

# Factors associated with multiple sex partners in the same encounter (group sex) among New York City (NYC) men who have sex with men (MSM) recruited online



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**Objective :** To describe the prevalence and correlates of self-reported group sex participation in the past 12 months among MSM who participated in an online survey.

## Study Design

- Self-administered online cross-sectional survey of MSM
- Launched in 6 U.S. cities
  - Baltimore, Boston, Dallas, Los Angeles, New York City, & San Francisco
- Recruitment on websites that cater to MSM
- Data collection occurred April 16 to August 6, 2007
- Anonymous
- Voluntary
- No incentive
- Only NYC data is used in this analysis

## Eligibility

- 18+ years old
- Born male
- Resident of NYC metropolitan area via zip code

## Methods

- The variable group sex was defined as having more than one sex partner during the same sexual encounter
  - Simultaneous multivariate logistic regression model was used to assess statistical differences
- Variables assessed include:
- Sociodemographics
  - Sexual risks
    - Non-injection drug use
    - use of Viagra, Levitra, Cialis (VLC)
    - > 5 sexual partners
    - meeting sex partners online
    - Unprotected anal intercourse (UAI)
  - HIV testing history
  - STD history

## Recruitment Banner Ads



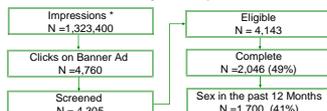
## Recruitment Websites

- Manhunt.net
- Myspace.com
- Friendster.com
- 365gay.com
- Gay.com
- Dlist.com
- Blackgaychat.com
- Bigmuscle.com

## Data Security

- Secure Sockets Layer (SSL) encryption technology was used
- Data was posted daily on a secure site for direct access by project areas
  - Daily access to data of local project area (NYC)
  - Data was password protected and used certificate-driven encryption
- Host website did not use cookies nor did it use:
  - IP addresses
  - Email address
  - Web logs
  - Or any identifying information

## Study Sample



\* Impressions represent the number of times a banner ad appeared on the participating websites

## Selected Sample Characteristics

	n = 1,700 *	%
<b>Race/Ethnicity</b>		
White	1,067	63.1
Black	215	12.7
Hispanic	315	18.6
Other	93	5.5
<b>Age</b>		
18 – 19	219	12.9
20 – 29	834	49.1
30 – 39	394	23.2
40 – 49	195	11.5
50+	58	3.4
<b>Sexual Preference</b>		
Homosexual	1,438	85.3
Heterosexual	9	.5
Bisexual	218	12.9
Other	21	1.3
<b>HIV Test Past 12 Mo.</b>		
Yes	924	54.3
No	776	45.7
<b>Self-Reported HIV Status</b>		
HIV Negative	1,280	90.6
HIV Positive	118	8.4
Unknown status	14	1

\* subgroups do not always add up to totals due to missing data

## Multivariate analysis of group sex by variables significant in the bivariate analysis

	AOR	95% Confidence Intervals
<b>Viagra/Levitra/Cialis Use, Past 12 months</b>	1.4	1.0 – 2
<b>History of an STD Past 12 months</b>	1.7	1.2 – 2.5
<b>&gt;5 Sexual Partners, Past 12 months</b>	4	3.1 – 5.2
<b>Met Partner online, Past 12 months</b>	2.4	1.8 – 3.1
<b>HIV Test, Past 12 months</b>	1.4	1.1 – 1.7
<b>UAI, Past 12 Months</b>	1.5	1.2 – 1.9

## Results

- Group sex was frequently reported in this online sample of MSM (n=680; 40%).
- In bivariate analysis, significant variables were:
  - HIV positive status
  - use of VLC
  - history of an STD
  - >5 sexual partners
  - Non-injection drug use
  - tested for HIV, past 12 mo.
  - meeting sex partners online
  - UAI
  - ≥30
- In multivariate analysis, the following variables were significantly associated with group sex in the past 12 months:
  - use of VLC
  - history of an STD
  - >5 sexual partners
  - meeting sex partners online
  - tested for HIV
  - UAI

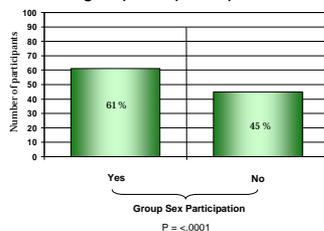
## Limitations

- These findings are representative of NYC MSM that completed surveys from these websites.
- Risk behaviors and HIV testing history are self-reported and therefore subject to recall bias.
- Underreporting may have occurred, as some questions were of a sensitive nature.
- Possible underrepresentation of non-White MSM, given access to the internet.
- The survey was available only in English.
- Survey length may have discouraged participation.

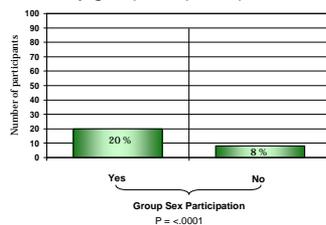
## Conclusions

- Some correlates of group sex participation may be inherent to the activity including more sexual partners and use of performance enhancing drugs which allow for multiple, insertive sexual encounters.
- Participants' higher frequency of UAI and STDs underlines the need to reach this group with HIV prevention messages.
- Internet-based behavioral surveys appear to be a feasible method of conducting sexual behavior research of MSM using direct marketing (banner ads) as an approach for recruitment.

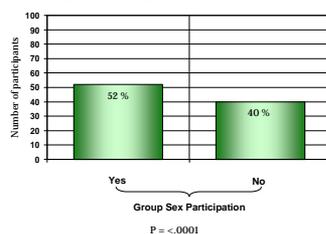
## \* Proportion reporting UAI by group sex participation



## \* Proportion reporting an STD by group sex participation



## \* Proportion reporting non-injection drug use by group sex participation



\* Past 12 months