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Differences in club drug use between heterosexual and lesbian/ bisexual females

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Abstract

Although there has been much empirical research documenting current trends in club drug use among gay and bisexual men, little research has addressed the variance among lesbian, bisexual, or heterosexual women. Using data collected through time—space sampling from dance clubs in New York City during 2005 (*N*=1104), this study explored sexual identity variance among women in the reported use of six club drugs: methamphetamine, cocaine, MDMA, ketamine, GHB, and LSD. Significant differences were found in that younger women were more likely to be active club drug users. Lesbian and bisexual women reported significantly higher lifetime rates of ecstasy, cocaine, methamphetamine, and LSD use compared to heterosexual women. These data suggest a need to better understand the influence of sexual orientation and sexual culture in relation to club drug use and to tailor health promotion efforts to meet the needs of various groups of club drug using women.

Keywords

Club drugs; Gender; Sexual orientation

1. Introduction

Although illicit drug use is far from a novel phenomenon, the past decade has seen a change in the drugs that are available and used. The emergence of "club drugs," termed because of their association with dance clubs, pose a new threat to psychological and physical health. Club drugs include MDMA or "ecstasy," methamphetamine, cocaine, ketamine, LSD, and GHB (gamma-hydroxybutyrate) (Maxwell, 2005). While users frequently report negative and positive psychological effects (Parks & Kennedy, 2004; Topp, Hando, Dillon, Roche, & Solowij, 1999), research has shown that club drugs may have acute toxic effects and negatively impact mood, memory, and attention (Gable, 2004). As such, a more thorough and complex understanding of club drug use is needed.

Several studies have failed to find gender differences in rates of club drug use (Boyd, McCabe, & d'Arcy, 2003; Boys et al., 1999). However, young adult females are at greater risk of experiencing harm from their club drug use (Topp, Hando, & Dillon, 1999) and report more

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negative consequences associated with use given that they generally dose at the same rate as men yet have smaller bodies and different physiology (Liechti, Gamma, & Vollenweider, 2001). Few studies have looked at within-gender variation of club drug use, which may have implications for prevention and intervention. Studies have noted differences in patterns of drug use between lesbian, bisexual, and heterosexual women. Koh (2000) reported that lesbian and bisexual women were significantly more likely to use illicit drugs than heterosexual women. Additionally, Cochran, Ackerman, Mays, and Ross (2004) found that women with same-gender sexual experiences were more likely to have used cocaine and hallucinogens and to report dysfunctional drug use compared to other women. These studies suggest that a lesbian or bisexual identity would be predictive of club drug use. Despite these findings, drug prevention efforts in the gay and lesbian community have focused almost exclusively on gay men. A greater understanding of the differences in club drug use among women of various sexual orientations is critical, particularly since dance club venues tend to cater to different subgroups.

Additionally, research suggests that young adults are more likely to be active users of illegal drugs compared to adults over the age of 30 (Sloboda, 2002). National data indicates that adults aged 18 to 25 are far more likely to have used club drugs such as cocaine, ecstasy, and LSD within the past year and past month when compared to adults aged 26 or older (SAMHSA, 2005). These findings suggest that age may also be a predictor of club drug use.

In an effort to better understand trends in club drug use, the Club Drugs and Health Project was designed to examine the patterns and contexts of club drug use among people who frequent dance club venues in New York City. We report preliminary results of the rates of club drug use among women and the predictive value of age and sexual orientation on use.

2. Methods

2.1. Participants and procedure

Time—space sampling (see MacKellar, Valleroy, Karon, Lemp, & Janssen, 1996; Muhib et al., 2001; Steuve, O'Donnell, Duran, San Doval, & Blome, 2001) was used to systematically generate a sample of club-going adults from December 2004 through July 2005. Though designed for sampling hard-to-reach populations, it is also useful for estimates of location based populations. Venues were selected at random from a list of enumerated dance clubs in Manhattan for random nights of the week. During this process, clubs catering to lesbian and bisexual women were oversampled in order to generate sufficient sample sizes. Within this larger sampling effort, field staff randomly approached club patrons (e.g., every fifth person to cross a particular point outside or inside of the club) during 3-h shifts selected with random start times (ranging from 9pm to 3am). Selected participants were asked to complete a brief 5-min survey for which they received no compensation. If the patron consented, the surveys were conducted by trained staff with the use of palm pilots. If the patron refused, field staff noted their refusal and estimated their age, gender, and ethnicity.

2.2. Measures

The intercept survey assessed basic sociodemographic information, including age, race/ethnicity, gender, and sexual orientation, through open-ended questions. To assess lifetime use of drugs, participants were asked whether they had ever used any illegal drug as well as whether they ever used any of the following club drugs: ecstasy, ketamine, GHB, cocaine, crystal meth, and acid. To assess recent use of club drugs, they were asked if they used "any of these six club drugs" within the past 3 months. Responses were dichotomized yes/no.

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2.3. Statistical analysis

Prevalence estimates were computed using SPSS. Chi-square analyses were conducted to examine the differences in rates of club drug use amongst female respondents between groups defined by age and sexual orientation. Stepwise logistic regression analyses were also conducted to examine the predictive nature of age and sexual orientation on club drug use, while controlling for other potentially confounding factors including race/ethnicity.

3. Results

3.1. Demographics

A total of 1104 females attending clubs were sampled. The number identifying as heterosexual was slightly higher than those identifying as lesbian or bisexual (53.3% vs. 46.3%) and the women ranged in age from 18 to 49 with a mean age of 25.9 (S.D.=5.4). Whites accounted for 57.9% of the women sampled, followed by Latinas (15.9%), Blacks (10.4%), Asians/Pacific Islanders (5.7%), and those of mixed or other heritage (10.0%). Participants and non-participants did not significantly differ by age or race/ethnicity.

3.2. Club drug use

The majority (72.2%) reported previous drug use (see Table 1). MDMA/ecstasy was the most commonly used club drug, with 44.0% reporting lifetime use, followed by cocaine at 41.9%. Nearly one in five women (18.4%) could be classified as active club drug users—meaning that they had used club drugs at least once within the past 3 months.

As shown in Table 1, women over the age of 30 reported significantly higher lifetime rates of cocaine and LSD use compared to younger women. However, younger women had significantly higher rates of active club drug use. Lesbian and bisexual women were significantly more likely than heterosexuals to report lifetime use of any drug, as well as lifetime use of LSD, ecstasy, cocaine, and methamphetamine. Marginally significant trends suggested that lesbian and bisexual women were more likely to use ketamine and engage in recent club drug use.

After controlling for race/ethnicity and sexual identity, regression analyses revealed that being 30 or older was predictive of lifetime cocaine and LSD use among club-going women (see Table 2). However, being under 30 years of age was predictive of active club drug use. Analyses that controlled for race/ethnicity and age also revealed that a lesbian or bisexual identity was predictive of lifetime use of each of the club drugs except GHB, as well as predictive of recent club drug use.

4. Discussion

Overall, these preliminary results suggest within gender differences in rates of use of club drugs by age and sexual orientation. Though older women were more likely to have used certain club drugs over the course of their lives, younger women were more likely to be recent users of club drugs. Since they are a key population of club drug users, prevention and education messages should be directed at younger women. Additionally, our analyses revealed that lesbian and bisexual women used club drugs at a greater rate than heterosexuals.

A few limitations impact the generalizability of this study. Given the setting, some respondents could have been under the influence at the time of the survey. However, staff were trained to not survey visibly intoxicated individuals due to concerns both about data validity and capacity to consent. The public nature of these environments also raises questions about validity in the self-report of drug use, a stigmatized behavior. Given the relative normativity of club drug use

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in these subcultures, we believe that such biases are minimized. An additional limitation was the brief nature of the survey, which did not contain questions on drug use beyond club drugs.

Despite these limitations, this report provides important information on club drug use among women. Intervention programs and educational messages may need to differentially target lesbian and bisexual women to deliver appropriate messages to this community. The needs of lesbians and bisexual women have been ignored in many community health promotion campaigns, which generally focus on gay men. While the gay and lesbian community remains politically united, gay men and lesbians are socially and behaviorally distinct groups. Our data suggest that club drug health promotion campaigns should be specifically tailored to meet the needs of lesbian and bisexual women so as to attend to the current unmet need. Because such data are critical to inform prevention, education, and intervention efforts, future research should aim to examine and better understand prevalence rates both within and between female sub-populations, in order to more clearly disentangle the relationship between gender roles and sexual culture in drug use behaviors.

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Table 1

Female club drug prevalence by age and sexual identity

	All females	Age		Sexual identity	
		Under 30	30+	Lesbian/bisexual	Heterosexual
	Prevalence (*n*)	**Prevalence (*n*)**	**Prevalence (*n*)**	**Prevalence (*n*)**	**Prevalence (*n*)**
Any illegal drug ever	72.2% (1098)	71.2% (877)	76.5% (221)	76.0% (508)	69.1% (585)*
Ecstasy ever	44.0% (1081)	43.4% (864)	46.5% (217)	49.2% (502)	39.7% (574)**
Ketamine ever	16.6% (1080)	16.7% (862)	16.1% (218)	18.7% (502)	14.7% (573)^
GHB ever	8.3% (1077)	8.1% (861)	8.8% (216)	9.4% (499)	7.3% (573)
Cocaine ever	41.9% (1074)	39.1% (859)	53.0% (215)***	47.3% (499)	37.2% (570)***
Methamphetamine ever	13.0% (1073)	12.3% (857)	16.2% (216)	17.0% (500)	9.7% (568)***
LSD ever	27.6% (1075)	25.0% (859)	38.0% (216)***	33.0% (500)	22.8% (570)***
Any club drug in the past 3 months	18.4% (1104)	19.8% (880)	12.2% (224)***	20.5% (508)	16.5% (584)^

χ^2 significance

^ $p > 0.10$

* $p > 0.05$

** $p > 0.01$

*** $p > 0.001$.

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Table 2

Predictors of female club drug use by age and sexual identity

	Age under 30	Lesbian/bisexual identity
	(CI) OR	**(CI) OR**
Any illegal drug ever	(0.53–1.10) 0.77	(1.09–1.95) 1.46**
Ecstasy ever	(0.66–1.23) 0.90	(1.17–1.94) 1.51**
Ketamine ever	(0.71–1.62) 1.08	(1.01–1.96) 1.41*
GHB ever	(0.54–1.59) 0.93	(0.80–1.96) 1.26
Cocaine ever	(0.41–0.78) 0.57***	(1.13–1.90) 1.46**
Methamphetamine ever	(0.50–1.17) 0.76	(1.28–2.71) 1.86***
LSD ever	(0.40–0.77) 0.56***	(1.23–2.17) 1.63***
Any club drug in the past 3 months	(1.17–2.78) 1.80***	(1.02–1.92) 1.40*

Significance

* $p > 0.05$

** $p > 0.01$

*** $p > 0.001$.