

QUEENSLAND COUNCIL FOR CIVIL LIBERTIES

Prohibition Doesn't Work, It Never Has and Never Will

Submission to the Parliamentary Inquiry into Addressing Cannabis-Related Harm in Queensland

by the

Queensland Council for Civil Liberties

The Research Director
Social Development Committee
Parliament House
George Street
Brisbane Qld 4000

By email: sdcc@parliament.qld.gov.au

30 April 2010

Introduction

Thank you for the opportunity to make a submission to your inquiry. .

First a few words about the construction of this submission. I have a master's degree in hard science and have tutored and lectured in science at the tertiary level. I know more about science processes than non-scientists but I also have a more sceptical view. I am very widely read on the topic of this submission, and as a member of the baby boomer generation I have known many people who have used cannabis safely. Seventeen years ago I submitted a paper to another inquiry on cannabis and the law in Queensland (Ransley, 1993).

I have purposefully used a lot of quotations in the submission to draw the committee's attention to the wide range of expert opinion that asserts that prohibition doesn't work and cannabis should be legalised.

Why People Take Drugs

It is pertinent at the beginning of this submission to take a quick look at the reasons why people take drugs. Professor F A Whitlock was, for many years, the Professor of Psychiatry at the University of Queensland. His 1980 book is a model of commonsense and clarity on the drugs issue. The following remarks, from his Chapter Nine, remain as relevant today as they were in 1980:

“Why do people use drugs? The question should be amplified and rephrased: what makes some young people use drugs that are officially declared dangerous and illegal in contrast to the majority who drink and smoke socially approved substances?

The most obvious and natural answer is because they like them. We do not generally look for obscure, psychological or sociological explanations of most drug use in the community. People take alcohol, smoke tobacco, drink tea and coffee because they enjoy the effects of these substances. They are capable of producing changes in our emotional states that are regarded as pleasant and, depending on expectations and the circumstances in which they are taken, stimulating or relaxing. Unfortunately, when it comes to prohibited drugs, all kinds of esoteric meanings are attributed to behaviour which, when legal drugs are being used, demands and receives a far simpler explanation. Yet the Canadian Commission found when it asked the same question of individuals using cannabis that the drug was taken because it produced enjoyable effects.....”
[emphasis added]

SDC: Short & Long Term Risks Associated with Cannabis Use: the Science

Cautionary Note

Before proceeding, it is worth noting that most scientific research into the effects of cannabis is funded by governments and sometimes by religious and philanthropic organisations. Because there is a prevailing view among the parties who dispense funding that cannabis use is harmful, the research that gets the most funding is research into possible harmful effects. Professor David J Nutt is a highly respected UK psychiatrist and neuropsychopharmacologist specialising in the research of drugs which affect the brain. In July 2009 he delivered the Eve Saville Lecture for the Centre of Crime and Justice Studies titled ‘*Estimating drug harms: a risky business?*’ In this lecture he described the funding bias this way:

“It is very easy to get research money to show that drugs are harmful but it’s very hard to get research funds to show that they may not be so. A lot of the scientific reporting about drugs is biased. It’s a big challenge for scientists to make sure that their colleagues are producing data that are accurate. There have been some horrific examples where some of the so-called ‘top’ scientific journals have published poor quality research about the harms of drugs such as cannabis or ecstasy, sometimes having to retract the articles. The problem is, you never see the retractions, you just see the front page of the newspapers saying ‘ecstasy fries your brain’. The retraction explaining that methamphetamine rather than ecstasy was given by mistake is much less visible, if published at all.”

Obviously this funding bias has distorted the science in the sense that an overwhelming number of scientific papers are focussed on harmful effects. It is only in the last decade or so this imbalance has begun to be redressed by the publication of research into the beneficial effects of cannabis for various medical conditions.

The default view that cannabis use is always harmful is also pervasive in the scientific community that publishes research and conducts peer review. David Nutt was the leading author of a research paper ‘*Development of a rational scale to assess the harms of drugs of potential misuse*’, published in *The Lancet* in 2007. In the same Eve Saville Lecture he commented,

“Despite—or perhaps because of—its novelty and remit, it was very hard to get the paper published because it challenged some of the current (mis)perceptions about drugs.”

Not only was it hard to get the paper published, the UK government later rejected the policy implied

by its analysis—that cannabis remain a Class C drug—and in October 2009 dismissed Nutt from his position as chair of the government’s Advisory Council on the Misuse of Drugs. Thus, for the UK government, the agenda to discover and document cannabis harm still appears to be driving a lot of the research.

The principal driver for the belief that cannabis is harmful is its illegal status. Professor Whitlock has written:

One has to conclude that there was no drug problem in Australia, apart from the far greater, age-old one of alcohol, until the mid 1960s when obligations under the UN Single Convention compelled action and legislation that hitherto had not seemed necessary. In short, a problem was declared to exist by official decree, and a good deal of subsequent official action seems to have been designed to make sure that a self-fulfilling prophecy came true.

Cannabis was declared illegal and therefore harmful but at the time there was virtually no credible scientific research to back this claim. Such data as was available—the 1894 Indian Hemp Drugs Commission report being the earliest—had not revealed any evidence of its alleged harmfulness. Western governments that had banned cannabis therefore made available substantial research funds in the hope that studies would demonstrate significant harms. Many scientists were happy to oblige:

"It has been impossible to prove marijuana affects driving adversely. ... I can say that there are some quite distinguished researchers who are going through incredible contortions to try and prove that marijuana has to be a problem."

[Professor Jack Maclean, Director of the Road Accident Research Unit at Adelaide University, The Advertiser, 31 October 2001]

The result was a lot of poorly designed research, particularly in the first 20-30 years after cannabis was declared illegal. Many extraordinary claims were made about the harmful effects of cannabis based on studies of users who were typically multi-drug users, often heavy users of alcohol and tobacco. Despite the use of sophisticated statistical techniques, the confounding effects of multi-drug use continues to be a major issue, as can be seen in the sketch of current research that follows. Not surprisingly, it is extremely difficult to find large groups of subjects who have restricted their psychoactive drug use to cannabis alone.

Choosing reliable science

It is likely that hundreds of thousands of research articles have been published about the effects of cannabis. Certainly that is the impression gained from putting a query into google. As already argued, it is also likely that most of these articles have been funded with the objective of discovering some kind of harm associated with cannabis use. But there are also numerous websites arguing that cannabis is relatively benign, backed up by their own research. And many books have been published, both for and against. This makes it very easy to cherry pick the research to make an argument one way or the other. For every research study used to justify the concept that cannabis harm justifies its illegal status, legalisation advocates can produce equally convincing research to show that it does not. In this context the extensive list of references in the Drug Free Australia report is noted.

Just because a research article has been published in a respected scientific journal doesn’t mean it is reliable. This is not how science works. As stated by Forbes (2010), discussing similar

controversies around climate science:

“In all the recent controversies the phrase ‘peer review’ has been on everyone’s lips. Of course, peer review is a vital part of the scientific process but it is not the final guarantor of scientific veracity and probity. The best review of a scientific paper is the work that follows, when researchers try to replicate or build on the findings. Some recent cases of scientific fraud were published in the best peer-reviewed journals.”

In assessing the possible harms associated with cannabis use it is therefore important to identify, where possible, the highest quality research, and to take account of all possible lines of evidence, including epidemiological studies and meta-analysis.

Review of the science

Subject to the caveats already discussed, this submission relies on two recent reviews. These are: *Cannabis: Classification and Public Health* (Rawlins, et.al., 2008) prepared by the Advisory Council on the Misuse of Drugs at the request of the UK government; and *Cannabis Policy: Moving Beyond Stalemate* (The Beckley Foundation, 2008). They were chosen because they are comprehensive, detailed, of very high quality and incorporate the most recent research.

According to Professor Nutt, the ACMD report was “based on detailed, extensive research, and was one of the most detailed assessments of cannabis harm ever done.” According to Amanda Fielding, Director of the Beckley Foundation, the Beckley Foundation report is the result of convening “a team of the world’s leading drug policy analysts to prepare an overview of the latest scientific evidence surrounding cannabis and the policies that control its use.” The DFA submission does not reference either of these reports.

The findings of these two reports on the issues identified by the Social Development Committee are paraphrased below. The Beckley Foundation report is referenced here as BF, the Advisory Council report as ACMD. Before addressing the ‘harm’ issues, it is appropriate to see what the reports say about cannabis intoxication.

Effects of cannabis intoxication

BF STUDY

- Cannabis produces euphoria and relaxation, alters perception, distorts time, and intensifies ordinary sensory experiences, such as eating, watching films, appreciating nature, and listening to music. User’s short-term memory and attention, motor skills’ reaction time and skilled activities are impaired while they are intoxicated. These effects develop rapidly after smoking cannabis and typically last for 1 to 2 hours. Their onset is delayed for 1 to 4 hours after oral use. Cannabis users are typically seeking one or more of these effects when they use.

ACMD STUDY

Agrees with above BF comments and adds the following:

- The effects of cannabis on the heart and blood vessels are similar to the effects of moderate exercise and do not constitute a risk in healthy adolescents or adults.

- Unlike alcohol, smoking cannabis does not appear to cause disinhibition, an increase in risk-taking behaviour, or aggression.

Short-term risks to mental health

BF STUDY

- The most common unpleasant effects of acute cannabis use are anxiety and panic reactions. These may be reported by naive users and they are a common reason for discontinuing use. More experienced users may also report these effects after receiving a much larger than usual dose of THC.

ACMD STUDY

- In some people acute intoxication leads to panic attacks, paranoia and confused feelings that drive people to seek medical help. These effects are generally short-lived and usually respond to reassurance or the administration of a mild tranquilliser.
- UK population data for the years between 2004 and 2007 show a downward trend in the incidence of complaints about acute psychological reactions to cannabis.

Long-term risks to mental health

BF STUDY

- A number of studies have reported a relationship between cannabis use and anxiety and depression disorders. However, a meta-analysis found no convincing relationship had been demonstrated because of a failure to control for potential confounding factors.
- Cannabis use and psychotic symptoms are associated in general population surveys. Longitudinal studies of large cohorts have suggested a causal relationship but a meta-analysis found no study had assessed all major potential confounding factors.
- A cannabis-schizophrenia causal relationship would predict an increase in the incidence of schizophrenia, particularly early-onset cases, over the period when there have been very substantial increases in cannabis use among young adults in Australia and North America. One Australian and two British studies failed to find any increase but one British and a Swiss study reported increased incidence of psychoses among males in recent birth cohorts.
- Cannabidiol (CBD) is one of the 60 cannabinoids present in cannabis. There is evidence that it has anxiolytic and anti-psychotic properties. Cannabis grown using the sensemilla method has the highest THC:CBD ratio and traditional cannabis resin the lowest. This is one effect of the illegal drug market.

ACMD STUDY

- There is no convincing causal relationship between the use of cannabis and the development

of anxiety and depression.

- There is unequivocal evidence that the use of cannabis by people with schizophrenia increases the likelihood of relapse, manifested by worsening of symptoms.
- There is no evidence of a relationship between cannabis use and the prevalence of schizophrenia and psychoses at the population level. An Australian study found no relationship between a steep rise in cannabis use and the prevalence of schizophrenia in cohorts of people born between 1940 and 1979. In a large UK study the prevalence of schizophrenia and psychoses decreased between 1996 and 2005. The population evidence may reflect some other factors such as a common predisposition to schizophrenia and also to cannabis use.
- On balance, the evidence points to a probable, but weak, causal link between psychotic illness (including schizophrenia) and cannabis use.
- Only a minority of young people who use cannabis will develop a psychotic illness. On one estimate, around 5,000 young men, or 20,000 young women, would need to be prevented from using cannabis to avoid one person developing schizophrenia.
- In experimental studies in animals and humans, CBD has been shown to have effects similar to antipsychotic drugs.

Short term risks to physical health

BF STUDY

- The acute toxicity of cannabinoids is very low by comparison with other psychoactive drugs, because they do not depress respiration like the opioids, or have toxic effects on the heart and circulatory system like cocaine and other stimulants.
- Regular cannabis-smoking during pregnancy appears to reduce birth weight, although less than tobacco-smoking.
- The greatest public health concern about the acute effects of cannabis is that intoxicated drivers may cause motor vehicle crashes. A convergence of fallible data suggests that cannabis use increases the risk of motor vehicle crashes 2-3 times.

ACMD STUDY

- Cannabis use is associated with low birth weight babies. This effect is seen in women who use tobacco during pregnancy and it is not possible to be certain that cannabis itself causes additional harm.
- Cannabis laboratory studies indicate a dose-dependent impairment of performance of tasks that require sustained attention and motor control such as driving, operating heavy machinery and flying aircraft (especially when taken with alcohol). In these circumstances, cannabis can be dangerous to the individual and to others.

Long-term risks to physical health

BF STUDY

- Cannabis use may cause an increased risk for an acute cardiovascular event in older regular smokers.
- There is no evidence to date that chronic cannabis smoking increases the risk of emphysema.
- Because of the confounding effect of concurrent tobacco smoking, it has not been possible to determine whether cannabis use increases the risk of lung cancer.

ACMD STUDY

- Cannabis may be dangerous for people with diseases of the circulatory system, particularly those with coronary artery disease, irregularities of heart rhythm or raised blood pressure or those at risk of stroke.
- Smoking cannabis is associated with longer-term damage to the respiratory tract and the lungs, with an increased risk of chronic bronchitis. Such changes also occur in people who use tobacco over long periods of time. Because in Britain cannabis is commonly smoked with tobacco, the extent to which these changes are causally related to cannabis is uncertain.

Risks to brain function

BF STUDY

- Cognitive impairment, particularly in short-term memory, is often reported by cannabis-dependent persons seeking help to stop using cannabis. However, studies of long-term heavy users have not shown severe or gross cognitive impairment. There is some evidence that more subtle types of cognitive impairment—small deficits in verbal learning, memory and attention—may be associated with long-term heavy cannabis use but the causes are debated.
- Extremely sophisticated measurement techniques have shown altered brain function and metabolism in humans following acute and chronic use of cannabis. Some studies have found evidence of structural brain changes—reduced hippocampus and amygdala volumes—but this research is in the very early stages.

ACMD STUDY

No specific comments.

Risk of addiction and dependence

BF STUDY

- Cannabis dependence is the most common type of drug dependence after alcohol and tobacco. The lifetime risk of cannabis dependence may be as high as half that for alcohol and a quarter that for nicotine.

ACMD STUDY

- There is clear evidence that cannabis can produce dependency. However, few dependent users access treatment services in the UK.

Risk of cannabis use leading to the use of other harmful substances

BF STUDY

- Cannabis use is more strongly associated with other illicit drug use than alcohol or tobacco use, and the earliest and most frequent cannabis users are the most likely to use other illicit drugs. Contributing factors include opportunity—cannabis and other illicit drugs are supplied by the same black market—and a shared genetic vulnerability to develop dependence on cannabis and other drugs. A number of studies have supported the hypothesis that the association arises because socially deviant young people have a predilection to use a variety of drugs, both legal and illegal.

ACMD STUDY

- The “gateway theory” is the term that describes the possibility that use of cannabis leads to the use of drugs such as opiates and cocaine. The risks for cannabis use is small, and is certainly less than the risks that use of alcohol and tobacco will progress to dependency on these more dangerous drugs.

2. Factors influencing risks

Age at which a person first uses cannabis

BF STUDY

- Surveys typically find associations between cannabis use and poor educational attainment among school children and youth. Possibilities are that cannabis use causes poor educational attainment or that poor educational attainment leads to cannabis use. A third and more likely possibility is cannabis use and poor educational attainment are the result of common risk factors.
- US studies have shown that the earlier the age at which cannabis was first used, the more likely a user was to use heroin and cocaine. However, this may simply reflect common risk factors.
- A number of prospective studies have found that adolescents who used cannabis by age 18 were more likely to be later diagnosed with schizophrenia or report psychotic symptoms than those who had not. A meta-analysis found no study had assessed all major potential

confounding factors.

ACMD STUDY

- There is very little useful UK data on the prevalence of cannabis use among those under 16 years of age. What there is suggests that among recent users the first use is around the age of 13-14 years, indicating an earlier introduction to cannabis than in previous decades. The same data also show a significant reduction in cannabis use among 16 to 24 year olds from 1996 to 2006/7.

Frequency of use

BF STUDY

- The prospective studies already referred to found a statistically significant dose-response relationship between frequency of adolescent cannabis use and risk of psychotic symptoms during the follow-up period. Once again the same meta-analysis questioned whether all major potential confounding factors had been accounted for, making it hard to exclude the common cause hypothesis.

ACMD STUDY

Not specifically addressed.

Potency of the cannabis used

BF STUDY

- The illegal status of cannabis has encouraged the production of more concentrated forms with a higher THC content. Available data suggest these varieties have 2-3 times the THC of most products available in the 1970s. The effect of any increase in potency depends on the extent to which users are able to offset the increased THC by titrating the dose they obtain.

ACMD STUDY

- There is evidence to suggest users are now exposed to products with a higher THC content than previously, because of the substantial increase in the market share of sensemilla. The consequences are unknown. The only relevant sources of evidence are enquiries to the National Poisons Information Service and hospital admissions due to cannabis intoxication. Neither of these have increased. Users may be titrating their intake to achieve a desired intensity of effect, leaving the “effective” THC dose is unchanged.

Potential harms compared to other psychoactive drugs

A handful of researchers have systematically compared the potential harms associated with cannabis use to the potential harms associated with non-medical use of other psychoactive drugs. This research is summarised in the Beckley Foundation study. The drugs chosen for comparison were MDMA/ecstasy, stimulants, tobacco, alcohol, cocaine and heroin. In these studies one of the dimensions of danger (or ‘dangerousness’) was the level of intoxication, which ironically for users is the pleasurable effect they seek from using the drug. Other dimensions were the likelihood of a fatal overdose, general toxicity, dependence, addictiveness and psychic dependence. Although there was disagreement on what the dimensions of harm should be, there was strong agreement that cannabis rated at the lowest level for potential harm.

By far the most systematic attempt to rate potential harms is that by Nutt et.al (2007).

Nutt Harm Matrix

Nutt and colleagues identify three main factors that determine the harm associated with any drug of potential abuse: a) the physical harm to the individual user; b) the tendency of the drug to induce dependence; and c) the effect of drug use on families, communities and society. Within each category they recognised three components, creating a nine-category “matrix of harm”, as shown in their table reproduced below.

THE NINE PARAMETERS OF HARM

	Parameter	
Physical Harm	One	Acute
	Two	Chronic
	Three	Intravenous Harm
Dependence	Four	Intensity of Pleasure
	Five	Psychological Dependence
	Six	Physical Dependence
Social Harms	Seven	Intoxication
	Eight	Other social harms
	Nine	Health-care costs

From Nutt et.al, 2007 Table 1 Assessment Parameters

Expert panels of psychiatrists, pharmacologists, and addiction specialists were asked to give scores, from zero to three, for each category of harm for 20 different drugs. Professor Nutt explained the choice of drugs as follows:

“We looked at all the drugs in the *Misuse of Drugs Act* (MDA) and added some others that weren’t already covered by the Act. For example, we included ketamine, solvents, and tobacco and alcohol, because we thought it was very important that harms of illicit drugs were assessed against the harms of drugs that people know and use, otherwise it is not possible to have a truly harm-based assessment. The scores of these other drugs also play an important part as anchor points against which others can be scaled. Without such reference points, the debate about relative drug harms becomes isolated and arbitrary,”

The 20 drugs were rated as follows, 1 being the most harmful and 20 the least harmful. “Not

controlled” means not controlled by the UK MDA. As depicted, cannabis was rated at eleventh most harmful.

1. Heroin
2. Cocaine
3. Barbiturates
4. Street methadone
5. Alcohol (not controlled)
6. Ketamine
7. Benzodiazepine (eg Temazepam)
8. Amphetamine
9. Tobacco
10. Bupranorphine
11. Cannabis
12. Solvents (not controlled)
13. 4-MTA (4-methylthioamphetamine)
14. LSD
15. Methylphenidate
16. Anabolic steroids
17. GHB (Gamma 4-hydroxybutyric acid)
18. Ecstasy
19. Alkyl nitrates (not controlled)
20. Khat (not controlled)

Relevant commentary by Nutt et.al (2007) is:

“... cannabis is commonly smoked as a mixture with tobacco, which might have raised its scores for physical harm and dependence, among other factors...”

“... alcohol and tobacco are both in the top ten, higher-harm group. There is a rapidly accelerating harm value from alcohol upwards ...”

Drug fatality

For many lay people, one of the most important parameters for assessing the relative dangerousness of drugs is their potential to cause death. The following table, reproduced from Nutt’s Eve Saville lecture, shows Scottish drug death numbers and their reports in the most popular newspapers during the 1990s. The last column shows the death to newspaper reporting ratio.

DRUG DEATHS & MEDIA BIAS

Drug	Drug Deaths	Newspaper Reports	Death/Newspaper
Total Cases	2,255	546	4:1
Aspirin/Salicylate	12	0	-
Paracetamol	265	1	265:1
Diazepam	481	10	48:1
Temazepam	369	25	15:1
Morphine	431	6	72:1
Amphetamines	36	13	3:1
Cocaine	30	4	8:1

Heroin/Diamorphine	342	75	5:1
Methadone	460	29	16:1
Ecstasy/MDMA	28	26	1:1

This table is useful for several reasons. First, it shows an extraordinary level of media bias when it comes to reporting drug deaths. Second, cannabis is missing, because, Nutt says, “cannabis doesn’t kill.” Third, alcohol is also missing, although it will have caused a similar number of total deaths “2,000 to 3,000 people.” Fourth, nearly every death where ecstasy was named as a possible contributory factor was reported by newspapers “giving the impression that ecstasy is a much more dangerous drug than it is.” Nutt adds that this was one of the reasons he made the unexceptional observation—without adjusting for numbers of users—that ecstasy, which causes 30 deaths a year, was less dangerous than horse-riding, which causes 100 deaths a year (Nutt, 2009). Last but not least, the table stands as a revelation to anyone unfamiliar with the fact that everyday pain killers and sedatives cause significant numbers of deaths.

It is not simply that ecstasy and cocaine deaths, for example, get reported because of their rarity and thus novelty value, as compared with alcohol-related deaths which are so common they don’t merit comment. If rarity were the issue, aspirin deaths in the Scottish press would get as much attention as cocaine deaths. The illegal drug deaths attract attention because they have been declared illegal, not because of any intrinsic properties.

Lest it be thought that the Australian media is any better, in their excellent review of Australian drug policy Russell Fox and Ian Mathews made the following observation (1992, p.173):

“For those who regard the media as a mirror of the society in which we live, the treatment given by the mainstream press over the past 25 years to the illicit drug issue should come as no surprise. For the most part it has been supportive of prohibitionist policies, especially in its pejorative reporting. There is little evidence, until the recent past, of the media encouraging debate on drug policy, let alone challenging the orthodox views of government.”

Discussion of the science

Caffeine & cannabis

It is very important to compare the side effects of cannabis with the side effects of drugs in everyday use. Taking caffeine first, the ABC website describes the side-effects of caffeine as follows (Catchpole, ABC, 2006):

“Caffeine is not generally considered addictive, but it is habit-forming. The body develops a tolerance towards the drug, meaning more caffeine is required to produce the same sensations. Withdrawal symptoms occur because after a day or so without caffeine the brain become oversensitive to adenosine, causing blood pressure to drop dramatically. The most familiar withdrawal symptom is the caffeine headache. Other symptoms include drowsiness, irritability and even nausea and vomiting. Excessive caffeine intake (more than four or five cups of strong tea or coffee per day) causes tremors, a fast heart rate, increased urination, nervousness, anxiety, stomach upsets and insomnia.

In rare cases caffeine can cause death. In Western Australia a 25-year old woman with a condition affecting her heart valves died after consuming a tonic containing 10 times the

amount of caffeine as coffee – not enough to kill most people but fatal with a heart condition.

The effects of caffeine and pregnancy are hotly disputed. While some studies have shown that caffeine contributes to a greater risk of miscarriage or birth defects, other studies have criticised this research in failing to eliminate the possibility of other causes contributing to the miscarriage.”

The website may be correct in its summary of pregnancy problems, or it may simply be out of date. It is easy enough to find research articles on the net showing that maternal caffeine use increases the risk for reduced birth weights (Konje, J.C. & Cade, J.E., 2008) and miscarriages (Weng & Odouli, 2008). By way of contrast, foetal alcohol syndrome is well accepted.

The same ABC website describes comparable side-effects of cannabis as follows (Lavelle, 2002):

“Common immediate effects include increased heart rate, low blood pressure, faintness and reddened eyes. There also can be a 'hangover' effect – drowsiness and poor coordination – lasting a couple of hours.

Regular users of cannabis develop a mild tolerance to the drug – in other words, they need to smoke more each time to get the same effect. About one in 10 become dependent on it. Some are psychologically dependent – cannabis becomes part of their lifestyle and they rely on it to relax and reduce stress.

Regular heavy use can also produce physical dependence. The drug subtly alters the user's brain chemistry: if they suddenly stop smoking it they experience withdrawal symptoms (sleep disturbance, irritability, anxiety and sweating) which can last about a week.”

Cannabis does not cause fatalities, not even ‘in rare cases’.

Drug dependence is a slippery concept, covering a range of behaviours from habit to addiction. The diagnosis has no physical basis and therefore lacks objective criteria as a ‘disease’ (Greenberg, 2008, p.19). Huge numbers of people are ‘dependent’, ‘habituated’ or ‘addicted’ to their daily fixes of caffeine. They suffer significant distress when they have to go without, a distress roughly equivalent to a low-level alcohol hangover. But there is evidence, not least the personal experience of many users, that caffeine seems to improve productivity and alertness.

Similarly, huge numbers of people seek relaxation and pleasurable intoxication from alcohol. This behaviour is so normative that abstainers are routinely harassed in social situations. It is clear that, for many people, socialising in groups would be much more difficult without alcohol. They tolerate and make jokes about blackouts, memory loss, and hangovers because they have decided the enjoyable effects are worth the costs.

Our drug consuming community tolerates the significant side effects of legal drugs because they believe the benefits outweigh the costs. Exactly the same pragmatic assessments of costs and benefits are practised in the illegal drug using community.

Alcohol & cannabis

It is instructive to look more closely at the negative health effects of alcohol consumption. A recent

American Medical Association report summarises two decades of research comparing drinkers and non-drinkers (AMA, 2007):

- Adolescent drinkers scored worse than non-users on vocabulary, general information, memory, memory retrieval and at least three other tests;
- Verbal and nonverbal information recall was most heavily affected, with a 10 percent performance decrease in alcohol users;
- Significant neuropsychological deficits exist in early to middle adolescents (ages 15 and 16) with histories of extensive alcohol use;
- Adolescent drinkers perform worse in school, are more likely to fall behind and have an increased risk of social problems, depression, suicidal thoughts and violence;
- Alcohol affects the sleep cycle, resulting in impaired learning and memory as well as disrupted release of hormones necessary for growth and maturation;
- Alcohol use increases risk of stroke among young drinkers;

The same report summarises research on the adverse effects of alcohol on the brain:

- The hippocampus handles many types of memory and learning and suffers from the worst alcohol-related brain damage in teens. Those who had been drinking more and for longer had significantly smaller hippocampi (10 percent).
- The prefrontal area (behind the forehead) undergoes the most change during adolescence. Researchers found that adolescent drinking could cause severe changes in this area and others, which play an important role in forming adult personality and behaviour and is often called the CEO of the brain.

An Australian study makes similar points about the impact of alcohol on the teenage brain (Hickie & Whitwell, 2009). Apparently the alcohol consuming population does not take this kind of evidence very seriously. They may be ignorant, they may not care, or they may be making a calculated assessment that the positive benefits of drinking outweigh the negatives.

The BF and ACMD reviews already canvassed make it clear that potential cannabis health effects are of a much lower order than these alcohol effects. The illicit drug is much less harmful than the licit drug, particularly in the area of most concern to prohibitionists—potential brain damage. However, the discovery that both cannabis and alcohol produce observable short-term changes in brain activity can be safely ignored, as these are simply an external way of observing those pleasurable effects—altered blood flow, stimulation of the nucleus accumbens—sought by the users.

The correspondence in suspected brain effects between alcohol and cannabis make it obvious the confounding effect of alcohol on teenage cannabis-health research is a very important issue, given that most cannabis users also consume alcohol. It is acknowledged that all kinds of sophisticated statistical analyses and laboratory animal tests are applied to discount this effect, but—as acknowledged in the ACMD study—it continues to be a major problem.

Schizophrenia

Australians Wayne Hall & Louisa Degenhardt cite 96 publications in their worldwide review of the last decade of research into the acute and chronic effects of cannabis (Hall & Degenhardt, 2009)(Hall is a co-author of the BF study). Their survey covered epidemiological, clinical and laboratory studies. In their Conclusion they state:

“Regular cannabis use in adolescence might also adversely affect mental health in young adults, with the strongest evidence for an increased risk of psychotic symptoms and disorders.”

According to a report by Gever (2009), this conclusion has been contested by Donald Abrams, MD, who is chief of Haematology-Oncology at the San Francisco General Hospital and has research interests in HIV and medical marijuana. Abrams commented that the causal direction could actually point the other way: "One hypothesis suggests that adolescents with schizophrenic tendencies find that cannabis improves their thought disorder and hence tend to be more likely to use cannabis to self-medicate. ... Hence, use does not lead to schizophrenia but is associated with amelioration of symptoms."

Jiggins (2006) has argued “if we can find a population where cannabis use is recent and has increased enormously over the last decades, we should be able to trace ... a schizophrenic epidemic, as the many new cases of schizophrenia caused by the cannabis plague increased the natural, background level of schizophrenia in the population.” “Australians smoke more pot than nearly any other nationality on the planet [however] the evidence that schizophrenia levels have remained constant is overwhelming, not just in Australia, but right throughout the world.”

Self-reporting

The practice of under-reporting by alcohol users is so well-known in the community that it is often the subject of jokes. Several studies of cannabis users have raised similar issues about the reliability of their self-reporting.

US and UK data reveal that when self-reports are compared to testing (urinalysis and hair analysis), valid drug use reporting by arrestees is the exception not the rule (Patton, 2005). Patton quotes from an overview by Harrison (1997) that “studies from the USA have repeatedly demonstrated that only HALF of those arrestees testing positive for a drug” had reported using it within the relevant time period [emphasis added].

Patton concludes that self reports of recent drug consumption by arrestees are “not valid”. While the law enforcement context may discourage honest disclosure, ‘arrestees’ will include a great many young people whose only offence is that of possession, suggesting the arrestee group is representative of the wider community.

Patton’s research also showed that the willingness to report use of a drug varied with the type of substance. Arrestees made very definite distinctions when deciding which drugs they were more willing to report. Cannabis and “dance drugs” were more likely to be self-reported, heroin, cocaine and amphetamine less likely. Cannabis use was under-reported, but not as much as the latter drugs.

Patton notes a number of studies showing that drug consumption has become a normalised leisure activity amongst adolescents, young adults, young offenders and arrestees. From this observation he argues that normalisation explains the differential reporting of drug use in the arrestee surveys. Cannabis use is a normalised leisure activity but heroin and cocaine use are not. Cannabis research that relies solely on self reporting is therefore likely to overlook the co-use of the more stigmatised drugs. This casts more doubt on the reliability of supposed correlations between cannabis and ill-health by potentially adding other drugs to the poly-drug stew.

Another complicating factor is the unknown potency of the cannabis consumed by self-reporters. As stated by Hall & Degenhardt (2009), “No reliable information exists about the concentration of Δ -9-tetrahydrocannabinol and other cannabinoids (eg, cannabidiol) in commonly used cannabis products.”

In one study of 367 adolescents, 26% who reported non-use had a *positive* analysis, and 34% who reported use had a *negative* urinalysis (Williams, Nowatzki, 2005). Other studies on the net confirm the unreliability of self-reporting.

Even urinalysis itself is not necessarily reliable: “the many possible limitations of urinalysis [affect] its ability to provide accurate results” (Patton, 2005, p.6).

Patton (2005, p.578) comments:

“An increased concern ... must surely be that of evaluating the external validity of self-reports of drug consumption. A substantial amount of information, knowledge and money has been based upon the reliability of thousands of people honestly reporting and describing certain illegal aspects of their lives.”

Studies of cannabis health effects that rely solely on self-reporting are unconvincing science.

Conclusions

The following conclusions can be made with a high degree of confidence:

- **The short term effects of cannabis use have no adverse health implications.**
- **It is likely that cannabis use immediately before or during driving generates a small increase in the risk of motor vehicle accidents but the extent to which this is a problem has not been proven.**
- **Cannabis use does not cause anxiety or depression.**
- **The claim that cannabis use causes schizophrenia or related psychoses has not been proven.** However, cannabis use may trigger a relapse in a person who already has schizophrenia.
- **It is likely that longer term cannabis use generates some health problems for some people, but this has not been proven.** To the extent that there are adverse effects, they are less than the negative health effects associated with other commonly used drugs, particularly alcohol and tobacco.
- **Cannabis is not a gateway drug.** There is no convincing neurological, psychopharmacological, biochemical or epidemiological evidence to support the claim that cannabis biochemistry makes it gateway drug to other illicit drugs. All of the usual suspects, legal and illegal, create their pleasurable effects by acting on the brain reward centre in the nucleus accumbens.

This is not a call for more research. More research is not needed to decide on the legal status of cannabis. It is already well established that the possible adverse health effects of cannabis sit at a much lower level than the legal drugs. It is a nonsense argument to say that these justify prohibition.

Nor is there an argument for prohibition based on the precautionary principle. This states that if you're not sure about a drug harm, or you believe that future research might show some as yet unknown harm, you should err on the side of caution and prohibit it. Nutt (2009, p.8) has drawn attention to the MMR controversy to illustrate how this kind of thinking can cause worse harm. When some bad science suggested MMR could cause autism, the resulting social panic led to a drop in vaccination uptake. This in turn caused significant numbers of children to get lung and brain damage from measles, so that many more people were harmed than the tiny numbers of autism cases that were supposed to be avoided.

Similarly, the health risks associated with cannabis use are not severe enough to justify continuing prohibition. For the sake of a small and unproven health risk in the future, every year in Queensland the lives and aspirations of hundreds of mostly young people are damaged by their contact with the criminal justice system.

EDUCATION

SDC: What role should schools play in reducing cannabis use?

SDC: What public health campaign strategies should be adopted to reduce cannabis use?

Media campaigns

(Hari, 2009) identifies two major problems with health promotion strategies:

“... the Office of National Drug Control Policy spent US\$14Bn on anti-cannabis adverts aimed at teenagers, and \$43m to find out if the ads worked. They discovered that kids who saw the ads were more likely afterwards to get stoned, so the evidence was suppressed, and the ad campaign marched on.”

One, the strategy didn't work. Two, more ad campaigns were rolled out. In July 1992 presidential candidate Bill Clinton said “the definition of insanity is doing the same old thing over and over again and expecting a different result” (Baum, 1996, p.329).

In 1997/1998 the West Australian Drug Abuse Strategy Office (WADASO) conducted an anti-marijuana media campaign. The cost of this campaign is not known but in that financial year WADASO received \$13.75 million in recurrent funds. Perman and Henley (2003) conducted a qualitative review of the campaign's effectiveness. Among their findings were the following:

- both users and non-users felt they were not influenced by the campaign;
- traditional sources of information such as parents, school and the government were only credible for non-users;
- users with personal experience of marijuana universally discounted the campaign messages, although in varying degrees related to their level of use;
- both users and non-users felt the Internet offered a private and confidential method for accessing the information they required, particularly from medically-based websites.

Chief Superintendent Kevin Morris President of the Police Superintendents' Association of England and Wales was also pessimistic about the effectiveness of media campaigns (Morris, 2003):

“I believe cannabis is a health problem rather than a legal one ... Education must feature heavily as a tactic in deterring people from using cannabis, but even that is not straightforward. Campaigns aimed at ‘frightening’ young people have been proven not to work; they simply do not believe the message. Perhaps we can learn something from the campaigns that are aimed at drink-driving and tobacco smoking – both of which have been significantly reduced in recent years. We have not achieved that by banning the use of alcohol and tobacco, or by targeting and arresting adults who use them responsibly, but rather through honest education.”

Blockers to effective education

So some of the blockers to effective cannabis health education are likely to be:

- media focus on glamorous illegal drugs;
- dishonest media reporting, including recurrent drug scares (eg skunk; but also GHB, ecstasy, miaow-miaow);
- parental concerns fanned by irresponsible media reporting;
- group think on the part of government and the criminal justice system which crushes dissenting voices;
- refusal by politicians to accept scientific evidence (alternatively, politicians understand the law is an ass, but are unwilling to undertake the advocacy needed to change it);
- skewed research funding that encourages the discovery of new adverse drug effects, feeding shock-horror media reports; and
- the illegal status of cannabis.

Model seminar

Legalisation provides the essential and necessary context for effective education about drug harms. The extraordinary reduction in Australian tobacco use is one proof of this. The moderation in adult consumption of alcoholic beverages is another.

In an effective cannabis education campaign there has to be honesty about the range and severity of the negative effects associated with alcohol and tobacco use, the most likely comparators, and equally there has to be honesty about all the other risks in life, including for example the lethal potential of everyday pain killers and tranquillisers (and horse-riding).

In a model education seminar, say for schoolchildren, the first thing the presenter would do is invite the participants to share their personal knowledge. The questions might include “What is your experience? Do you know people who smoke cannabis daily including when alone? Do you know people who just smoke in social occasions? Do you know people in your family and community who have been regular users of cannabis for many years? Do you know people who are dependent upon or addicted to cannabis? If you do know dependent people, are they fully functional members in the community, their family and their workplace?”

After everyone has spoken who wishes to speak, the presenters can then offer to share their expertise, provided they have some reliable information to share, provided the participants are listening, and provided the presenter is at all times honest.

This kind of seminar requires a lot of trust. It can only happen in a context where cannabis is legal.

TREATMENT

SDC: What treatment options should be available to cannabis users?

The popularity of binge drinking despite bad experiences—physical injuries, blackouts, bad sex, visits to emergency departments—demonstrates it serves an important function for young people, whatever that may be. Amongst the alcohol-consuming population generally the jokes about hangovers conceal the fact that drinkers have temporarily poisoned themselves and are suffering the consequences. But the legal status of alcohol allows users seeking treatment to access it without the threat of legal sanctions, and without having to deal with the social disapproval that can accompany treatments offered to illegal drug users.

The illegal status of cannabis creates a fundamental problem in this respect.

Treating Drug Users

Whitlock summarises the ideology that drives the forced treatment of illegal drug users (Whitlock, 1980).

“Our greater familiarity with alcohol and tobacco makes it perfectly obvious that only a minority of individuals use them for reasons other than simple enjoyment or as aids to social intercourse. Those who use alcohol to excess, to allay anxiety, to alleviate depression or to ‘escape from reality’ are no different from the small minority of illegal drug users who take their favoured anodynes and soporifics for very much the same reasons as the anxious, insecure or depressed drinker. ...

Yet users of illegal drugs are often regarded as neurotic, ‘sick’, mentally ill, degenerate personalities who require ‘treatment’ to stop the drug-taking behaviour, refashion their lives, eliminate their neuroses and convert them into normal law-abiding citizens who will drink their beer and smoke their cigarettes with the best of us. That they may, for good reasons, feel that alcohol and tobacco are more dangerous drugs than the ones that are officially labelled as such is of no consequence. They deviate from cultural expectations and, because of the innate conservatism of society, we compel them to mend their ways and punish or ‘treat’ them if they do not. We assume that without our well-intentioned help they will never give up their chosen drugs, in the face of all the evidence that the great majority of marijuana smokers suffer no craving or psychological distress ...”

Drug Diversion Programs

It was recently reported in the Courier Mail that 85% of drug offenders fail the court-based Queensland Illicit Drug Diversion Initiative (Ironsides, 2009). The initiative supplements a similar drug diversion program by the police. Eighty percent of the participants in the evaluation were cannabis users. It is most likely that the reason for the high ‘recidivism’ rate amongst this group can be found in their attitudes:

- they don’t perceive their cannabis use as a problem; or
- even if they are dependent, they don’t perceive their cannabis use as a problem.

The drug-using community has decided—on the basis of the accumulated wisdom of decades of experience—that cannabis is a relatively safe drug, despite the recurrent shock-horror media stories about this or that health impact of cannabis revealed by new and ever more subtle research.

According to the same report, Professor Jake Najman from the Queensland Alcohol and Drug Research and Education Centre said that putting the (mostly young) offenders in gaol was neither good for them nor good for the rest of society. From the point of view of this submission the drug diversion program is a partial success if it keeps offenders out of gaol. But if cannabis possession were legal the whole farce could have been avoided.

This brief survey suggests the following principles for treatment programs.

Principles of Treatment

- Treatment must be sought by the user
- Treatment is most effective in an environment where cannabis is legal
- Treatment can be resourced by diverting funding from cannabis prohibition

LAW ENFORCEMENT

SDC: What law enforcement methods and penalties should be used to reduce cannabis use?

Australian Commentary on drug laws

Three quotations are selected to articulate the Council's view. The first is from Tony Fitzgerald. Although his Queensland inquiry had no brief to investigate the illicit drug industry, the commissioner offered the following comment (1989; quoted in Ransley, 1993):

“Properly enforcing laws which seek to prohibit behaviour which is widespread, difficult to detect and difficult to prove places enormous demands upon law enforcement resources. Laws should reflect social need, not moral repugnance. Unless there are pressing reasons to do so, it is futile to try and stop activities which are certain to continue. To do so takes resources away from policing other activities which the community considers undoubtedly wrong, such as violence and fraud.”

Russell Fox was a federal court judge from 1967 to 1989 and the presiding commissioner in the 1970s Ranger Uranium Environmental Inquiry. Ian Mathews was editor of the Canberra Times from 1972 to 1988. Concluding an exhaustive review of Australian drugs policy, Fox and Mathews (1992, pp. 242) summarised their view as follows:

“The basic defect in our present system is that the prohibitions are too widespread and indiscriminate. The matters with which they should deal with are not identified and selected for concentrated treatment. This results in an unenforceable regime on the one hand and the inadequate treatment of serious social problems on the other. We have lost control over the market, to the detriment of the health and welfare of the community. Because of pervasive [police] corruption, enforcement measures are intrinsically flawed. ...

The present system was largely grounded in considerations, such as racism and religious fundamentalism, which we would not now regard as meritorious; they do not accord with current values. Subsequent thinking has maintained one fundamental error, that once a person takes a drug, the course is almost certainly set for disaster, involving great damage to personal health, and injury to society. The evidence is quite clearly to the contrary.

Drugs policy must have credibility and a wide degree of public acceptance. At present it lacks both. **One element alone invites ridicule and that is the current treatment of cannabis.**”

[emphasis added]

Clearly the situation has not much changed from when these words were written. Despite some relaxation at the margins—drug diversion courts and programs, reduced penalties for cannabis possession, safe injecting rooms—the ‘war on drugs’ continues. Even though penalties have been reduced, cannabis possession is still a crime.

How is this possible? Manderson's excellent history of Australian drug laws enables him to take the long view (Manderson 1993, pp.206-7)(Manderson is a barrister):

“The flexibility and tolerance with which ‘drug’ use was viewed in the 1800s has gone: the division between ‘legal’ and ‘illegal’, ‘medical’ and ‘non-medical’ use is now so entrenched that the phrase ‘drug abuse’ is frequently used to mean only illegal non-medical use—and any illegal non-medical use. While the distinction between illegal ‘drugs’ and other substances has grown more profound, fear over their use remains, out of all proportion to the actual harm they cause. This fear has not abated ... Indeed, if anything, the current focus on organised crime has only exacerbated the atmosphere of crisis which has been whipped up so often in the past century.

More than this, however, attitudes to both ‘drugs’ and ‘law’ have shown a sometimes striking resilience over the years. From opium smoking to cannabis smoking, the condemnation of a particular drug use has concealed other concerns: from Mr Sin to Mr Big, we have outlawed phantoms and demons. Drug laws have developed out of prejudice, ignorance, and fear; from inertia at home and subservience abroad; through the interplay of professional, bureaucratic, political and international rivalries. The legal and social bifurcation that has developed between some drugs, the use of which is restricted or prohibited and censured, and others, equally harmful but more freely available, has not derived from their medical or chemical qualities. Drug laws have had precious little to do with drugs or health.

Even more consistently, the construction of drug laws has evinced an unbending attitude towards the legal system itself. Politicians, bureaucrats and many others have all assumed that the law is worthy of preservation because it is the law. The legal system has been buttressed by ever more complex provisions and fearsome penalties, each building upon and presupposing the validity of those that went before ... The legislative structure which has developed out of these patterns, some fluid, some static, has become so vast as to seem almost immovable.....

... [people assume] that laws have developed with specific and rational purposes in mind, that the reason for a law’s enactment is the same thing as the reasons given for it, and that laws are effective tools in changing people’s behaviour. Of course, laws are not without effect: clearly they have influenced the way in which generations of policy-makers have approached the problems of drug use. Laws have operated most powerfully as influences on how we see the world and as limits on what we think is possible. They have not been nearly so effective as blunt instruments to make people do as they are told. We must always be conscious of the origin and the limits of the laws. There are real problems associated with the use of any mind-altering substance (illegal or not): not legal problems, just problems. Poverty, sickness, alienation, despair, powerlessness. Drug use is only a symptom and an aspect of these problems. From Mr Sin to Mr Big, laws seem to have been far more effective in concealing them than in solving them.”

Australian support for legalisation

Many Australian individuals and groups have called for drug legalisation. Fox and Mathews make the argument (1992, pp. 242):

“There is only one solution: to diminish the ambit of the prohibitions and look at ways of handling the real problems effectively The first priority is to minimise the power of the black market and go as close as possible to eradicating it. ... The illicit trade produces serious and widespread damage to health, adds to crime and corruption, and produces new drugs of

ever increasing strength.

Accepting that use should not be illegal implies that possession for personal use should not be. ... It is futile for use and possession to be legal, if all avenues of supply are illegal. Put shortly, there must be a legal market. The market must be controlled, and this means a system of government licensing. ...

The first step, we suggest, is for existing legislation to be amended so as to permit the possession of small amounts of cannabis, perhaps about the quantity that currently gives rise to a presumption of trading, and the use of it in private. Transfer of small amounts, with or without payment, should be permissible. ... Growing marijuana under licence should be permitted. ... Sale of an approved product at wholesale and retail levels should be permitted under licence. ... The products are to be packaged in a way which clearly shows the nature of their contents, the amount of the drug, the THC content, and relevant information, including a specific health warning.”

Civil liberties

The civil liberties argument for legalisation has been summarised by US commentator Ott (1993, pp 21-22):

“... there is no question that [drug] laws represent an abuse of government power. ... In theory, law is an instrument of popular will in democratic countries, and in practice has been used as a weapon by majorities to repress and harass minorities, especially laws against drugs which are associated with those groups.”

A similar sentiment is echoed by Manderson (1993, p.201):

“... drug laws, while mirroring our view of the powerless, have been etched by the powerful.”

At varying user rates between about 15 and 25 percent, cannabis consumption is clearly a minority activity.

Council supports legalisation

The Queensland Council for Civil Liberties continues to support complete removal of cannabis from the area of criminal law. In our submission to the 1993 Criminal Justice Commission Advisory Committee on Illegal Drugs, we stated in part:

“The Council does not favour the compromise solution of decriminalising personal use and possession. An obvious inconsistency exists between permitting possession for personal use and yet criminalising conduct which must necessarily precede such possession at some point. Some would argue that such an inconsistency is justified as an interim measure: (see, for example, Bonnie and Whitebread), or as recognition of practical political considerations (see the Sackville Commission which recommended a partial prohibition model for South Australia). The enactment of such policies, including those which provide minor civil penalties for use of small quantities of marijuana, has apparently had no adverse effects. However, a policy of decriminalisation on personal use fails to make any significant inroad

on the unregulated black market governing supply. It is only by breaking that unregulated black market that many of the serious consequences of the policy of prohibition can be redressed.

The Council notes the views advocated by Professor Marie Bertrand, who as a member of the Le Dain Commission, recommended, amongst other things, government action to have the sale and use of cannabis placed under controls similar to those governing the sale and use of alcohol, including legal prohibition and unauthorised distribution and analogous age restrictions. Her recommendation was that ‘government-distributed cannabis should be marketed at a quality and price that would make the *black market* sale of the drug an impractical exercise.’

The council submits that use and possession for personal use of cannabis should not be an offence or attract civil liability.

Growing marijuana under licence should be permitted, as would the sale under licence. ...

An important attraction in enacting a policy of legalisation, but with controlled availability by the government, is the effect which it would have on the presently uncontrolled black market. The sale of cannabis through a system of government licensing would enable cannabis to be sold at a price which would destroy the existing black market. The policy of legalisation would deprive existing criminal organisations of an important source of income by denying such criminal organisations a guaranteed source of cash flow.

In summary, the present policy of prohibition is not soundly based, has numerous costly and undesirable consequences which outweigh its marginal benefits and has resulted in a black market which is completely out of control. It has not been demonstrated to have reduced cannabis use. The policy of prohibition has been a costly failure.”

The Council also commends the excellent legalisation model recently advanced by the UK Transform Drug Policy Foundation (2009).

The internet has changed everything since 1993. First, by making available detailed information about every known psychoactive substance under the sun, it has become the preferred reference for the community with an interest in this area. Second, it has enabled the construction of a new generation of highly credible and instantly accessible ‘libraries’ combining scientific information with advocacy for drug law reform. An outstanding example is the Lindesmith Library.

Another View

Lest it be thought that this submission focuses too much on the harmful effects of cannabis use—including the even more harmful effects of drug prohibition—the following remarks return to the question asked at the beginning: why people use drugs. Ronald K. Siegel, Ph.D., is a psychopharmacologist on the faculty of the Department of Psychiatry and Biobehavioural Sciences at the UCLA School of Medicine and is a leading authority on the social and psychological effects of drug use. He uses the term ‘intoxication’ to describe the pleasurable effects of all psychoactive drugs, including for cannabis, relaxation. Here is what he has written (Siegel 1989, p.10):

“[The] drug wars that shake the globe so incessantly have caused even those who seek

intoxication with drugs to begin to ask the ageless question of the non-user: Why? Why do people want to do this to themselves? Why do we seek intoxication with drugs? Why are we so prone to use and abuse of intoxicants? Until we answer these questions, *homo sapiens* will never understand how to deal effectively with the individual and societal problems that have resulted from his status among animals as the king of intoxication.”

Siegel proposes the following answer to his question:

“Our nervous system ... is arranged to respond to chemical intoxications in much the same way it responds to food, drink, and sex. Throughout our entire history as a species, intoxication has functioned like the basic drives of hunger, thirst, or sex. Intoxication is the fourth drive.”

If intoxication is a basic human drive then it should be made as safe as possible (Siegel, p.312-13):

“The solution to the drug problems of our species begins when we acknowledge the legitimate place of intoxication in our behaviour. We must ensure that the pursuit of intoxication with drugs will not be dangerous. How can we do that? The answer is to make drugs perfectly safe. ... the pharmaceutical industry spends billions of dollars each year for research and development of magic bullets and wonder drugs. The goal is to maximise desired effects and benefits and minimise risks and dangers. A tacit but guiding notion has been that one shouldn’t feel *too* good. The Food and Drug Administration approved synthetic THC for clinical use in treating the nausea and vomiting encountered by many cancer patients undergoing chemotherapy. But the approved form, *Marinol*, was a soft gelatine capsule containing sesame seed oil to retard the high.

This Calvinistic pharmacology has prevented us from seeing pleasurable changes in the body or mind as fulfilling health needs. It is time to rid ourselves of such notions and recognise ... intoxications as treatment for the human condition. ... The research and development of intoxicants that are as unabusable and safe as the foods we eat are as worthy of pursuit as are those leading to any magic bullet or wonder drug.”

Amongst the many scientists who have commenced the kind of research Siegel is calling for, two in particular stand out: Alexander Shulgin and Ann Shulgin (1992; 1997). The *Note to the Reader* in their first book commences with this sentence (p.xi):

“With this book, PIHKAL, we are making available a body of information concerning the conception, synthesis, definition, and appropriate use of certain consciousness-changing chemical compounds which we are convinced are valuable tools for the study of the human mind and psyche.”

Prohibition Doesn't Work

Finally, the following article serves to summarise the council's views on these matters.

“The proponents of the ‘war on drugs’ are well-intentioned people who believe they are saving people from the nightmare of drug addiction and making the world safer. But this self-image has turned into a faith—and like all faiths, it can only be maintained by cultivating a deliberate blindness to the evidence.

The recent furore about the British government's decision to fire its chief scientific advisor on drugs, Professor David Nutt, missed the point. Yes, it is shocking that he was ditched for pointing out the mathematical truth that taking ecstasy is less dangerous than horse-riding, and that smoking cannabis is less harmful than drinking alcohol. But this is how the war on drugs has to be fought. The unofficial slogan of the prohibitionists for decades has been: *The facts will only undermine the war, so invent some that show how successful we are, fast.*

Look at the United States, the country that pioneered the drug war, and still uses its military and diplomatic might to demand the rest of the world cracks down. In 1998, the Office of National Drug Control Policy was ordered by Congress to stop funding any scientific research that might give the impression that we should redirect funding from anti-trafficking busts into medical treatment of addicts, or that there is any argument to legalise, regulate or medicalise drug use. It's Nutt cubed: only tell us what we want to hear.

What would happen if we started to build our drugs policy around the facts, rather than our desire for a fuzzy feeling inside? Prof Nutt only took baby steps in this direction before he was booted out. He argued that we should rank drugs by the harm they do, rather than by the size of the panicked headlines they trigger. Now the row is fading, it is possible to see how conservative he was. A must-read new report out this week—*After The War on Drugs: Blueprint for Regulation*, by the Transform Drug Policy Foundation—follows the facts as far as they will take us. It shows that the rational solution is to take the drug market back from the unregulated anarchy of criminal gangs, and transfer it to pharmacists, off-licences, and doctors who operate in the legal economy. To see why this is necessary, we have to look at some of the facts our politicians refuse to see:

Fact One

The drug war hands one of our biggest industries to armed criminal gangs, who unleash terrible violence across the country. When alcohol was prohibited in the US in the 1920s, it didn't vanish. No: armed gangsters like Al Capone stepped in and sold it—and they shot anybody who got in their way. Yet today, Wine Rack does not shoot up Threshers. Oddbins does not threaten to kill anybody who sees its staff selling wine. Why? Because it wasn't the booze that caused the violence; it was the prohibition. Once alcohol was reclaimed for legal businesses, the dealer-on-dealer violence swiftly stopped.

Where there is a huge profit to be made in a black market—it's 3,000 per cent on drugs today—people will fight and kill to control it. Arrest a dealer, and you simply trigger a new war for his patch, with the rest of us caught in the crossfire. In 1986, the Nobel-prize winning economist, Milton Friedman, calculated that there are 10,000 murders in the US alone every year caused this way. Legalise, and you bankrupt most organised crime overnight. With their profits in freefall, the gangsters don't suddenly become cuddly—but the huge financial incentives to remain a gangster wither fast. It's the drug war that keeps them

in business, and legalisation that shuts them down. As Milton Friedman said: *Prohibition is the drug dealer's best friend.*

Fact Two

Under prohibition, drug use becomes more hardcore. Before alcohol prohibition, most Americans drank beer and wine. After prohibition was introduced, super-strong moonshine became the most popular drink, as booze rapidly became 150 per cent stronger. Why?

The writer Richard Cowan called it "the iron law of prohibition": whenever you criminalise a substance, it gets stronger. Because they are smuggling and stashing a substance, the dealers condense their product to give the biggest possible kick while taking up the smallest possible space. It's at work today: it's why dealers invented crack in the 1980s. The researchers Matthew Robinson and Renee Scherlen found: "The increased deadly nature of drugs under prohibition led to 15,000 more deaths in 2000 [in the US alone] than if prohibition had not made drugs more dangerous."

Fact Three

The drug war doesn't reduce drug use—but the alternatives can. Some people believe these two dark side-effects are a price worth paying if prohibition stops a significant number of people from picking up their first bong or needle. It was an understandable enough argument—until the evidence came in from countries that have experimented with ending the drug war.

On 1 July 2001, Portugal decriminalised the possession of all drugs, including heroin and cocaine. You can have and use as much as you like for your own needs, and if you are caught, the police might refer you to a rehab programme, but you will never get a criminal record. (Supplying and selling remains illegal.) The prohibitionists predicted a catastrophic rise in addiction, and even I—an instinctive legaliser—was nervous.

Now we know: overall drug use actually fell a little. As a major study by Glenn Greenwald for The Cato Institute found, among Portuguese teenagers the fall was fastest: 13-year-olds are four per cent less likely to use drugs, and 16-year-olds are six per cent less likely. As the iron law of prohibition predicts, the use of hard drugs has fallen fastest: heroin use has crashed by nearly 50 per cent among the young who were not yet addicted. The Portuguese have switched the billions that used to be spent chasing and jailing addicts to providing them with prescriptions and rehab. The number of people in drug treatment is now up by 147 per cent. Almost nobody in Portugal wants to go back. Indeed, many citizens want to take the next step: legalise supply too, and break the back of the gangs.

Portugal is no fluke. It turns out that wherever the drug laws are relaxed, drug use stays the same, or—where spending is switched to treatment—declines. Between 1972 and 1978, 11 US states decriminalised marijuana possession. The National Research Council found that the number of dope-smokers stayed the same. In Switzerland, a decade ago the government started providing legal centres where people could safely inject heroin—for free. Burglary rates fell by 60 per cent, and street homelessness ended. A study by *The Lancet*—one of the most respected medical journals in the world—found that the rate of people becoming new heroin addicts fell by 82 per cent. Why? Heroin addicts didn't need to recruit new addicts to sell to in order to feed their habit. The pyramid scheme of heroin addiction was broken.

So the drug war doesn't achieve its goal of reducing addiction. All it does achieve is horrific

gang violence—and in some cases the cartels gut whole countries like Mexico and Afghanistan. It does unwittingly press people into using harder and more dangerous drugs. And it does waste tens of billions of dollars that could really reduce drug addiction, by spending it on treatment for addicts.

The prohibitionists are therefore left a contradiction between their message and the facts. They can either change their message, or try to suppress the facts. Last week, the British Government made its choice. But how long will this be tenable? The prohibitionists are—from the best intentions and the highest motives—unleashing a catastrophe. Human beings have been finding ways to get stoned or high since we lived in caves. In our attempt to end this natural impulse, we have created a problem worse than drug use itself.

There is another way. Imagine a country with no drug dealers killing to protect their patch or terrorising whole estates. Imagine a country where burglary fell by 60 per cent. Imagine a Britain where we spent all these billions treating addicts as ill people who need our help, not hunting them down as criminals who need punishment. We can be that country. We just have to come down from chasing the dragon of a drug-free world—and start looking soberly at the facts.”
(Hari, 2009)

Why is it so hard to end cannabis prohibition when it has been such a spectacular failure? A large part of the answer clearly lies in the dominant social conversation about ‘drugs’ and ‘law’, the ‘unbending attitudes’ that Manderson complains ‘have shown a sometimes striking resilience over the years’.

But why is cannabis so important in the minds of the prohibitionists when there are so many other illegal drugs? In her Preface to the Beckley Foundation report already referred to, Director Amanda Fielding offers this answer:

“... it is worth noting that any change to the scheduling of cannabis under the international drug control system could lead to the serious undermining of the whole War on Drugs approach. Without cannabis within the system’s remit, the proportion of illegal drug-users in the global population is just over 1%—far too small to justify the vast costs, both in financial terms and human suffering, that result from the current efforts to enforce the ideals behind this unwinnable war.”

Just as the manufacturers of weapons have a vested interest in real wars, the worldwide armies of prohibition—police forces, judges, lawyers, politicians, bureaucrats, drug researchers, policy wonks, criminal organisations—have a vested interest in perpetuating and expanding the war on drugs.

PREPARED ON BEHALF OF THE QUEENSLAND COUNCIL FOR CIVIL LIBERTIES BY
JOHN RANSLEY, SECRETARY

Brisbane 30 April, 2010

References & Bibliography

AMA (2007) Harmful Consequences of Alcohol Use on the Brains of Children, Adolescents, and

College Students. Accessible at: <http://www.ama-assn.org/ama/no-index/physician-resources/9416.shtml>

Baum, D (1996) *Smoke & Mirrors: The War on Drugs and the Politics of Failure*. Little, Brown & company.

Catchpole, H. (2006) Caffeine. ABC Website: Health & Well Being. Accessible at: <http://www.abc.net.au/health/library/stories/2006/04/27/1829125.htm>

Drug Free Australia (2009) Cannabis: suicide, schizophrenia and other ill-effects. Accessible at: www.drugfree.org.au/fileadmin/Media/Reference/DFA_CannabisPaper.pdf

Fitzgerald, A. (1989) (Report of a Commission of Inquiry into Possible Illegal Activities and Associated Police Misconduct.

Forbes, P (2010) Climate science's Chinese whispers: The books that separate global warming fact from fiction. Accessible at: www.independent.co.uk/arts-entertainment/books/features/climate-sciences-chinese-whispers-the-books-that-separate-global-warming-fact-from-fiction-1951331.html

Fox, R. And Mathews, I (1992) *Drugs Policy: Fact, Fiction and the Future*. The Federation Press 270 pp.

Gever, J (2009) Health Risks of Marijuana Still Not Nailed Down. Medpage Today. Accessible at: <http://www.medpagetoday.com/Psychiatry/Addictions/16456>

Greenberg, G. (2008) *The Noble Lie*. Wiley, 243 pp.

Hall, W., Degenhardt, L. (2009) Adverse health effects on non-medical cannabis use. *The Lancet* Vol. 374, 1383-1391.

Hari, J. (2009) Accept the facts – and end this futile 'war on drugs'. *The Independent*, Wednesday 11 November, 2009. Accessible at: www.independent.co.uk/opinion/commentators/johann-hari/johann-hari-accept-the-facts-ndash-and-end-this-futile-war-on-drugs-1818167.html

Harrison, L.N. (1997) The Validity of Self-Reported Drug Use in Survey Research: an Overview and Critique of Research Methods. *NIDA Research Monograph Series* ,167: 17-36.

Hickie, I.B., Whitwell B.G. (2009) *Alcohol and The Teenage Brain: Safest to keep them apart*, BMRI Monograph 2009-2, Sydney: Brain & Mind Research Institute. Accessible at: www.bmri.org.au/news/2009/drinkwise.pdf

Ironside, R (2009), 85% fail Queensland drug court program. *The Courier-Mail*. Accessible at: <http://www.couriermail.com.au/news/features/fail-queensland-drug-court-program/story-fn2mcu0g-1225803460559>

Jiggins, J. (2006) Does cannabis cause schizophrenia? *Sticky Point Magazine* Issue 01. Accessible at http://drjiggins.com/does_cannabis_use_cause_schizophrenia.html

Konje, J.C. & Cade, J.E. (2008) Maternal caffeine intake during pregnancy and risk of foetal growth restriction: a large prospective observational study. *BMJ* 2008;337:a2332. Accessible at:

http://www.bmj.com/cgi/content/full/337/nov03_2/a2332

Lavelle, P. (2002) Cannabis. ABC Website: Health & Well Being. Accessible at: <http://www.abc.net.au/health/library/stories/2002/08/22/1829503.htm>

Lindesmith Library. Accessible at: <http://www.drugpolicy.org/library/about/>

Morris, K. (2003) in The Big Question: Should cannabis be legalised? The Independent. Accessible at: <http://www.independent.co.uk/news/uk/crime/the-big-question-should-cannabis-be-legalised-537808.html>

Nutt, D.J., King, L.A., Saulsbury, W. And Blakemore, C. (2007) 'Developing a rational scale for assessing the risks of drugs of potential misuse', The Lancet, 369, pp. 1047-1053. Accessible at: www.thelancet.com/journals/lancet/article/PIIS0140-6736%2807%2960464-4/abstract.

Nutt, D.J. et.al. (2009) MDMA (ecstasy): A review of its harms and classification under Misuse of Drugs Act 1971. Accessible at: www.drugs.homeoffice.gov.uk/publication-search/acmd/acmd-MDMA-report-2009.

Ott, Jonathan (1993) Pharmactheon: Entheogenic drugs, their plant sources and history. Natural Products Company 639 pp.

Patton, D. (2005) An Exploration of the External Validity of Self-Report Amongst Arrestees. Surveillance & Society, 'People Watching People' (ed Wood) 2(4): 564-580. Accessible at: <http://www.surveillance-and-society.org/articles2%284%29/arrestees.pdf>

Perman, F., Henley N. (2003) Marketing the Anti-Drug Message: Media, Source and Message Credibility Interactions. Journal of Research for Consumers, Issue 5: Accessible at: http://www.jrconsumers.com/academic_articles/issue_5?f=5782

Rawlins, M. et.al. (2008) Cannabis: Classification and Public Health [Home Office online publication]. Accessible at: www.drugs.homeoffice.gov.uk/publication-search/acmd/acmd-cannabis-report-2008.

Queensland Council for Civil Liberties (1993) Cannabis and the Law in Queensland. Submission to the Criminal Justice Commission Advisory Committee on Illegal Drugs. Accessible at: www.qccl.org.au/documents/Sub_PA_1Nov93_Cannabis_Law_in_Queensland.pdf

Ransley, J.E. (1993) Cannabis and the Law in Queensland: A Personal Assessment. 30pp. Submission to the Criminal Justice Commission Advisory Committee on Illegal Drugs. Accessible at: www.qccl.org.au/documents/Sub_JER_4Oct93_Cannabis_and_Law_in_Queensland.pdf

Shulgin, Alexander and Shulgin, Ann (1992) A Chemical Love Story. Transform Press, 978pp.

Shulgin, Alexander and Shulgin, Ann (1997) The Continuation. Transform Press, 804pp.

Social Development Committee Issues Paper (2010) Inquiry into addressing cannabis-related harm in Queensland. Accessible at: www.parliament.qld.gov.au/view/committees/documents/SDC/other/IP_Cannabis.pdf

The Beckley Foundation, Cannabis Policy: Moving Beyond Stalemate (2008). The Global Cannabis Commission Report, Amanda Fielding, Convenor: Accessible at: www.beckleyfoundation.org/pdf/BF_Cannabis_Commission_Report.pdf

Transform Drug Policy Foundation (2009) After the War on Drugs: Blueprint for Regulation. Accessible at: <http://www.tdpf.org.uk/blueprint%20download.htm>

Weng, X, & Odouli, R. (2008) Maternal caffeine consumption during pregnancy and the risk of miscarriage: a prospective cohort study. American Journal of Obstetrics & Gynaecology, Vol. 198, Issue 3, Pages 279. Accessible at: <http://www.ajog.org/article/S0002-9378%2807%2902025-X/abstract>

Whitlock, F.A. (1980) Drugs: Drinking & Recreational Drug Use in Australia. Cassell Australia 211 pp.

Williams, R.J., Nowatzki, N. (2005) Validity of Adolescent Self-Report of Substance Use. Substance Use & Misuse, Vol. 40, Issue 3, pp 299 – 311. Accessible at: www.informaworld.com/smpp/content~content=a725232193&db=all