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Club Drug Use Among Young Men Who Have Sex with Men in NYC: A Preliminary Epidemiological Profile

MICHAEL C. CLATTS, LLOYD A. GOLDSAMT, and HUSO YI

Institute for International Research on Youth at Risk, National Development and Research Institutes, Inc., New York, New York, USA

Abstract

This paper describes findings from a study of young men who have sex with men (YMSM) in New York City. Using a cross-sectional design and a community-based targeted sampling approach, a total of 569 YMSM were recruited during 2000 and 2001 for a structured survey interview. High rates of lifetime exposure to a variety of club drugs (including methamphetamine, ketamine, and MDMA) are observed in the overall sample. Among those who use club drugs on a chronic basis ($N = 145$), we found high rates of a prior suicide attempt (including high rates of multiple suicide attempts), high rates of lifetime exposure to multiple types of drugs, high rates of current poly drug use (including multiple types of club drugs), and high rates of current depressive symptoms. Chronic club drug users had a mean CES-D score of 8.5 and nearly two-thirds had a score of 7 or more. Although high rates of condom use are reported in some types of sexual exchanges, data show multiple types of sexual risk among chronic club drug users, including high rates of unprotected anal intercourse (UAI) with most frequent partners and comorbid drug use among both YMSM and their sexual partners.

Keywords

Keywords young men who have sex with men (YMSM); drug use; HIV risk; mental health; club drugs; circuit parties

Introduction

Much of the available literature on the epidemiology of “club drugs” among men who have sex with men (MSM) derives from studies conducted on the west coast of the United States (Reback and Grella, 1999; Lewis and Ross, 1995; Frosch et al., 1996), with additional studies in Australia (Kippax et al., 1998) and Western Europe (Henry, 1992). Relatively little data is available about club drug use from east coast U.S. cities, most notably New York City (NYC), with its large and complex MSM population and highly elaborated set of MSM social venues (bars, dance clubs, etc.) (Klitzman et al., 2002). The social landscape of the MSM community in NYC includes numerous social arenas that have a long history of involvement with illegal drugs, and indeed many of these arenas served as early models for the elaboration of the MSM club scene that emerged in other urban areas. Similarly, these venues were the setting for the early development of events such as the “White party,” a precursor of, and model for, what are now known as “circuit parties,” highly scripted social events in which club drug use is prevalent. While there is overwhelming evidence that drugs (notably club drugs) play an important role in recent increases in the incidence of HIV/STDs in MSM populations in NYC

and elsewhere, particularly among young MSM (YMSM) (Koblin et al., 2000; Stall and Ostrow, 1989; Thiede et al., 2003; Waldo et al., 2000; Weber et al., 2003), it is striking that there is relatively little data available about the prevalence and distribution of club drugs among NYC MSM populations and little assessment of their role in associated public health outcomes.

In an effort to contribute to our growing understanding of the prevalence of “club drugs” among YMSM in NYC, we report data on club drug use from a larger epidemiological study in which lifetime and chronic use of selected club drugs was assessed (including methamphetamine, ketamine, and MDMA). We describe the large group of YMSM in our sample who reported any lifetime exposure to club drugs. Within this larger exposure group, we focus our analysis on YMSM who evidence chronic use of club drugs, developing a preliminary epidemiological profile of this subgroup. Our profile includes demographic characteristics, exposure to a wide range of stressful life events, comorbidity with other illegal drugs, age at initial exposure to a wide range of other illegal drugs, frequency of current club drug use, use of injection as a mode of drug administration, selected mental health correlates (including lifetime suicide attempts and current depression), comorbidity of drugs in recent sexual encounters, and selected sexual risk factors in most frequent sexual partner (including partner characteristics, age discordance, concurrence, and prevalence of unprotected anal intercourse). While limited to descriptive, cross-sectional data, our objective is to document the high and largely unrecognized prevalence of club drug use among YMSM in NYC and to identify some of the key issues that require additional study in this vulnerable population.

Methods

Data collection was initiated in September of 2000 and completed in May 2001. With the explicit goal of building theoretical sources of variability into the sample, subjects were recruited using a targeted sampling approach that included a wide variety of natural settings in which YMSM congregate (Clatts, Davis, and Atillasoy, 1995; Watters and Biernacki, 1989). Settings were identified during a year-long community assessment process, and included a wide range of venues that MSM use for finding sexual partners (e.g., public sex locations, public parks, etc.), establishing commercial sex transactions (e.g., male prostitution areas, “hustler” bars, etc.), as well as those settings in which YMSM gather for more generalized social interactions (e.g., bars, clubs, etc.). Recruitment venues were scheduled at random to reduce potential sampling biases. A third of the participants in the overall sample were recruited in bars, clubs, and cafes (32%), while the remainder were recruited in outdoor “street hangouts” and parks (42%), indoor and outdoor “hustling” venues (16%), and community-based agencies serving high-risk youth (10%).

Interviewers approached young males in the venues and asked if they would participate in a brief health survey. Those who agreed were brought to a private location and screened for eligibility using a brief interview constructed to mask entry criteria (e.g., sexual behavior with female as well as male sex partners was assessed). Eligibility was restricted to young men between the ages of 17 and 28 years who reported sexual contact with a male partner in the previous 6 months. Approximately 80% of the eligible respondents agreed to participate. The structured interview lasted about an hour and was typically conducted immediately following recruitment and screening. The interview was translated into Spanish by a certified translator and back translated to ensure accuracy. Two percent of the interviews took place in Spanish and most interviewers were bilingual in English and Spanish. All but two participants completed the interview, and missing data overall were minimal. Youth received \$25 for their participation. The study procedures were approved by the Joint Institutional Review Board of the National Development and Research Institutes, Inc., including approval to enroll 17 year olds without parental consent.

A total of 569 YMSM completed the interview protocol, which was conducted using a computer assisted personal interview (CAPI) format. Interview domains included demographic characteristics (e.g., age, race), sexual identity, educational attainment, history of housing instability (including experience in foster care, shelter, and runaway episodes), involvement with the criminal justice system, exposure to violence and victimization, mental health status (including history of suicide and current level of depression symptoms, as evidenced by the use of brief CES-D, Center for Epidemiological Studies Depression Scale (Huba et al., 1995)), both lifetime exposure to and current use of illegal drugs, and sexual risk assessments.

Data Analysis

Initially, this report focuses on those youth within the overall YMSM sample who reported some kind of lifetime exposure to one or more of the three types of club drugs that were assessed in this study (N = 293). We report on lifetime exposure for the purpose of showing the broad level of exposure that exists among YMSM. We then focus our analysis on the subsample that evidences more habitual use of one or more club drugs (N = 145), which is the principal objective of this report.

It should be noted that the data reported here are derived from a larger study of health risks among YMSM, rather than from a study focused exclusively on the use of club drugs. This has implications for the types of data that were collected as well as the types of analysis that the data can support. First, our assessment of club drugs is limited to methamphetamine ("Speed"), ketamine ("K"), and MDMA ("Ecstasy" or "E"). We did not assess GHB or Rohypnol. Second, we recognize that both powder cocaine and heroin are also sometimes used in MSM club venues and we report their use in this sample. However, we excluded cocaine and heroin in our construction of the club drug user group because these drugs are also prevalent among the many homeless drug users within our larger YMSM sample, notably a group that is not typically observed in club settings (Clatts et al., 2005). Inclusion of these types of drugs (and these types of users) in the construction of the club drug group would distort our characterization of this particular class of substances. However, within the club drug group, we report on the prevalence of a wide variety of drugs, including cocaine and heroin. Third, our principal interest is in profiling YMSM who use club drugs on a chronic, habitual basis. Consequently, we excluded a small number of YMSM whose first use of one or more types of club drugs had occurred within 30 days prior to the interview but who reported no prior exposure. We excluded these youth on the assumption that initial exposure that had occurred within close proximity to the interview (within 30 days) may have been in the context of experimentation rather than chronic use, and hence would not illuminate chronic users within the sample.

Lastly, in attempting to illuminate the use of club drugs among YMSM, we are immediately faced with a number of complex definitional problems related to the chemical properties of the substances themselves and the way that they are marketed and understood in this population. Terms like "Speed" are employed among many club drugs users to encompass a broad class of substances that may include products that include a diverse range of chemical properties, including methamphetamine. While users sometimes comment on perceived variability in potency or effect, variability that MSM largely attribute to distinctions among brands available from different sellers, the typical user is not able to distinguish between the constituent chemicals purchased and consumed under the general rubric of "Speed" (Narvaez et al., 2001). Consequently, and within the confines of the assessment tools available within the larger study from which this report is derived, we did not attempt to distinguish between different forms of Speed, except where YMSM offered an abiding distinction. For example, although terms "Speed" and "Ecstasy" are used to refer to discrete substances, they both come from common classes of substances (i.e., MDMA is in fact a form of methamphetamine—3,4-

methylenedioxymethamphetamine) (Green, Cross, and Goodwin, 1995). However, in our formative research in preparation for this study, it was apparent that YMSM in NYC are generally unaware of this common chemical foundation, and few users of MDMA understood or acknowledged themselves to be using “Speed.” Consequently, we developed assessment tools that mirrored the operant “emic” distinctions of the subject population that differentiated between “Speed” (as it was understood to refer to substances such as “Crystal,” “Tina,” etc.) and MDMA (as it is understood to refer to substances such as “Ecstasy” or “E”), and we maintain that distinction in reporting the data.

Results

I. Prevalence of Lifetime Exposure to Club Drug Users

Within the overall YMSM sample, a total of 293 YMSM report lifetime exposure to one or more types of club drugs, including MDMA (93%), Speed (43%), and ketamine (53%) (Table 1). Age of initial exposure ranged from 17 to 28 ($M = 22.1$, $SD = 2.7$), spanning the full age range of youth within the overall study. YMSM in the sample are similarly diverse in terms of self-described racial identification, including African-American (14%), Hispanic (39%), Caucasian (38%), and Other (including Native American, Asian, Pacific Islander, and biracial) (10%). Two-thirds (69%) self-identify as gay or homosexual, 20% as bisexual, 5% as heterosexual, and 6% as “other.” Most (88%) describe themselves as having relatively stable living arrangements, although over a third (36%) report having had an experience of homelessness at some time in their lives.

YMSM with lifetime exposure to club drugs also report prior exposure to a wide variety of other types of illegal drugs, including marijuana (95%), crack-cocaine (21%), powder cocaine (61%), and heroin (18%). Ten percent (10%) of the club drug group report prior exposure to injection drug use, reflecting a relatively high level of injection risk given the young age of the sample. That prevalence of exposure to MDMA closely approximates that of marijuana (generally a much more ubiquitous substance in young adult populations) is also particularly striking. High levels of exposure to Speed are also remarkable, particularly given the fact that Speed use is scarcely represented in any of the data from major drug forecasting and sentinel systems in NYC (Community Epidemiology Work Group, 2003).

II. Drug and Sexual Risk Among Chronic Club Drug Users

Given that this is a sample of a young adult population in which high levels of drug experimentation might be expected (consistent with the available literature on YMSM), we further defined the sample to allow for a more detailed examination of YMSM who evidenced chronic use of club drugs. This sample is confined to subjects who reported lifetime exposure as well as use within the 30 days prior to the interview.

Demographic Characteristics—Nearly half of the YMSM who reported lifetime exposure also reported ongoing, chronic use ($N = 145$), and this group does not differ significantly from the larger lifetime exposure group in demographic characteristics. Chronic users range in age from 17 to 28 years old ($M = 21.9$, $SD = 2.8$) and are predominantly White (41%) or Latino (35%). Most (74%) self-identify as gay or homosexual, 20% as bisexual, 3% as heterosexual/straight, and 3% as “other.”

Prevalence of Club Drug Use—The majority (83%) use Ecstasy, over a third (39%) use ketamine, and over a third (35%) use Speed (see Table 3). Nearly one in five (18%) are chronic users of all three types of club drugs (Table 2). About half chronically use MDMA only (45%), with fewer chronic Speed-only users (12%), and fewer ketamine-only chronic users (4%). Similarly, a small group reported chronic use of Speed and MDMA (4%), or chronic use of

Speed and ketamine (1%). Substantially more, however, reported chronic use of ketamine and MDMA (16%). Some chronic users also reported use of other types of psychotropic drugs, including powder cocaine (31%), crack cocaine (7%), and heroin (4%).

Frequency—In the 30 days prior to the interview, over a third (37%) had used Speed on 5 or more days, 13% had used MDMA on 5 or more days, and 11% had used ketamine on 5 or more days (Table 3). It should be noted here that our frequency measure only examined the total number of days in which a particular drug had been used at least once. Given the fact that many of these substances have been associated with large numbers of doses within a single episode (i.e., “binging” and “tweaking”), these data are likely to underrepresent actual rates of exposures or doses since these substances may have been used on multiple occasions within a single day.

Age at Initiation—Few differences are seen in mean age of initiation among the three types of club drugs assessed, including Speed ($M = 19.3$, $SD = 2.8$), MDMA ($M = 19$, $SD = 2.4$), and ketamine ($M = 19.7$, $SD = 2.7$). Mean age of initiation among chronic users does not significantly differ from those observed in the larger lifetime exposure group. Similarly, although the lifetime exposure group initiated other types of drugs such as heroin and cocaine at a slightly younger age, these differences are not significant.

Injection Drug Use—Given the selected nature and young age of the sample, rates of exposure to injection drug use were relatively high. Recall that 10% of the overall sample of lifetime club drug users reported exposure to injection drug use. Among the current club drug users, 6% were current injectors (operationally defined as having reported drug injection within the last 30 days but excluding those whose first injection occurred within this period). Those reporting current injection drug use were similar in age range to the overall chronic club drug use group, ranging in age from 18 to 25. However, injectors were more likely to identify as ethnic minority (only one current injector was White). One-hundred percent of the injectors reported a past experience of homelessness, compared to 42% of noninjectors ($X^2 = 10.1$, $p = 0.001$).

Adversity, Mental Health, and Help-Seeking—YMSM club drug users evidence substantial exposure to adversity (Table 4). Well over a third (40%) report having run away or having been asked to leave their home on at least one occasion before the age of 18 and 11% never returned home. Of those who did return home, over two-thirds (61%) report multiple subsequent run away episodes. Over a third (38%) have a prior history of sex work (defined as exchanging sex for food, clothing, shelter, and/or drugs) and 14% were actively involved in sex work at the time of the interview. Over half (52%) report a prior arrest record. Over a third (37%) report having been physically attacked within the year prior to the interview, and of these, about a third believe that their sexual or gender identity was the basis for the attack.

Substantial numbers report past mental health difficulties, including prior suicide attempts and involvement with mental health and/or substance abuse intervention. A third (34%) report having had at least one lifetime suicide attempt and nearly half of these (45%) report multiple suicide attempts. Age of first suicide attempt ranged from 7 to 24 years of age ($M = 14.8$, $SD = 3.0$).

Rates of engagement with drug user treatment were relatively low given the high levels of drug exposure observed, with only 8% having been in outpatient treatment, only 7% having been in a detoxification program, and only 3% having been in residential drug user treatment. Moreover, among those exposed to treatment, few completed the program. For example, of those who had entered detoxification, only half (50%) completed the course of intervention.

Strikingly high rates of clinically significant mental health distress were observed. Using the short form (eight items) of the CES-D, we assessed current depression as a general marker for psychological distress (Huba et al., 1995). With a normative score of 7 or greater considered clinically significant, YMSM club drug users evidenced high levels of depressive symptoms with a mean CES-D score of 8.5 (SD = 6.0). More than half (58%) have a score of 7 or more.

Sexual Risk—Since the available literature on YMSM has implicated this class of substances in sexual risk, including recent increases in HIV and other STDs, we examined correlates of current club drug use and a select group of factors associated with sexual risk, including age discordance of sex partners, and whether the sexual exchange was predicated on some kind of material exchange (e.g., sex for food, shelter, or money). We also assessed self-reported condom use in receptive anal intercourse (Table 5).

The majority describe their last sexual encounter as having been a mutual exchange (i.e., as arising primarily out of their own interest and attraction rather than an exchange predicated solely on primarily material reward). Only a small group (14%) report that their last sexual encounter was predicated on some type of material exchange. Since our principal aim here is to describe overall patterns of sexual risk in the club drug group, and since the number of sex workers is too small to examine independently, data from participants reporting sex work in their last sexual encounters are not included in the following analyses of sexual practices. Thus, the sample size for these analyses is 125.

The majority (83%) have had sex within the past month, and nearly two-thirds (65%) within the past week. Most (95%) of the encounters are with men, and the average age of sex partners is 25.2 years old (range 16 to 42, SD = 5.6). Sex partners are, on average, 3.2 years older than respondents (ranging from 5 years younger to 20 years older, SD = 5.0). Mean number of sex partners in the past month is 5.0 (SD = 18.2). Roughly one-fourth (26%) report having met their most recent sex partner on the day they had sex, and over half (52%) of these partners were new sex partners (meaning that respondents had not had sex with the individual on a prior occasion).

In their last sexual encounter, 87% report engaging in “safer” penetrative anal sex, while 92% report “safer” receptive anal sex. Almost all (97%) respondents describe “safer” receptive anal sex practices in the context of condom use, although a small number (3%) report withdrawal prior to ejaculation (presumably without condom use) as their primary method of protection. For example, when asked about condom use with their most frequent sex partner in the past month, a quarter (26%) reported never using a condom during insertive anal sex and nearly a third (32%) reported never using a condom for receptive anal sex. (Note: The category “never” is reported because respondents could report on condom use across multiple sex events.)

Subjects report high levels of involvement with drug and alcohol use in their most recent sexual events, including alcohol (53%), marijuana (4%), powder cocaine (11%), Speed (22%), MDMA (21%), and ketamine (14%). About two-thirds (66%) report use of only one of these substances, while roughly one-fifth (21%) report use of two substances, and 15% report the use of three of these substances. Although probably a serious underestimate, subjects reported that their sexual partners also used substances during the encounter, including alcohol (56%), marijuana (45%), powder cocaine (9%), Speed (17%), MDMA (21%), and ketamine (23%).

Discussion

There are a number of limitations to this study. First, the data are derived from a broader study of health risks among YMSM, not from a study focused solely on club drugs. The sample was recruited from natural venues and most of the interviews were conducted in public settings

(rather than in a private research setting). This placed time constraints on the length of the interview and also on the kinds of detail that could be included. For example, the use of a day measure as a proxy for frequency does not work particularly well for drugs like Speed, which are often used in the context of bingeing. We also acknowledge that the sample was developed using a targeted sampling method whose objective was to capture variability within the population in order to support strategic analytical comparisons among subgroups of YMSM. However, we can make no formal claim for the representativeness of the sample. The data are also cross-sectional, thus limiting our ability to infer causality. Finally, these data are self-report and retrospective, raising the possibility of recall error and reporting biases.

Finally, we acknowledge having some concern about the reliability of some of the condom use data. It may be, as suggested by these data, that YMSM are using condoms with great frequency in some types of sexual encounters (i.e., the last sexual partner may have been either a casual partner) and yet much less consistently in the context of their most frequent sexual partner (i.e., who may have been a regular partner). Although this would be consistent with the available literature, we were surprised to see such high levels of self-reported condom use. Even if these rates are reliable, however, the population evidences high rates of receptive and insertive unprotected and intercourse (UAI) among frequent partners, a fact that is especially troubling given the high numbers of partner changes characteristic of young adult males, including YMSM. While we did not measure concurrency, our ethnographic data indicated high rates of partner change even among frequent or “steady” partners, often a context that suggested high rates of “serial intimacy,” that is, frequent and rapid conversion from a “casual” relationship to “steady” partnership, including rapid shifts in the types of increased sexual risk-taking associated with most frequent or steady partners, but with indistinct boundaries between how and when sexual intimacy ends during interstitial periods in which there may be multiple concurrent “steady” partners of unknown or presumed negative HIV status (Crawford et al., 2001; Davidovich, de Wit, and Stroebe, 2000; Kippax et al., 1997).

Conclusion

High levels of lifetime exposure as well as chronic club drug use are reported in this sample of YMSM in NYC. Rates of drug use, including club drugs, substantially exceed previous estimates of this population. Chronic club drug users evidenced high levels of mental health difficulties, including both a history of suicide and current depression. Yet few sought formal intervention and even fewer appear to have been successfully engaged and retained in care. While additional research is needed to better understand the complex relationship between mental health problems and drug and sexual risk practices (Clatts et al., 2005), the data show that the onset of mental health difficulties (including suicide), predate exposure and onset of drug use (see Tables 3 and 4). This suggests that unmet mental health needs may play a critical role in subsequent risk for “drug abuse” in this vulnerable population.

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Glossary

Bingeing and Tweaking

Users describe bingeing as a large number of consecutive doses of a drug that may span an extended period of time but that are conceptualized as a single event. “Tweaking” refers to an experience during a binge, or after it, in which the

psychotropic effects of the substance are declining. Generally connoting a negative experience, tweaking is a sharp and progressive decline in energy or mood that is sometimes also referred to a “crash.” It is often manifested by acute agitation and discomfort, and is sometimes also associated with excessive nervousness, compulsivity, paranoia, and a strong impulse to repeat dosage with the same drug or combination of drugs. Usually used in combination, the phrase “bingeing and tweaking” refers to the cycle of obtaining an initial high followed by a negative experience of “tweaking” or “crashing” as either the perceived effects of the substance are felt to decline, resulting in an impulse to obtain another dose of the drug in an effort to recover the initial pleasurable experience

Circuit Party

Circuit parties are large MSM social events, often held in popular gay destinations, that typically last for several days. Circuit parties often have a theme such as The White Party and The Black and Blue Ball, are heavily advertised through local gay media, travel agencies, and web-based MSM venues, and often draw several hundred nonlocal participants. Typically centered on a large dance event, these parties also commonly have a number of ancillary activities in which drug and sex interactions are prevalent

Crystal

A slang term in MSM venues used to denote a form of methamphetamine that is crystalline in appearance

Ecstasy

An informal term for MDMA (also known as “E”)

Hustler bar

An informal term that is used to refer to a type of bar, club, or other MSM commercial venue whose clientele has a high concentration of male sex workers and men seeking male sex workers

Hustling venues

An informal term that generally refers to outdoor public settings in which men establish commercial sex transactions

K

An informal term for ketamine

Speed

A collective term that may refer to any one of a number of different forms of methamphetamine

Tina

An informal name for methamphetamine that is common in NYC MSM venues

YMSM

A behaviorally based definition of the population of young men who exchange sex with other men but who may not self-identify as either “gay” or homosexual

References

- Clatts, MC.; Davis, WR.; Atillasoy, A. Qualitative Methods in Drug Abuse and HIV Research. Vol. 157. Rockville, MD: National Institute on Drug Abuse; 1995. Hitting a moving target: The use of ethnographic methods in the evaluation of AIDS outreach programs for homeless youth in NYC; p. 117-135. Research Monograph

- Clatts MC, Goldsamt LA, Yi H, Gwadz MV. Homelessness and drug abuse among young men who have sex with men in New York City: A preliminary epidemiological trajectory. *Journal of Adolescence* 2005;28(2):201–214. [PubMed: 15878043]
- Community Epidemiology Work Group. *Epidemiologic Trends in Drug Abuse*. Vol. 1. Rockville, MD: National Institutes of Health, Division of Epidemiology and Prevention Research, National Institute on Drug Abuse; 2003.
- Crawford JM, Rodden P, Kippax S, Van de Ven P. Negotiated safety and other agreements between men in relationships: Risk practice redefined. *International Journal of STD and AIDS* 2001;12(3):164–170. [PubMed: 11231869]
- Davidovich U, de Wit JB, Stroebe W. Assessing sexual risk behavior of young gay men in primary relationships: The incorporation of negotiated safety and negotiated safety compliance. *AIDS* 2000;14:701–706. [PubMed: 10807193]
- Frosch D, Shoptaw S, Huber A, Rawson RA, Ling W. Sexual HIV risk among gay and bisexual male methamphetamine abusers. *Journal of Substance Abuse Treatment* 1996;13(6):483–486. [PubMed: 9219145]
- Green AR, Cross AJ, Goodwin GM. Review of pharmacology and clinical pharmacology of 3,4-methylenedioxymethamphetamine (MDMA or ecstasy). *Pharmacology* 1995;119:247–260.
- Henry JA. Ecstasy and the dance of death. *British Medical Journal* 1992;305:5–6. [PubMed: 1353390]
- Huba, GJ.; Melchior, LA. Module 26b: Ces-D8 Form (Interview). Culver City, CA: The Measurement Group; 1995. Staff of the Measurement Group, HRSA/HAB's SPNS Cooperative Agreement Steering Committee.
- Kippax S, Campbell D, Van de Ven P, Crawford J, Prestage G, Knox S, Culpin A, Kaldor J, Kinder P. Cultures of sexual adventurism as markers Of HIV seroconversion: A case control study in a cohort of sydney gay men. *AIDS Care* 1998;10(6):677–688. [PubMed: 9924523]
- Kippax S, Noble J, Prestage G, Crawford J, Campbell D, Baxter D, Copper D. Sexual negotiation in the AIDS Era: Negotiated safety revisited. *AIDS* 1997;11:191–197. [PubMed: 9030366]
- Klitzman RL, Greenberg JD, Pollack LM, Dolezal C. MDMA ('ecstasy') use, and it association with high risk behaviors, mental health, and other factors among gay/bisexual men in New York City. *Drug and Alcohol Dependence* 2002;66(2):115–125. [PubMed: 11906799]
- Koblin BA, Torian LV, Gulilin V, Ren L, MacKellar DA, Valleroy LA. High prevalence of HIV infection among young men who have sex with men in New York City. *AIDS* 2000;14(12):1793–1800. [PubMed: 10985317]
- Lewis, LA.; Ross, MW. *A Select Body: The Gay Dance Party Subculture and the HIV/AIDS Pandemic*. London: Cassell; 1995.
- Narvaez, RF.; Case, P.; Hodge, P.; Geraty, T.; Kelly, B.; Egan, J.; Kim, S. MDMA In combination: "Trail mix" and other powdered drug combinations. National Institute on Drug Abuse, MDMA/Ecstasy Research: Advances, Challenges, Future Directions; July 19–20, 2001; Bethesda, MD. 2001.
- Reback CJ, Grella CE. HIV risk behaviors of gay and bisexual male methamphetamine users contacted through street outreach. *Journal of Drug Issues* 1999;29(1):155–166.
- Stall R, Ostrow DG. Intravenous drug use, the combination of drugs and sexual activity and HIV infection among gay and bisexual men: The San Francisco Men's Health Study. *Journal of Drug Issues* 1989;19:57–73.
- Thiede H, Valleroy LA, MacKellar DA, Celantano DD, Ford WL, Hagan H, Koblin BA, LaLota M, McFarland W, Shehan DA, Torian LV. Regional patterns and correlates of substance use among young men who have sex with men in 7 US urban areas. *American Journal of Public Health* 2003;93(11):1915–1921. [PubMed: 14600066]
- Waldo CR, McFarland W, Katz MH, MacKellar D, Valleroy LA. Very young gay and bisexual men are at high risk for HIV infection: The San Francisco Bay Area Young Men's Survey. *Journal of AIDS* 2000;24(2):168–74. [PubMed: 10935693]
- Watters JK, Biernacki P. Targeted sampling: Options for the study of hidden populations. *Social Problems* 1989;36(4):416–430.
- Weber AE, Craib KJ, Chan K, Martindale S, Miller ML, Cook DA, Schecher MT, Hogg RS. Determinants of HIV seroconversion in an era of increasing HIV infection among young gay and bisexual men. *AIDS* 2003;17(5):774–777. [PubMed: 12646809]

Biographies

Michael C. Clatts, Ph.D., is a medical anthropologist whose principal area of interest is in community epidemiology and the development of community-based public health programs. Dr. Clatts is the Director of the Institute for International Research on Youth at Risk at National Development and Research Institutes, Inc. Dr. Clatts has conducted a number of ethno-epidemiological studies related to HIV risk in NYC, including studies of gay men, high risk youth, and drug users, in which he has integrated methods from field epidemiology and Anthropological Ethnography. In addition to his ongoing research in NYC, Dr. Clatts is initiating a NIDA-funded study of HIV risk among young injectors in the Socialist Republic of Vietnam and also a study of HIV risk among migrant youth in China.

Lloyd A. Goldsamt, Ph.D., is Deputy Director of the Institute for International Research on Youth at Risk at NDRI; Principal Investigator of a NIDA-funded study looking at the HIV/ HBV/HCV risks among new drug injectors, and Co-Investigator on a study of young injection drug users in the Socialist Republic of Vietnam. He is also Principal Investigator on projects evaluating drug prevention programs in New York City public schools, and on a series of projects evaluating the training of Drug Court practitioners. Dr. Goldsamt has served as Co-Investigator on studies looking at HIV risk among injection drug users, youth, and men who have sex with men. Dr. Goldsamt is a licensed clinical psychologist in New York State.

Huso Yi, Ph.D., is a Senior Research Associate of the Institute for International Research on Youth at Risk at NDRI. His primary research interests include HIV/AIDS and health disparities among ethnic and sexual minorities; the construction, formation, and/or development of sexual identities and their association with health; the cultural constructs and validity of sexualities in Korea; the mediators and moderators of the relation between sexuality, health, and rights.

Table 1

Selected background characteristics of YMSM of lifetime exposure to club drugs (N = 293) and chronic use of club drugs (N = 145)

	Lifetime exposed % (n) or M (SD)	Chronic use % (n) or M (SD)
Age	22.1 (2.7)	21.9 (2.8)
Ethnicity		
White	37.5% (110)	41.4% (60)
Black	13.7% (40)	11.7% (17)
Hispanic	38.9% (114)	35.2% (51)
Other	9.9% (29)	11.7% (17)
Sexual identity		
Gay/homosexual	69.3% (203)	73.8% (107)
Bisexual	19.8% (58)	20.0% (29)
Heterosexual	5.1% (15)	2.8% (4)
Other	5.8% (17)	3.4% (5)
Homelessness		
Past homeless	35.5% (104)	34.5% (50)
Current homeless	11.9% (35)	11.0% (16)
Educational attainment (>12 grade)	73.4% (78)	73.1% (106)
Prevalence of lifetime drug use		
Marijuana	94.9% (278/293)	95.2% (138/145)
Crack	21.2% (60/283)	21.1% (30/142)
Cocaine	61.2% (177/289)	66.4% (95/143)
Heroin	18.3% (52/284)	15.1% (21/139)
Speed	43.0% (126/293)	57.7% (82/142)
MDMA	92.5% (271/293)	95.2% (138/145)
Ketamine	53.2% (156/293)	64.8% (92/142)
IDU	9.9% (29/293)	10.3% (15/145)

Table 2

Polyclub drug use among chronic club drug users (N = 145)

	% (n)
Speed only	11.7% (17)
MDMA only	44.8% (65)
Ketamine only	4.1% (6)
Speed & MDMA	4.1% (6)
Speed & ketamine	1.4% (2)
MDMA & ketamine	15.9% (23)
All Speed, MDMA, and ketamine	17.9% (26)

Table 3

Profile of drug use among chronic club drug users

	Frequency (<1 month)		Age of initiation
	At least once	≥5 days	
Marijuana	69.0% (100)	75.0% (75/100)	15.8 (3.1)
Crack	6.9% (10)	20.0% (2/10)	18.6 (3.0)
Cocaine	31.0% (45)	26.7% (12/45)	19.0 (2.8)
Heroin	3.5% (5)	100% (5/5)	18.0 (2.9)
Speed	35.4% (51)	37.3% (19/51)	19.3 (2.8)
MDMA	82.8% (120)	13.3% (16/120)	19.0 (2.4)
Ketamine	39.3% (57)	10.5% (6/57)	19.7 (2.7)
IDU	5.5% (8)	62.5% (5/8)	17.2 (1.9)

Table 4

Indicators of adversities among chronic club drug users

	% (n) or M (SD)
Runway	40.0% (58)
Multiple runaway	60.7% (34/56)
Ever sex work	38.2% (55)
Police contact	51.7% (75)
Physically attacked	36.6% (53)
Sexual identity related	32.7% (17/52)
Suicide attempts	33.8% (49)
Age of first suicide attempt	14.8 (3.0)
Multiple suicidality	44.9% (22/49)
Mental health treatment	24.8% (36)
Drug treatment ^a	11.0% (16)
CES-D	8.5 (6.0)
Score of seven or more	57.9% (84)

^aDrug treatment includes detoxification, residential, or outpatient program.

Table 5

Last sex encounters among chronic club drug users (N = 125)

	% (n) or M (SD)
Male sex partner	95.2% (119)
Partner's age	25.2 (5.6)
Age discordance	3.2 (5.0)
Met that day	26.4% (33)
New sex partners	52.0% (65)
Insertive AI	38.2% (47/123)
Insertive UAI	33.3% (16/48)
Receptive AI	42.0% (50/119)
Receptive UAI	20.0% (10/50)
Club drug use	59.2% (74)
Speed	22.2% (16/72)
MDMA	21.4% (15/70)
Ketamine	14.3% (10/70)
Partner used club drug	48.7% (55)
Speed	17.0% (9/53)
MDMA	20.8% (11/53)
Ketamine	22.6% (12/53)
UAI with most frequent sex partner ^a	
Insertive UAI	25.7% (9/35)
Receptive UAI	31.6% (12/38)

^aPercentages are among those who reported anal intercourse (AI).