

Stimulant Drug Use among HIV positive men who have sex with men (MSM): Findings from the Medical Monitoring Project (MMP)

Michael Navejas, Kathleen H. Reilly, Shavvy Raj-Singh, Chi-Chi Udeagu

¹ HIV Epidemiology Program, New York City Department of Health and Mental Hygiene, New York, NY, USA

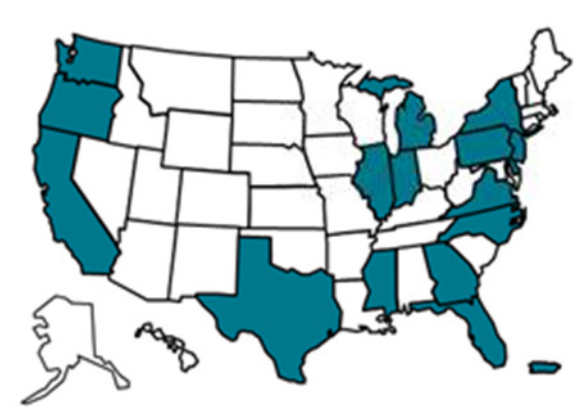
Background

- Studies have shown that stimulant drug use (e.g., methamphetamine) may be disproportionately used by MSM.
- To determine the impact of this high risk behavior in NYC, we examined data from the CDC-funded Medical Monitoring Project (MMP).
- Our objective was to examine the frequency and correlates of self-reported non-injection stimulant drug use (methamphetamine, cocaine, crack, or other amphetamine) in the past 12 months among HIV-positive MSM.

Methodology

- MMP is a national study of HIV-infected persons receiving outpatient medical care for HIV that monitors health behaviors, clinical outcomes, and HIV-related health and social service needs through structured interviews and medical record abstractions.
- MMP uses a 3-stage clustered sampling design to produce nationally representative estimates. The data collection year was for 2013.

1st stage - Local Areas



- 23 areas selected (16 states, 6 cities, and 1 US territory)
- Probability of selection is proportional to size (PPS) (# of reported living AIDS cases in 2002)
- Includes >80% of US AIDS cases in 2002

2nd stage - Providers



- Deliver HIV medical care
- Monitor CD4 count, viral load
- Prescribe antiretroviral therapy (ART)
- Probability of selection is proportional to size (facilities with higher patient loads are more likely to be selected)

3rd stage - Patients



- Randomly sampled
- HIV-infected
- ≥ 18 years of age
- Received HIV medical care at facility 1/1 – 4/30 in a given cycle year
- Participation was voluntary; \$40 incentive (MetroCard, cash, or Visa Card)

Statistical Analysis

- Analyses were restricted to MSM who used stimulant drugs (n = 99).
- Associations between stimulant drug use and relevant variables—based on the findings of previously published research—were examined through the estimation of odds ratios (OR) and 95% confidence intervals (CI) using logistic regression models.
- Analyses were conducted using SAS 9.3 (Cary, NC, USA).

Results

Variable	N	N (%) engaging in Stimulant drug use	Bivariate		Multivariate	
			OR (95% CI)	p Value	AOR (95% CI)	p Value
Race						
Black	28	3 (10.7)	0.18 (0.04, 0.76)	.02	.22 (0.05, 0.99)	.05
White	44	7 (16.0)	1		1	
Hispanic	25	10 (40.0)	0.28 (0.09, 0.89)	.03	.28 (0.08, 0.94)	.04
Other	2	1 (50.0)	1.50 (0.08, 26.86)	.78	4.79 (0.22, 105.01)	.32
Age						
18-29	20	4 (20.0)	1			
30-39	28	8 (28.6)	1.60 (0.41, 6.29)	0.50		
40-49	23	7 (30.4)	1.75 (0.43, 7.17)	0.44		
50+	28	2 (7.1)	0.31 (0.05, 1.88)	0.20		
Education						
≤ High School	33	3 (9.1)	0.27 (0.07, 0.98)	0.05		
> High School	66	18 (27.3)	1			
Number of Sex Partners †						
1-2 partners	42	4 (9.5)	1		1	
≥ 3 partners	53	17 (32.7)	4.61 (1.42, 15.04)	.01	5.60 (1.46, 21.)	.01
Condomless Sex						
No	52	6 (11.5)	1			
Yes	47	15 (31.9)	3.59 (1.26, 10.26)	.02		
Total	99	21 (21.2)				

Limitations

- Self-report; possible social desirability bias
- Complex survey sample
- Small sample size

Conclusion

- Stimulant drug use is more common among white HIV positive MSM than among other MSM and is correlated with multiple sex partners—five times more likely—among MSM of all races.
- Age, education, and condomless anal sex were not independently associated with stimulant drug use in the multivariate analysis.
- Closer examination of stimulant drug use in this population is necessary to develop targeted interventions.

Acknowledgments

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Results

- In the adjusted model whites were almost 5 times more likely to report using non-injection stimulant drugs in the past 12 months compared to blacks and were 3 and a half times more likely than Hispanics to report using non-injection stimulant drugs in the past 12 months.
- MSM of all races who used stimulant drugs were almost 5 times more likely to have ≥3 sex partners in the past 12 months.

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Michael Navejas, Ph.D., M.Phil., MSW, M.Div.
HIV Epidemiology and Field Services Program
NYC Department of Health and Mental Hygiene
42-09 28th Street, 22nd Fl. CN 44 Queens, NY 10013

Email: mnavejas@health.nyc.gov
Phone: 347-396-7717