Party drug use within gay community networks in an online cohort of gay and bisexual men: baseline findings from the Flux study

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Following Lives Undergoing Change (Flux)

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Centre for Social Research in Health, UNSW

Community partners
ACON, NSW
Victorian AIDS Council
NSW Users’ and AIDS Association (NUAA)

Funding
ARC Discovery Project (DP140102483) (3 years)
Study aims

Online, longitudinal cohort study of recreational drug use among gay and bisexual men in Australia that aims to:

- Identify contextual and individual factors associated with the uptake and recreational use of drugs among gay and bisexual men (GBM) over time
- Describe the relationship between social and community norms, and the shared understandings of risk and pleasure
- Describe the role of particular gay community subcultures in influencing attitudes and beliefs about drug use

Aims of this presentation

- Describe Flux methodology
- Report baseline findings on patterns of alcohol and other drug use, and compare with other national datasets
- Examine the extent that participation in different gay community networks is associated with the use of ‘party drugs’ such as methamphetamine, cocaine, GHB and ketamine

<table>
<thead>
<tr>
<th></th>
<th>Heterosexual men</th>
<th>Gay/bisexual men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily tobacco use</td>
<td>13.8</td>
<td>17.3</td>
</tr>
<tr>
<td>High risk drinking</td>
<td>17.2</td>
<td>12.2</td>
</tr>
<tr>
<td>Any drug use</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Cannabis</td>
<td>1.9</td>
<td>16.1</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>17.9</td>
<td>35.9</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>2.9</td>
<td>11.8</td>
</tr>
<tr>
<td>Cocaine</td>
<td>5.4</td>
<td>8.7</td>
</tr>
<tr>
<td>Injected drugs (ever)</td>
<td>1.9</td>
<td>6.5</td>
</tr>
</tbody>
</table>


Why higher rates of AOD use and harms among GBM?

- Minority stress (Meyer, 2003)
- Historical significance of bar and nightclub cultures
- Community solidarity at dance parties during HIV/AIDS epidemic (Race, 2003)
- Drug use in sexual contexts among gay and bisexual men (‘chemsex’)
- ‘Normalisation’ of illicit drug use in gay social networks
How many gay and bisexual men in Australia?

- Sexual identity: 2% gay, 1% bisexual
- Same-sex sexual attraction: 7%
- Same-sex sexual experience: 7%

~ 250,000 men aged 16-69 years

Source: 2nd Australian Study of Health and Relationships (ASHR2)
(Richters et al 2014)

Methods

- Prospective, observational cohort study of recreational drug use among GBM
- Automated follow-up every 6 months (up to 5 data points)
- Eligible participants were men who:
  - Gay, bisexual or had sex with a man in previous 12m
  - Lived in Australia
  - Aged at least 16 years
- Enrollment from Sep 2014 – July 2015
- Optional consent for data linkage with state and national health and disease-related registries (eg. National HIV Registry, NDD-HCV, hospital separations)
Recruitment

21,014 website clicks
2,943 completed consent form
2,705 commenced questionnaire
2,251 provided sufficient baseline data (83%)
1,711 consented to follow-up (76%)
1,015 consented to data linkage (59%)
540 consented to baseline only (24%)
Recruitment

66% via targeted Facebook adverts
21% via gay dating sites and apps
5% via personal networks
4% via gay community organisations and events
Sample characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (SD)</td>
<td>33.0 (12.6)</td>
</tr>
<tr>
<td>Gender n (%)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2234 (99.2%)</td>
</tr>
<tr>
<td>Transgender or intersex male</td>
<td>17 (0.8%)</td>
</tr>
<tr>
<td>Sexual identity n (%)</td>
<td></td>
</tr>
<tr>
<td>Gay</td>
<td>1990 (88.4%)</td>
</tr>
<tr>
<td>Bisexual</td>
<td>199 (8.8%)</td>
</tr>
<tr>
<td>Heterosexual / other</td>
<td>62 (2.7%)</td>
</tr>
<tr>
<td>HIV status n (%)</td>
<td></td>
</tr>
<tr>
<td>HIV positive</td>
<td>171 (7.6%)</td>
</tr>
<tr>
<td>HIV negative</td>
<td>1623 (72.1%)</td>
</tr>
<tr>
<td>Untested / unknown</td>
<td>457 (20.6%)</td>
</tr>
<tr>
<td>HCV positive n (%)</td>
<td>43 (1.9%)</td>
</tr>
<tr>
<td>Anglo-Celtic cultural background n (%)</td>
<td>1620 (72.0%)</td>
</tr>
<tr>
<td>Completed university degree n (%)</td>
<td>1180 (52.4%)</td>
</tr>
<tr>
<td>Employed full-time n (%)</td>
<td>1217 (54.6%)</td>
</tr>
</tbody>
</table>

Geographic distribution of participants

[Map of Australia with various percentages indicated]
Lifetime and recent illicit drug use

- Any drug
- Cannabis
- Any other
- Ecstasy
- Speed
- Cocaine
- LSD
- Crystal meth
- Ketamine
- GHB
- Heroin

**Lifetime and recent illicit drug use**

- Ever used
- Used in past 6 months

GCPS past 6 months

**Lifetime and recent illicit drug use**

- Ever used
- Used in past 6 months
- GCPS past 6 months

Any drug
Cannabis
Any other
Ecstasy
Speed
Cocaine
LSD
Crystal meth
Ketamine
GHB
Heroin
Frequency of drug use in previous 6 months

Motivations for crystal meth use
Routes of crystal meth use

- Smoked
- Injected
- Swallowed
- Snorted
- Shafted

Injecting drug use

<table>
<thead>
<tr>
<th></th>
<th>All (%)</th>
<th>HIV-positive (%)</th>
<th>HIV-negative and untested (%)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever injected</td>
<td>17.1</td>
<td>50.3</td>
<td>14.4</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Injected in past 6m</td>
<td>4.1</td>
<td>25.2</td>
<td>2.4</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Injected:

- Crystal meth: 6.5%
- Speed: 4.9%
- Cocaine: 2.1% (n=5)
- Heroin: 2.0% (n=4)
- Ecstasy: 2.0% (n=1)

- 8 participants reported sharing a needle/syringe in past 6 months (8.6% of past 6m PWID)
- No participants reporting sharing ancillary equipment
### Gay community networks

**N=2251**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Somewhat (%)</th>
<th>Very much (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in gay club and party scene (%)</td>
<td>46.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Participate in gay sex clubs and sex parties (%)</td>
<td>24.0</td>
<td>3.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Median (IQR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of gay friends</td>
<td>10 (5-20)</td>
</tr>
<tr>
<td>Most or all friends are gay men (%)</td>
<td>26.8</td>
</tr>
<tr>
<td>A lot of free time spent with gay friends (%)</td>
<td>18.4</td>
</tr>
<tr>
<td>Most or all gay friends use illicit drugs (%)</td>
<td>18.8</td>
</tr>
<tr>
<td>A lot of time spent with gay friends who use drugs (%)</td>
<td>4.8</td>
</tr>
<tr>
<td>Have any friends who inject drugs (%)</td>
<td>14.3</td>
</tr>
</tbody>
</table>

### Drug use in sexual contexts among men who used party drugs in past 6 months (n=617)

- **Used party drugs**: 80%
- **Had group sex**: 60%
- **Injected drugs**: 40%

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Used party drugs</th>
<th>Had group sex</th>
<th>Injected drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>40</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Once</td>
<td>30</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Two or more times</td>
<td>10</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>
## Covariates of recent party drug use

<table>
<thead>
<tr>
<th>Covariate</th>
<th>No party drug use, n=1634 (%)</th>
<th>Party drug use, n=617 (%)</th>
<th>Adjusted OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify as gay</td>
<td>86.8</td>
<td>92.5</td>
<td>1.81 (1.25-2.63)**</td>
</tr>
<tr>
<td>HIV-positive</td>
<td>5.8</td>
<td>12.5</td>
<td>1.62 (1.10-2.40)*</td>
</tr>
<tr>
<td>Participate in gay club and party scene</td>
<td>47.9</td>
<td>72.1</td>
<td>2.09 (1.67-2.61)***</td>
</tr>
<tr>
<td>Participate in gay sex clubs and sex parties</td>
<td>23.2</td>
<td>40.0</td>
<td>1.50 (1.19-1.90)**</td>
</tr>
<tr>
<td>Most or all gay friends use illicit drugs</td>
<td>8.9</td>
<td>45.1</td>
<td>7.01 (5.51-8.91)***</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001

## Summary and conclusions

- Successful enrolled over 1700 into an online cohort study
- First online cohort study of drug use among GBM in Australia
- Unique study method adaptable for other online cohort studies
- Drug experienced sample – similar to national behavioural surveillance surveys of GBM
- Party drug use strongly associated with gay social and sexual networks
- High rates of crystal use, injecting drug use among HIV-positive men – need for targeted harm reduction and treatment services
- Longitudinal data on its way!
Thank you

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