Medicinal Cannabis Use and Driving by Clients of NSW Health Cannabis Clinics

Investigators:
Adrian Dunlop
Amanda Brown
Richard Clancy
Jennifer Johnston
Steve Childs
Jenny Bowman
Jennifer Luksza
Melissa Jackson
Nick Lintzeris
Raimondo Bruno
Nghi Phung
Iain McGregor
Lauren Monds
Jack Wilson

Background

• Research completed as part of the larger study:
  Kronic in the Clinic: The use of Synthetic Cannabinoids by NSW Cannabis Clinic Clients

• Explored the perceptions and experiences of treatment seeking cannabis users regarding their cannabis and synthetic cannabinoid use.

• 154 participants from specialised cannabis treatment clinics of five participating NSW Health Local Health Districts

• Inclusion criteria: Treatment seeking users of cannabis
Method

- Recruitment Timeline June 2015 to April 2016

- Interviews:
  - Conducted face-to-face
  - Retrospective, structured questionnaires included:
    - Demographic information
    - Drug use history
    - Drug Use Motives (DUMQ) for cannabis & synthetic cannabinoids
    - Acute subjective effects of cannabis & synthetic cannabinoid use
    - Cannabis dependence (ICD-10)
    - Medical cannabis use
    - Driving and cannabis & synthetic cannabinoid use
    - Physical health and Quality of Life (SF-36v2)
    - Mental Health (DASS-21)
    - Reasons for and for not using synthetic cannabinoids
    - Comparison of synthetic cannabinoids & cannabis

Method

- We explored:
  - Cannabis and synthetic cannabinoid use history and patterns
  - Effects and consequences of cannabis and synthetic cannabinoid use
  - Use of cannabis for medicinal purposes
  - Frequency of driving under the influence of cannabis and synthetic cannabinoids
Demographics

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>((n = 154))</td>
</tr>
<tr>
<td><strong>Age</strong> Median (IQR)</td>
<td>35 (10)</td>
</tr>
<tr>
<td><strong>Age Range</strong> (n) (%)</td>
<td></td>
</tr>
<tr>
<td>18 - 35</td>
<td>80 (52%)</td>
</tr>
<tr>
<td>36+</td>
<td>74 (48%)</td>
</tr>
<tr>
<td><strong>Male</strong> (n) (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>110 (71%)</td>
</tr>
<tr>
<td><strong>Education ≤ Year 10</strong> (n) (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>84 (55%)</td>
</tr>
<tr>
<td><strong>ATSI status</strong> (n) (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 (11%)</td>
</tr>
<tr>
<td><strong>Single relationship status</strong> (n) (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>110 (72%)</td>
</tr>
<tr>
<td><strong>Live Alone</strong> (n) (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>106 (69%)</td>
</tr>
<tr>
<td><strong>Government benefits</strong> (n) (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>113 (73%)</td>
</tr>
</tbody>
</table>

Use of Cannabis for Medicinal Purposes

- Medicinal use of cannabis
  - Was cannabis used to reduce the symptoms of a physical or mental health condition?
  - If so, what type of condition?
  - Use of cannabis for general pain reduction
  - Age of first medicinal use
  - Duration of medicinal use
  - Reasons for stopping
Use of Cannabis for Medicinal Purposes

- Of 154 users of cannabis, 59% reported using cannabis to reduce the symptoms of physical or mental illness (91/154)
- 70% reported using for general pain relief (83/118)
- Median age of first medicinal use = 20 years (IQR 9)
- 59% reported duration of use > 5 years (58/98)

Use of Cannabis for Medicinal Purposes

<table>
<thead>
<tr>
<th>Condition *</th>
<th>N †</th>
<th>(%)</th>
<th>Effectiveness # % Quite and Extremely (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>55</td>
<td>60.4</td>
<td>61.1% (33)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>19</td>
<td>20.9</td>
<td>52.6% (10)</td>
</tr>
<tr>
<td>Chronic pain</td>
<td>17</td>
<td>18.7</td>
<td>64.7% (11)</td>
</tr>
<tr>
<td>Nausea</td>
<td>8</td>
<td>8.8</td>
<td>100% (8)</td>
</tr>
<tr>
<td>Migraine</td>
<td>7</td>
<td>7.7</td>
<td>71.4% (5)</td>
</tr>
<tr>
<td>Weight loss</td>
<td>4</td>
<td>4.4</td>
<td>75.0% (3)</td>
</tr>
<tr>
<td>Other</td>
<td>27</td>
<td>29.7</td>
<td>66.7% (18)</td>
</tr>
<tr>
<td>General Pain ^</td>
<td>82</td>
<td>70.3</td>
<td>63.9% (53)</td>
</tr>
</tbody>
</table>

* Effectiveness range: 0 = Not, 1 = Slightly, 2 = Moderately, 3 = Quite, 4 = Extremely
* Multiple responses allowed
† Total N = 91
^ Total N = 118
Use of Cannabis for Medicinal Purposes

- 51% participants reported current use of cannabis for medicinal purposes (46/91)

<table>
<thead>
<tr>
<th>Reasons for stopping medicinal use</th>
<th>% (n) †</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems with dependence</td>
<td>51% (43)</td>
</tr>
<tr>
<td>Medical condition went away</td>
<td>16% (7)</td>
</tr>
<tr>
<td>Did not reduce symptoms of illness</td>
<td>9% (4)</td>
</tr>
<tr>
<td>Stopped working</td>
<td>9% (4)</td>
</tr>
<tr>
<td>Relationship problems</td>
<td>7% (3)</td>
</tr>
<tr>
<td>Illegal Status</td>
<td>4% (2)</td>
</tr>
<tr>
<td>Unacceptable side-effects</td>
<td>4% (2)</td>
</tr>
<tr>
<td>Other</td>
<td>13% (6)</td>
</tr>
</tbody>
</table>

† N = 45; multiple responses allowed

Driving under the influence

- Driving under the influence of cannabis and synthetic cannabinoids
  - Ever driven ?
  - Ever driven within 3 hours of using either substance ?
  - If so, how often ?
Driving and Cannabis

- Of the 154 participants, 89% (n=137) had ever driven.

- Of these:
  - 94% reported ever driving within three hours of consuming cannabis (129/137)
  - 81% reported driving more than 100 times (111/137)
  - 6% had never driven whilst under the influence of cannabis (8/137)

- Figures reflect a high prevalence of driving
Driving and Synthetic Cannabinoids

- Of 154 participants, 53% (n = 82) had used synthetic cannabinoids.
- Of these:
  - 90% of these had ever driven (74/82)
  - 51% reported driving within three hours of consuming synthetic cannabinoids (38/74)
  - 24% reported driving more than 100 times (18/74)
  - 46% reported never driving whilst under the influence of synthetic cannabinoids (34/74)

Summary

- Use of medical cannabis by clients attending cannabis clinics is common – 59%
  - Depression, anxiety and pain are most common reasons
  - Dependence was a concern for ~1/2 sampled population
- Driving under the influence of cannabis by clients attending cannabis clinics was almost universal
  - 94% within 3 hours, many frequently
  - 51% of synthetic cannabis users within 3 hours – concerning re effects
Thank you

Questions?
Acknowledgements

We would like to thank the clients of NSW Health who have shared their personal experiences and who gave their time to participate in this study.

We would also like to acknowledge the drug & alcohol clinicians and research staff who have assisted with recruitment and given their support to this project.

References

