	by sexual	activity.a
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	Sexual Activity Heterosexual	Gay/Homosexual	Bisexual
Total people spent time with**	72.5		
Drug users**	60.0		
Injectors	6.9		
Crack smokers*	43.1		
Amphetamine users	5.2		
People you use drugs with	26.1		
People you have sex with	10.8		

^aBased on number of 'people you spent time with in the past 30 days'

should also be noted that in response to a question regarding gender, 89% responded 'male', 6% responded 'female', 3.5% responded 'transgender' and 3.5% gave other responses, i.e., other, unsure, bisexual, transvestite (no single response given by more than two subjects).

Data on network membership during the prior 30 days were analysed by behavioural identification of the index respondent, i.e. how respondents characterized themselves based on their sexual activity (see table 5). Those who identified their sexual activity as heterosexual reported the largest networks (number of people they spent time with), as well as having significantly more drug users, especially crack cocaine users, in their networks. Although sample sizes were small, some interesting differences in networks were indicated: although the gay- and homosexual-identified participants had larger networks than the bisexuals, the latter group tended to report about three times the proportion of amphetamine users (25% [5.4/21.9] versus 8% [2.4/30.8]) in their networks.

Discussion

Drug using MSM are a heterogenous group, with diverse drug use patterns and sexual behaviour patterns. Although differences in recruitment methods and priorities across sites contributed to site differences in subject characteristics, it appeared that there were geographic differences in drug use patterns (e.g. more amphetamines in the western part of the country and more heroin and speedball reported in eastern areas). This indicates that different types of interventions, with education/intervention messages tailored to individual sites, are needed.

Significant differences between public and private sexual identities indicate that interventions geared solely towards public identities may exclude important segments of the MSM population. Interventions based on behaviours are needed. Access to certain populations may require methods and materials which incorporate their public identities, or rather simply focus on the behaviour, with no targeted identity. Interventions targeting the collective MSM population, and which ignore distinct sexual and gender identities, may be excluding important high-risk groups of drug using MSM. In many

^{*}p < 0.05.

^{**}p < 0.01.

communities, MSMs who are drug users may publicly hide both their sexual orientation and their drug use. This may contribute to their being hard to find and difficult to work with and thus other methods (e.g. peer-based interventions) may be particularly appropriate. Furthermore, while HIV prevention oriented only to gay-identified MSM may miss important segments of the MSM population, efforts oriented toward the general drugusing MSM population may not appeal to those drug users who positively identify with the gay community. Thus, a range of outreach and intervention strategies are needed, targeting MSM in diverse settings (e.g. gay clubs as well as general social clubs) and with tailored contents in the prevention messages (e.g. more explicit focus on same-sex behaviours as well as more general presentation of a range of sexual behaviours).

As noted in the introduction, there has been some disagreement in the literature regarding the multidimensional aspects of the concept of 'sexual identity'. This is a complex issue which requires further study. The findings from the focus groups conducted with this same sample of men (Rhodes et al. 1999, Rhodes et al. 2000), indicated this complexity; some men were comfortable identifying as gay or homosexual, (e.g. 'I'm letting them know that I'm gay and this is me, and accept me for who I am or not') whereas others were less comfortable identifying themselves as gay or homosexual (e.g. 'I don't label myself as any one of the categories ... I just consider myself to be me, and whatever works, works'. Or 'If you go out there and do something for money, that doesn't make you a homosexual, because you don't do it that often') (Rhodes et al. 1999: 637). These distinctions in comfort with same sex behaviours have important consequences for HIVprevention. Those more comfortable identifying as gay or homosexual were more open discussing their same sex behaviour in the focus groups. Furthermore, those who did not identify as gay were less likely to be part of a local gay scene (Rhodes et al. 1999) and thus were less likely to access the support as well as HIV prevention efforts available through those groups.

It is important to note that twice as many men reported ever injecting as compared with reports of current injecting (64% versus 37%). This indicates that prevention for risky behaviours cannot just deal with the most current behaviours; many of these men may be at risk of reverting to injection drug use, and thus prior as well as current behaviours should be addressed when developing interventions.

The finding that the majority of these MSM also reported having sex with women indicates the possibility of heterosexual as well as homosexual transmission among MSM. Incorporating prevention messages in terms of sex with men and women should thus be part of HIV prevention efforts targeting behaviourally and self-identified bisexual MSM.

Data on networks indicated that it may be that those least willing to identify as MSM (i.e. those MSM who identify as heterosexuals based on their behaviour), who may be at increased risk by virtue of having riskier networks (greater number of drug users and crack smokers). Further study into the networks of MSM, particularly in terms of self-identity and risky networks, is needed.

A limitation of the study was that detailed data on the risk behaviours (e.g. needle sharing for IDUs, unprotected anal sexual behaviours) with partners

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were not collected. Other research efforts, however (Deren et al. 1996, Stall and Ostrow 1989, Wolitski et al. 1992), indicate that high levels of risk behaviours among drug using MSM have been found. Further research is therefore needed on the relationship between sex and drug-related risk behaviours and sexual identity to assist in the development of intervention efforts suitable for the broad range of drug-using MSM.

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Résumé

Les hommes qui prennent des drogues et ont des rapports sexuels avec des hommes sont très à risque vis à vis du VIH. Cette étude a évalué les comportements à risque dans le cadre de l'usage des drogues et des rapports sexuels, ainsi que les identités sexuelles chez des hommes usagers de drogues par voie intraveineuse et fumeurs de crack qui ont des rapports sexuels avec des hommes. Cent quarante quatre hommes répondant à ces définitions et domiciliés dans cinq villes des USA ont été interrogés. Lors des entretiens, un tiers d'entre eux étaient usagers actifs de drogues par voie intraveineuse, ce chiffre étant deux fois plus élevé pour ceux qui disent l'avoir été à un moment de leur vie. La plupart des participants (56%) disent avoir eu dans l'année précédente des rapports sexuels avec des femmes ; 32% disent s'être déjà livrés au commerce sexuel avec des hommes, et 53% avec des femmes. Des différences significatives entre les identités sexuelles publiques et privées sont mises en évidence par l'étude. Par exemple, alors que 31% des participants déclarent avoir des comportements bisexuels, seuls 17% s'identifient aux autres comme bisexuels. Les hommes usagers de drogues qui ont des rapports sexuels avec des hommes 338 S. DEREN ET AL

constituent clairement un groupe hétérogène, et les messages de prévention qui abordent cette spécificité sont nécessaires.

Resumen

Los hombres que tienen relaciones sexuales con otros hombres y consumen drogas son los que corren más riesgos de contraer VIH. En este estudio, se valoraron comportamientos de riesgo relacionados con drogas y sexo y las identidades sexuales en hombres que se invectan drogas o fuman crack y tienen relaciones sexuales con otros hombres. De este colectivo fueron entrevistados ciento cuarenta y cuatro hombres de cinco ciudades de Estados Unidos que consumen drogas por vía intravenosa y fuman crack. Un tercio de ellos se inyectaban en la actualidad, el doble informaron que llevaban inyectándose casi toda su vida. La mayoría (56%) dijeron haber tenido relaciones heterosexuales el año anterior; 32% admitió comercio sexual con hombres y 53% con mujeres. Existían importantes diferencias entre las identidades sexuales privada y pública. Por ejemplo, si bien 31% decía tener un comportamiento bisexual, sólo 17% se identificaba ante los demás como bisexual. Los hombres que consumen drogas y tienen relaciones con otros hombres son un grupo claramente heterogéneo y esta diversidad tiene que reflejarse en los mensajes de prevención.