Prevalence of drugged driving in New Zealand

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Abstract

In 2014 the New Zealand Transport Agency commissioned a research project designed, in part, to establish a quantitative picture of the type and the extent of drugged driving in New Zealand, by both legal and illegal drugs. A stratified telephone survey (n=2000) and internet survey (n=546) were conducted to explore the extent of drugged driving. Other than alcohol, the drugs most commonly taken prior to driving were strong opioid-based painkillers, antidepressant medication, anti-nausea medication, cannabis and anti-anxiety medication. A large proportion of drivers also reported taking combinations of different drugs prior to driving.

Background

New Zealand’s Road Safety Strategy 2010-2020, Safer Journeys (Ministry of Transport 2010), aims to significantly reduce road crashes involving alcohol or drug impaired drivers, which contribute a stubbornly large proportion, around 20%, of serious road trauma. Although the incidence and adverse consequences of alcohol impaired driving are well understood and documented, the incidence of drugged driving (legal and illegal) in New Zealand had not been unequivocally established.

A research project was conducted in 2014 and 2015 to establish the extent of drugged driving in New Zealand, by both legal and illegal drugs, and the levels of impairment produced by the more commonly used drugs (Starkey & Charlton, 2015). This paper reports on the surveys to establish the prevalence of drugged driving.

Methodology

An initial telephone survey was conducted on a stratified sample of drivers, representative of the age, gender and regional distribution of licensed drivers across New Zealand (n=2,000; mean age = 47.6 years; 59.3% female; see Table below). Participants were asked about their general driving habits and to indicate if they took or used any prescription medications, over-the-counter medication, or drugs for recreational purposes.

\begin{tabular}{|c|c|c|}
\hline
Age group (years) & % licensed drivers & Survey sample \\
\hline
16-24 & 13.8\% & 200-250 \\
\hline
25-39 & 27.6\% & 430-480 \\
\hline
40-64 & 44.1\% & 440-490 \\
\hline
65+ & 14.5\% & 380-430 \\
\hline
\end{tabular}

A follow-up phone survey focused on those participants (n = 450, mean age = 48.1 years, 57.1\% female) in the initial survey who reported taking strong painkillers (e.g. codeine, tramadol, methadone, morphine), selective serotonin reuptake inhibitors (SSRIs – fluoxetine, citalopram, paroxetine and sertraline), benzodiazepines (diazepam, lorazepam, alprazolam), cannabis and stimulants (amphetamine, methamphetamine, methylphenidate).
Information regarding the incidence of drugged driving was also obtained from a subsequent internet survey (n = 546; mean age = 34.5 years; 50.55% females), conducted primarily to provide insights into New Zealand drivers’ attitudes and perceptions toward drugged driving.

**Results**

For participants in the surveys, the drugs most commonly taken within three hours prior to driving were strong painkillers, antidepressants, anti-nausea medication, cannabis and anti-anxiety medication. Participants completing the online survey were younger compared to the telephone survey participants and the percentage of those driving within three hours of taking drugs was generally higher.

<table>
<thead>
<tr>
<th>Drugs taken within 3 hours of driving</th>
<th>Telephone surveys</th>
<th>Online survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>strong painkillers</td>
<td>9.8%</td>
<td>18.7%</td>
</tr>
<tr>
<td>antidepressant medication</td>
<td>6.1%</td>
<td>15.8%</td>
</tr>
<tr>
<td>anti-nausea medication</td>
<td>3.5%</td>
<td>6.4%</td>
</tr>
<tr>
<td>cannabis</td>
<td>2.5%</td>
<td>14.2%</td>
</tr>
<tr>
<td>anti-anxiety medication</td>
<td>2.9%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

A significant proportion of the phone (16.6%) and internet survey participants (9.9%) reported taking combinations of different drugs prior to driving. The drug combinations frequently involved alcohol (43.0% overall), and different types of strong painkillers were often combined.

The surveys revealed that drugged driving in New Zealand is widespread, with over 50% of the participants who took SSRIs, benzodiazepines or stimulants reporting “drugged driving” once a week or more in the last 12 months. Smaller proportions reported driving once a week or more after taking cannabis (42.6%), illegal stimulants (28.2%) and strong painkillers (25.5%). These proportions were similar to those indicating that it was “very likely” that they would drive within three hours of taking the drugs in the future.

**Conclusion**

This study was designed, in part, to establish the prevalence of drugged driving in New Zealand, by both legal and illegal drugs. Drugged driving appears to be widespread, with 3%–19% of all drivers surveyed driving within 3 hours of taking prescription medications or drugs, and 25%–50% of these users reporting “drugged driving” once a week or more.

**References**
