Overdose and drug dependency among regular illicit drug users in Australia

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Introduction

- Increases in reported standard overdose in EDRS survey.
- 5.6 increase in reported heroin overdoses per 1000 person years but no increase in non-opioid overdoses.
- Unexplained drug overdose linked to heavy drug use including alcohol use.
- A key risk factor for a drug overdose is a previous overdose.

Methods

- 15,779 persons, living in Queensland, last 12 months.
- EDRS (n=2000) People who used injection drugs at home in the last 12 months.
- IDRS (n=600) People who used injection drugs at home in the last 12 months, not connected to the EDRS.

Findings

<table>
<thead>
<tr>
<th>Variable</th>
<th>EDRS</th>
<th>IDRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>% male</td>
<td>66%</td>
<td>69%</td>
</tr>
<tr>
<td>% under 30 yrs old</td>
<td>34%</td>
<td>31%</td>
</tr>
<tr>
<td>% married</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>% ever used</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>% unemployed</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>% in drug treatment</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Factors associated with recent overdose among PWID

Factors associated with recent overdose among EDRS

Factors associated with recent overdose among PWID

Experiences of overdose

- Lifetime: 2.15 (range 1.1-3.8)
- Most recent in last 12 months.
- Main drugs: alcohol (37%), crack/cocaine (9%), heroin (4%).
- Main location: private dwelling (44%), public place (65% in England).
- Main reactions: vomiting, visual hallucinations, fever, heart rate, extreme anxiety, pupillary changes.

Factors associated with recent overdose among PWID

Factors associated with recent overdose among EDRS

Factors associated with recent overdose among PWID

Conclusions

- PWID were most likely to report a recent overdose than EDRS.
- Those who overdosed tended to have repeat overdose.
- Main drugs associated with PWID were alcohol and crack/cocaine, heroin, methamphetamine for PWID.
- Supports research that overdose is more likely to occur amongst dependent users.
- Harm minimisation target group: heavy drug and alcohol users.

Drug dependency

- EDRS: 52% had risky alcohol use (AUDIT score 8+)
- IDRS: 47% were at risk of alcohol dependency (AUDIT score 4+)
- 90% of opioid users at risk of opioid dependency (GDS score 4+)
- 41% of methamphetamine users at risk of stimulant dependency (GDS score 4+)

Table 1: Sociodemographic characteristics

<table>
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<tbody>
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<td>% male</td>
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<tr>
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</tr>
<tr>
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</tbody>
</table>

Acknowledgements

We would like to acknowledge the people who participated in the survey and to the sponsors and funders of the study. EDRS and IDRS are funded by the Queensland Department of Health, Addiction Prevention and Support Improvement Group Fund.
Introduction

- Increase in reported stimulant overdoses in EDRS surveys\(^1\)
- No increase in reported heroin overdoses in IDRS surveys\(^2\) but an increase in unintentional fatal opioid overdoses\(^3\)
- Unintentional drug overdoses linked to heavy drug use including alcohol use\(^1,^4\)
- A key risk factor for a drug overdose is a previous overdose\(^5\)

Is drug dependency linked to risk of overdose?
Table 1 Socio-demographic characteristics of EDRS and IDRS nationally, 2014

<table>
<thead>
<tr>
<th></th>
<th>EDRS (N=800)</th>
<th>IDRS (N=898)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% male</td>
<td>66</td>
<td>69</td>
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<tr>
<td>% under 25 years old</td>
<td>74</td>
<td>3</td>
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<tr>
<td>% unstable housing</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>% single</td>
<td>58</td>
<td>56</td>
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<tr>
<td>% completed year 12</td>
<td>81</td>
<td>21</td>
</tr>
<tr>
<td>% unemployed</td>
<td>15</td>
<td>83</td>
</tr>
<tr>
<td>% in drug treatment</td>
<td>2</td>
<td>47</td>
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</table>
Figure 1. Reported experiences of lifetime and recent overdose

<table>
<thead>
<tr>
<th></th>
<th>EDRS (N=800)</th>
<th>IDRS (N=898)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Ever</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>% Last 12 months</td>
<td>27</td>
<td>13</td>
</tr>
</tbody>
</table>

- EDRS (N=800)
- IDRS (N=898)
Figure 2. Recent overdose on any drug by alcohol dependency (AUDIT)
Figure 3. Recent overdose on any drug by stimulant drug dependency (SDS)

% PWUP (n=793)

Low risk  High risk

23  37
Figure 4. Recent overdose on any drug by drug dependency

<table>
<thead>
<tr>
<th>% who commented</th>
<th>Alcohol dependency (AUDIT-C)</th>
<th>Opioid dependency (SDS)</th>
<th>Stimulant dependency (SDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>11</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>High risk</td>
<td>17</td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>
Overdose and drug dependency among regular illicit drug users in Australia

Sophie Hickey, Paule McBurney and Rosa Alati
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Introduction

- Increased in reported standard overdose in EDRS surveys
- 39% increase in reported heroin overdoses in EDRS surveys but an 18% increase in non-standard (self-administered) overdoses
- Unintentional drug overdose linked to heavy drug use including alcohol use
- A key risk factor for a drug overdose is a previous overdose

Methods

- 61% data from 1998 EDRS and IDORS
- 46.7% in ED (range 10.39)
- All 774 pts, living in Queensland last 12 months

Is drug dependency linked to risk of overdose?

Findings

Factors associated with recent overdose among PWUP

- Being male, 15 years or younger and significantly associated with a reported recent overdose on any drug (p<.05)
- All other socio-demographic characteristics were not significantly associated with recent overdose

Factors associated with recent overdose among PWID

- Usable housing was the only socio-demographic characteristic that was significantly associated with recent overdose on any drug (p<.05)

Factors associated with recent overdose on any drug by drug dependency

- EDRS: 6, 8, 10, 12, 14, 16, 18, 20
- PWUP: 6, 8, 10, 12, 14, 16, 18, 20

Experiences of overdose

- Lifetime stimulant overdose (n=217)
  - Median time 1 (range 1.100)
  - Most recent time in last 12 months
  - Main drug: ecstasy (32%) or crystal (9%)

- Lifetime alcohol overdose (n=217)
  - Median time 1 (range 1.100)
  - Most recent time in last 12 months
  - Main drug: alcohol (74%) or benzodiazepines (4%) or GHB (4%)

- Lifetime overdose on any drug (n=217)
  - Median time 1 (range 1.100)
  - Most recent time in last 12 months
  - Main drug: alcohol (74%) or benzodiazepines (4%) or GHB (4%)

- Lifetime overdose on other drug (n=217)
  - Median time 1 (range 1.100)
  - Most recent time in last 12 months
  - Main drug: alcohol (74%) or benzodiazepines (4%)

Conclusions

- PWUP were more likely to report a recent overdose than PWID
- Those who overdosed, tended to have repeat overdose
- Main drugs associated for PWUP were alcohol and ecstasy versus heroin, ice/crystal benzodiazepines for PWID
- Supports research that overdoses are more likely to occur amongst dependent users
- Harm minimisation target group: heavy drug and alcohol users

Acknowledgements

We would like to thank all people who participated in the survey and to the research and funding organisations. EDRS and IDORS are funded by the National Health and Medical Research Council, The University of Queensland, and the Australian Government Department of Health.