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Characteristics associated with group sex participation among men and women in the club drug scene

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Abstract

This study examined the demographics, substance use and sexual risk behaviours associated with group sex (GS) participation among a sample of club drug users ($n = 498$) in Miami. Men ($n = 128$; 46.3%) and women ($n = 75$; 33.7%) reported histories of GS. Group sex participation among men and women was associated with heroin and injection drug use, trading or selling sex, and sex while high, compared with no GS participation. Moreover, among men, GS was associated with buying sex and sex with an injection drug user; among women, GS was associated with substance dependence, a history of sexually transmissible infections and crack cocaine use, compared with no GS participation.

Additional keywords

heterosexual; HIV; opioids; sexually transmissible infections

Group sex (GS), in which people have sex with more than one partner in a single sexual encounter, may be an important influence on a community's HIV and sexually transmissible infection (STI) rates and often includes participants from multiple populations, including injection drug users, substance non users, men who have sex with men, and sex buyers or exchangers.^{1,2} Limited data indicate that members of these disparate populations attend the same GS events and engage in condomless sex, allowing for HIV and STI transmission across group boundaries.^{1,2} The present study examines the demographics and background, substance use and HIV transmission risk behaviours associated with GS among a sample of heterosexual young adult club drug scene participants in Miami, Florida.

Data are drawn from an ongoing behavioural substance use and sexual risk reduction intervention trial. All participants were between the ages of 18–39 years and met the same past 90-day eligibility criteria, which included: (1) heterosexual sex, (2) use of club drugs (i.e. cocaine, ecstasy, g hydroxybutyric acid (GHB), methamphetamine, ketamine and lysergic acid diethylamide (LSD)) three or more times and (3) nonprescribed use of prescription medications one or more times. Participants also reported regular attendance at large recognized local nightclubs.

Conflicts of interest

None declared.

The baseline assessments were primarily comprised of the Global Appraisal of Individual Needs (ver. 5.4),³ which has several core sections (e.g. background, substance use and (Diagnostic and Statistical Manual of Mental Disorders, 4th edition) substance dependence, mental distress, sexual risk behaviours, STI history and abuse history), with each section containing questions on the recency of problems, breadth of symptoms and recent (past 90 days) and past year prevalence in days or times. Lifetime GS participation was defined as having sex with two or more people at one time. Measures were dichotomised into 1 indicating endorsement of a characteristic or behaviour, and 0 indicating no endorsement. Bivariate logistic regression models were constructed to predict GS participation among men ($n = 276$) and women ($n = 222$) on measures of demographics and background, substance use, and HIV and STI risk behaviour. All analyses were conducted using IBM SPSS Statistics ver. 21.⁴

The recent use of alcohol, marijuana, cocaine and ecstasy, and non-prescribed use of prescription medications were nearly universally endorsed regardless of gender and GS participation (data not shown). Table 1 shows that men and women GS participants were more likely to report a history of sexual abuse, severe mental distress in the past year, recent heroin use and injection drug use, trading or selling sex in the past year, and recent sex while high half the time or more, compared with non-participants. Additionally, male GS participants were more likely to report recent GHB use, buying sex in the past year and recent sex with an injection drug user. Female GS participants were more likely to report being White, a history of physical abuse, substance dependence in the past year, a history of STI (i.e. syphilis, gonorrhoea (*Neisseria gonorrhoeae*) and chlamydia (*Chlamydia trachomatis*)) and recent crack use, and were less likely to report being Hispanic and heterosexual compared with non-participants.

This study has documented prevalent GS participation among a sample of young adult club drug users in Miami. Widespread substance use and HIV transmission risk behaviours suggest that GS participants may be placing themselves at high risk for HIV, STI and hepatitis C virus infection. Public health concern is especially high, given the literature, which suggests GS events function as spaces where many high-risk behaviours occur across multiple populations.¹ The frequency of heroin use and injection drug use reported among GS participants in this study is alarming, especially because of the growing epidemic of opioid addiction among young adults in the USA.⁵ Recent data indicate a trend of sexual risk behaviours, including GS, among non-medical prescription opioid misusers reporting drug injection, heroin use or both.⁶ Moreover, although it is not uncommon for young adult club drug scene participants to report health and social problems, such as a history of abuse, substance dependence and mental distress,⁷ the findings illustrate the vulnerabilities of this population generally and of GS participants in particular.

This study has some limitations worth noting. The ability to generalise the findings to other young adults is limited by the eligibility requirements and the high frequencies of reported risk behaviours, and health and social problems among both GS and non-GS participants. All data are based on self-report, potentially leading to under-reporting of socially undesirable behaviours.

Given the limited literature on GS among heterosexual populations, these data provide evidence that young adult club drug scene participants may represent a sentinel population with regard to the emergence of HIV, STI and hepatitis C virus incidence resulting from GS participation. Future research will need to investigate the links between emerging substance use trends, such as heroin use and injection drug use, and sexual risk behaviours, including GS participation. Prevention and intervention efforts that target health and social problems, in addition to substance use and sexual risk behaviours, especially among women, are likely to have a greater impact.

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Table 1

Bivariate logistic regression models comparing group sex participants to group sex non-participants among males (N=276) and females (N=222) on measures of demographics and background, substance use, and HIV/STI risk behavior

	Males						Females						
	Group sex participants (N=128)			Non-participants (N=148)			Group sex participants (N=75)			Non-participants (N=147)			
	N	%		N	%	OR	95% CI	N	%	N	%	OR	95% CI
Demographics and Background													
Age 18–24	53	41.4%		78	52.7%	0.634	0.393, 1.022	39	52.0%	90	61.2%	0.686	0.391, 1.203
Hispanic	79	61.7%		101	68.2%	0.750	0.457, 1.233	37	49.3%	103	70.1%	0.419**	0.234, 0.738
African American/Black	27	21.1%		27	18.2%	1.198	0.661, 2.173	20	26.7%	30	20.4%	1.418	0.740, 2.717
White	17	13.3%		17	11.5%	1.180	0.575, 2.420	15	20.0%	11	7.5%	3.091**	1.341, 7.126
Other race/ethnicity	5	3.9%		3	2.0%	1.667	0.375, 7.403	3	4.0%	3	2.0%	1.171	0.222, 6.177
Education 12 years	105	82.0%		125	84.5%	0.840	0.446, 1.583	69	92.0%	123	83.7%	2.244	0.875, 5.755
Heterosexual identity	117	91.4%		143	96.6%	0.372	0.126, 1.101	24	32.0%	106	72.1%	0.182***	0.099, 0.333
Physical abuse history	63	49.2%		56	37.8%	1.592	0.985, 2.573	39	52.0%	55	37.4%	1.812*	1.032, 3.182
Sexual abuse history	19	14.8%		8	5.4%	3.050*	1.287, 7.232	28	37.3%	35	23.8%	1.906*	1.044, 3.482
Substance dependence ^a	76	59.4%		80	54.1%	1.242	0.770, 2.005	51	68.0%	79	53.7%	1.829*	1.021, 3.278
Severe mental distress ^b	62	48.4%		53	35.8%	1.684*	1.039, 2.729	53	70.7%	81	55.1%	1.963*	1.084, 3.555
STI history	14	10.9%		9	6.1%	1.678	0.895, 3.145	22	29.3%	24	16.3%	2.120**	1.205, 3.732
Substance Use ^a													
Crack cocaine	39	30.5%		32	21.6%	1.588	0.923, 2.734	28	37.3%	35	23.8%	1.906*	1.044, 3.482
LSD	65	50.8%		79	53.4%	0.901	0.561, 1.447	31	41.3%	62	42.2%	0.966	0.549, 1.698
Hallucinogens	82	64.1%		85	57.4%	1.321	0.812, 2.149	43	57.3%	68	46.3%	1.561	0.891, 2.735
Methamphetamine	41	32.0%		35	23.6%	1.522	0.895, 2.587	18	24.0%	24	16.3%	1.618	0.814, 3.217
GHB	26	20.3%		17	11.5%	1.964*	1.011, 3.815	14	18.7%	21	14.3%	1.377	0.656, 2.892
Heroin	38	29.7%		25	16.9%	2.077*	1.171, 3.685	23	30.7%	21	14.3%	2.654**	1.353, 5.207
Drug injection	24	18.8%		14	9.5%	2.209*	1.089, 4.480	17	22.7%	13	8.8%	3.021**	1.378, 6.624
HIV/STI Risk Behavior													

	Males						Females					
	Group sex participants (N=128)			Non-participants (N=148)			Group sex participants (N=75)			Non-participants (N=147)		
	N	%		N	%		N	%		N	%	
Condomless vaginal sex ^a	114	89.1%		132	89.2%	0.973	69	92.0%		135	91.8%	0.368, 2.841
Condomless anal sex ^a	63	49.2%		53	35.8%	0.719	35	46.7%		48	32.7%	0.131, 1.027
Buy sex ^b	35	27.3%		15	10.1%	3.337***	5	6.7%		2	1.4%	0.980, 27.357
Trade/sell sex ^b	22	17.2%		9	6.1%	3.205**	22	29.3%		14	9.5%	1.878, 8.281
Sex with IDU ^a	23	18.0%		11	7.4%	2.728*	12	16.0%		11	7.5%	0.986, 5.627
Sex while high half the time ^a	110	85.9%		113	76.4%	1.893*	67	89.3%		98	66.7%	1.864, 9.407

* $P < 0.05$.** $P < 0.01$.*** $P < 0.001$.^aPast 90 days.^bPast year.