Expert Opinions in DUID Cases Based on Interpretation of Observations and Toxicology

M.S. Odell

Department of Forensic Medicine, Monash University; Victorian Institute of Forensic Medicine, 57-83 Kavanagh Street, Southbank, Victoria, 3006, AUSTRALIA. e-mail: morriso@vifp.monash.edu.au

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Abstract
New laws were introduced in Victoria Australia in December 2000 to allow assessment of suspected drug impaired drivers (1). The definition of the offence of Drug Impaired Driving includes the requirement for an expert opinion relating the observed clinical signs with the toxicology result. This presentation discusses the experience to date of the expert panel.

In most cases there was good correlation between findings and the subsequent toxicology. The greatest difficulties in interpreting the findings were encountered in cases where minimal recorded signs were associated with drugs such as cannabis. Reasons for inconsistencies are discussed.

Introduction
The drug impairment assessment system consists of the following stages:

1. Apprehension by police on suspicion of impairment If a Preliminary Breath Test (PBT) for alcohol is low or negative and a simple roadside assessment suggests impairment, then the driver proceeds to stage 2:

2. Drivers suspected of being drug affected are taken to a police station for further assessment by a specially trained police officer. This assessment includes an evidentiary breath test, a structured interview, a Standardized Field Sobriety Test (2) consisting of test for Horizontal Gaze Nystagmus (HGN), Walk & Turn, One Leg Stand which is videotaped and followed by a blood test. The primary reason for videotaping these assessments is to demonstrate that the assessment procedure was followed properly. It is not intended to be a record of clinical signs however useful information can be obtained from viewing the videotape and reading the reports. Nystagmus is not recorded by video.

3. This assessment must be completed within 3 hours.
4. The blood sample is analyzed by authorized analysts at the Victorian Institute of Forensic Medicine (VIFM).

5. An expert opinion is obtained from one of several authorized experts in the form of a “Certificate of Drug Effect” which is able to be tendered as evidence in court.

**Method**

There are currently three authorized experts who are all forensic physicians at the VIFM. They were appointed by a panel consisting of professors of Forensic Medicine & Pharmacology who reviewed their qualifications and experience in clinical forensic medicine, assessment of drug affected persons and interpretation of clinical toxicology. Their role is to review the file which contains details of the impaired driving, police observations, the results of impairment testing and the blood toxicology results. The questions the expert opinion needs to address are whether:

1. “…the behaviour of the person on an assessment…is consistent with the behaviour usually associated with a person who has used…drugs”; **AND**
2. “…the behaviour usually associated with a person who has ... used that drug ... would result in the person being unable to drive properly…”

Of these, the second is usually easiest to address in a report by means of a standard proforma for the particular drug. The proforma contains a brief explanation of nature of the drug, its effects on driving its signs on testing and is edited to reflect particular situation. An example of this for the case of cannabis are the following paragraphs:

“**Drug Name:** delta\(^9\) Tetrahydrocannabinol

**Details of Effects:** This is the active component in cannabis (marijuana) smoke. As a central nervous system depressant and hallucinogen cannabis exerts a generally negative effect on psychomotor skills such as those required for driving. In large doses and particularly in combination with sedative drugs including alcohol, the drug is known to have a profound impairing effect on driving skills. Effects include reduction in perceptive skills, a slowing in reaction time, dulling of reflexes, dilation of time perception and an overall reduction in the capacity to react quickly to stressful situations. There may be few or no signs of impairment on testing.”

The sources of information available to the expert are in the file received from the police and consist of:

- Descriptions and observations of driving
- Descriptions of the behaviour of the subject prior to the SFST
- Behaviour during the interview – this consists of a transcript and video recording of the interview
- Record sheets and video of the SFST
- Result of blood analysis

**Results**

In the first 16 months of the system, 77 cases were presented for expert opinions. This is less than the total numbers apprehended by police and only represents those proceeding
to prosecutions specifically under the new law. Apprehended drivers who were prosecuted for other offenses such as dangerous driving or exceeding the blood alcohol limit did not require expert opinions. To date, no expert opinions have been challenged in the courts.

Nine cases (11.6%) involved females and 68 cases (88.4%) were male. Ages ranged from 16 to 51 with the majority in their 20s. Two subjects, both male, were apprehended twice during the period which means that the 77 cases represent 75 individuals.

All 77 cases had evidence of one or more drugs other than alcohol. Alcohol was present in 4 cases, always in conjunction with other drugs. The highest alcohol level was 0.08%. In 29 cases there was one drug, 32 cases 2 drugs, 11 cases 3 drugs and 5 cases 4 drugs. Metabolic “cascades” reported by the laboratory were counted as one drug. For example, a report of diazepam, nordiazepam, temazepam and oxazepam would be counted as one drug.

The most common drugs encountered were the benzodiazepines with very high levels in some cases. The highest was a temazepam level of 3.0 µg/ml. Cannabis (as tetrahydrocannabinol or THC, not carboxy-THC) was the next most common with the highest level 12 ng/ml. The following table shows the number of cases with various drugs. Note that the percentages refer to individual drugs. Since drugs were often present in combination the percentages do not add up to 100:

<table>
<thead>
<tr>
<th>Drug class</th>
<th>No of cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzodiazepines</td>
<td>57</td>
<td>74</td>
</tr>
<tr>
<td>Cannabis (as THC)</td>
<td>27</td>
<td>35</td>
</tr>
<tr>
<td>Morphine or Codeine</td>
<td>23</td>
<td>29.8</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>12</td>
<td>15.6</td>
</tr>
<tr>
<td>Methadone</td>
<td>9</td>
<td>11.7</td>
</tr>
<tr>
<td>Anti-depressants</td>
<td>5</td>
<td>6.5</td>
</tr>
<tr>
<td>Alcohol</td>
<td>4</td>
<td>5.2</td>
</tr>
<tr>
<td>Anti-histamines</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>LSD</td>
<td>1</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Problems And Inconsistencies

Horizontal gaze nystagmus (HGN) is an important part of the SFST. In 26, or one third of cases, the findings in the HGN examination were not consistent with what may have been expected from the drugs found on toxicology. Although the examiners could have no way of knowing what drugs were present, they would have been aware of any admissions of drug use from the interviews.

11 cases were “over reported” ie: HGN was found in cases where the drugs are not known to cause it, such as amphetamines, opiates or cannabis in the absence of alcohol or benzodiazepines.10 cases were “under reported” ie: HGN was not found where the drugs would be expected to cause it. These were all benzodiazepine cases and levels ranged from low therapeutic to very high.
In 5 cases the observations were considered to be “inconsistent”. These were in cases
where nystagmus was found in only one eye and one case where HGN was reported
absent at full deviation but was said to have commenced prior to 45 degrees.

In several cases there were medical problems or extreme degrees of drug affect which
made a formal drug assessment impossible or inappropriate. These included three cases
where the subject was barely conscious and the videotape showed futile attempts by
police to wake the person. These were cases that should not have proceeded to the stage
of formal assessment because of safety considerations. The general advice given to
police is to call an ambulance if a detainee is unresponsive.

In three cases there was obvious psychiatric illness. One of these involved a man with a
long history of psychiatric instability affecting driving. Another was an unlicensed man
who was made an involuntary psychiatric patient immediately after the assessment
because of florid psychosis. His blood test was positive for cannabis however the expert
could not give an opinion that this was directly responsible for his dangerous driving. A
third man showed bizarre posturing and affect which was documented by the doctor who
attended to take his blood sample. He was referred for medical review of his fitness to
drive.

In two cases there was physical illness. One was a man who was seen on the video
telling police he was a diabetic and showing them his insulin kit. He was admitted to
hospital when he was taken there for his blood test and found to be hypoglycaemic. The
other was a man with one leg in a splint after a fracture. He was not able to complete the
SFST properly however there was other evidence of impairment which allowed an
opinion to be given.

One case involved a person who gave their occupation as a health professional during
the interview. This person was reported to the appropriate registration board for
investigation (reporting of impaired health professionals is mandatory for doctors in
Victoria).

Dealing With Inconsistencies

In most of the inconsistent cases there was ample evidence of drug affect from other
parts of the SFST. The reports in these cases reflected this however a comment was
added to bring the inconsistency to formal notice. This is done with the intention of
avoiding any argument in court that the opinion might not take into account any
inconsistency. It is not known whether this may have had any influence on subsequent
decisions by police regarding the prosecution. In one case the opinion only extended as
far as a comment on the usual effects of the drugs, with no acknowledgment that the
particular case was due to drug effect. In all three acute psychiatric cases the expert
deprecated to give a definitive opinion that the impairment was due to drugs and
recommended referral for medical review. In cases where there was a serious
inconsistency and/or inability to form an expert opinion, an explanatory memo was sent
to the police explaining the reasons.

A particular problem arises when there is evidence of impaired driving but objective
information from the SFST does not reveal obvious impairment. This may occur with
drugs such as cannabis or with low doses of many other drugs. In these cases it is not possible for an opinion to confirm a negative finding.

In the cases that have proceeded as far as an expert opinion the impairment findings are usually easily consistent with toxicology. One reason for this is that the cases have been highly selected by the time they get to the stage of an expert opinion being required. A few cases present problems especially “proving negatives”, when there are unrecognised medical conditions and inconsistent observations of HGN. In the majority of cases the expert opinion confirmed the suspected drug effect that led to apprehension and impairment assessment.

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References