Legislative Assembly of Queensland Social Development Committee Issues Paper

Inquiry into addressing cannabis-related harm in Queensland

General Comments:

Alcohol and tobacco are responsible for 97% of drug-related deaths in Australia and are legal drugs. The fact that they are legal has enabled commonwealth and state governments to reduce the harms resulting from these drugs. Alcohol consumption in Australia per head of population is now about 25% less than it was 30 years ago. The prevalence of tobacco smoking in Australia has fallen dramatically in men and women over the last 40 years. In contrast, cannabis consumption in Australia increased from the 1960s until the 1990s but has since declined slightly.

Concerns about health and other complications from cannabis should be matched by concerns about the harms from and costs of cannabis prohibition. As President Jimmy Carter said 'Penalties against the use of a drug should not be more damaging to an individual than the use of a drug itself; and where they are they should be changed. Nowhere is this more clear than in the laws against the possession of marijuana …'.

The total costs of cannabis law enforcement in Australia are unknown. They are likely to be considerable. While identifying benefits from cannabis law enforcement is difficult, significant unintended negative consequences are all too obvious. The adverse consequences of unsuccessful attempts to enforce drug prohibition include significant police corruption documented in several Royal Commissions (e.g. Costigan 1985; Fitzgerald 1995; Wood 1997; Kennedy 2004).

There is growing support for the view that the least-worst option is the taxation and regulation of cannabis.

The following comments are responses to the questions posed by the inquiry.

Issues for Comment:

1. What are the short term and long term risks associated with cannabis use?

Particularly:

a) The risks to a user's mental health, physical health and brain function:

The short term and long term physical and mental health risks associated with cannabis use are relatively modest but are often exaggerated. No deaths from cannabis have yet been recorded in the scientific literature.

The health risks of cannabis have been recently assessed by Professors Wayne Hall and Louisa Degenhardt (Adverse health effects of non-medical cannabis use. Lancet 2009; 374: 1383–91). Hall and Degenhardt concluded:

> 'The public health burden of cannabis use is probably modest compared with that of alcohol, tobacco, and other illicit drugs. A recent Australian study estimated that cannabis use caused 0·2% of total disease burden in Australia—a country with one of the highest reported rates of cannabis use. Cannabis accounted for 10% of the burden attributable to all illicit drugs (including heroin, cocaine, and amphetamines). It also accounted for around 10% of the proportion of disease burden attributed to alcohol (2·3%), but only 2·5% of that attributable to tobacco (7·8%)'.

The minimal contribution of cannabis to deaths was also confirmed in a study of a large population in the US followed for many years. The large sample size and the long duration of follow up provides considerable confidence in these findings. The researchers followed 65,171 health insurance enrollees (Kaiser Permanente Medical Care Program), aged 15 through 49 years, between 1979 and 1985 with mortality follow-up completed in 1991. Current marijuana use was found to be associated with increased risk of AIDS mortality in men, an association that probably was not 'caused' by cannabis but was most likely explained by a higher risk of AIDS in homosexual males who used cannabis for symptom control after discovering that they were HIV positive. Compared with non-use or experimentation (lifetime use six or fewer times), current cannabis use was not associated with a significantly increased risk of mortality in men (apart from AIDS) or of total mortality in women. Relative risks for ever use of cannabis were similar. The authors concluded that cannabis use in a prepaid health care-based study cohort had little effect on non-AIDS mortality in men and on total mortality in women. (Sidney S, Beck JE, Tekawa IS, Quesenberry CP, Friedman GD. Marijuana use and mortality. Am J Public Health 1997 Apr;87(4): 585-90).

b) the risk of addiction and dependence:

The risk of cannabis dependence is low compared with most other legal and illegal drugs. Cannabis dependence does not appear to predict the likely future of cannabis users or the chances of experiencing harms.

The risks of cannabis dependence have been recently assessed by Professors Wayne Hall and Louisa Degenhardt (Adverse health effects of non-medical cannabis use. Lancet 2009; 374: 1383–91). Hall and Degenhardt concluded:

> 'The lifetime risk of dependence in cannabis users has been estimated at about 9%, rising to one in six in those who initiate use in adolescence. The equivalent lifetime risks are 32% for nicotine, 23% for heroin, 17% for cocaine, 15% for alcohol, and 11% for stimulant users. Those at highest risk of cannabis dependence have a history of poor academic achievement, deviant behaviour in childhood and adolescence, rebelliousness, poor parental relationships, or a parental history of drug and alcohol problems'.

This means that the risk of developing cannabis is much lower than for most other drugs. It is also important to ask what cannabis dependence actually means. Does it reliably predict the likelihood of users developing health or other problems? Nicotine dependence is a strong predictor of future smoking. The significance of cannabis dependence is at present uncertain.

c) the risk of cannabis use leading to the use of other harmful substances.

Cannabis use may be linked to the use of other illegal drugs. The most likely explanation for links to other drug use is the fact that other illicit drugs can usually be purchased from the suppliers of cannabis. Stronger links have been found between early use of the legal drugs, alcohol and tobacco, and the later use of illicit drugs, such as heroin and cocaine, than for cannabis.

The risks of cannabis use leading to the use of other harmful substances were discussed by Professors Wayne Hall and Louisa Degenhardt (Adverse health effects of non-medical cannabis use. Lancet 2009; 374: 1383–91). Hall and Degenhardt noted:

> In the USA, Australia, and New Zealand, regular cannabis users were most likely to later use heroin and cocaine, and the earlier the age at which a young person uses cannabis, the more likely they are to use heroin and cocaine. Three explanations have been given for these patterns of drug involvement: cannabis users have more opportunities to use other illicit drugs because cannabis is supplied by the same black market; those who are early cannabis users are more likely to use other illicit drugs for reasons that are unrelated to their cannabis use; and pharmacological effects of cannabis increase the propensity to use other illicit drugs. Young people in the USA who have used cannabis report more opportunities to use cocaine at an early age. Socially deviant young people (who are more likely to use cocaine and heroin) start using cannabis at an earlier age than do their peers. A simulation study has shown that the second (common cause) hypothesis, if true, would reproduce all the associations between cannabis and other illicit drug use.

Residents of two coastal cities of similar size, Amsterdam and San Francisco, were surveyed using comparable methods regarding consumption of cannabis and other illegal drugs (Reinarman, Cohen, Kaal. The Limited Relevance of Drug Policy: Cannabis in Amsterdam and in San Francisco. Am J Public Health. 2004; 94: 836–842). Drug policies in Amsterdam and in the Netherlands are more liberal than in San Francisco and the USA. The proportion of respondents who reported having used cannabis at least 25 times was lower in Amsterdam (12.3%) than San Francisco

(39.2%). Lifetime use of cocaine, crack, amphetamine, ecstasy and opiates was also lower in Amsterdam than San Francisco.

This study also found that Amsterdam residents purchasing cannabis in a climate of de facto legalisation were much less likely to also be offered other illicit drugs than San Francisco residents where there is much more emphasis on drug law enforcement:

> 'Just under one in six (15%) Amsterdam respondents reported that they could obtain other drugs at their source for cannabis. This is not an insignificant amount of cross-over, but it is much lower than that found in the illicit market in San Francisco, where over three times as many respondents (51%) reported that other drugs were available for sale where they bought their cannabis'. (Cannabis policies and user practices: Market separation, price, potency, and accessibility in Amsterdam and San Francisco. Craig Reinarman. International Journal of Drug Policy (2007) Volume 20, Issue 1, Pages 28-37.

These findings may, or may not be expected. But they cannot be ignored. The prevalence of use of cannabis and other illicit drugs was lower in a more liberal than a more punitive environment.

2. How are these risks influenced by factors such as:

a) The age at which a person first users cannabis?

It is generally accepted that the risk of using drugs use is increased the lower the age of first use and the lower the age of first regular use. This appears to also be the case with cannabis.

Professors Wayne Hall and Louisa Degenhardt (Adverse health effects of non-medical cannabis use. Lancet 2009; 374: 1383–91) concluded:

> 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.

b) The frequency of use?

Risks of the legal drugs, alcohol and tobacco, are highly correlated with frequency and duration of use as alcohol and tobacco are quite toxic drugs. Attempts to correlate frequency or duration of cannabis use and harms are inevitably more imprecise because of the lack of quality control of black market commodities and the difficulties involved in quantifying illegal products. It is likely that more frequent and more prolonged use of cannabis will be associated with greater risks but the correlation between cannabis consumption and health (or other) risks of cannabis are, unlike the case with legal drugs, not well established.

c) The potency of the cannabis used?

Although it is often asserted that the THC concentration of cannabis is increasing, the evidence for this is mixed. If cannabis consumers are able to detect batches of cannabis with higher concentrations of THC, it is possible that they may adjust for this. One of the few certainties is that the lack of a known concentration of THC in cannabis is due to the black

market source of the commodity. If there is concern about a possible increase in THC concentration of cannabis, then this is an argument for regulation to achieve stable concentration.

Professors Wayne Hall and Louisa Degenhardt (Adverse health effects of non-medical cannabis use. Lancet 2009; 374: 1383–91) were inconclusive about the effects of consumption of higher THC concentration cannabis:

> It is unclear whether increased THC content has been accompanied by any changes in CBD content. Any health effects of increased potency depend on whether users are able and willing to titrate their dose of THC, and might also vary with the experience of users.

3 What role should schools play in reducing cannabis use?

Reviews of the evidence show that, at best, mass and school based education sometimes reduce consumption of cannabis and other drugs slightly and any benefit is usually only transient.

4. What public health campaign strategies should be adopted to reduce cannabis use?

Australia should control cannabis by taxation and regulation. More than two million Australians will consume cannabis in 2010. In the presence of strong demand and in the absence of a legal source, supply will inevitably be obtained from illegal sources, often controlled by criminals and corrupt police. Taxation and regulation would allow governments to reduce consumption by under age persons, ensure health warnings and provision of help seeking information on packages, establish a system of hard-to-get and easy-to-lose licences for cultivation and sale, ensure THC concentration is contained within certain bands, provide consumer protection (as for other commodities) and generate government revenue which could in part be hypothecated to fund alcohol and drug prevention and treatment.

Australia officially adopted a policy of harm minimisation on 2 April 1985 at a meeting of the Prime Minister, all six Premiers and the Chief Minister of the NT. This policy has been re-endorsed subsequently on several occasions by the Ministerial Council on Drug Strategy, Australia's paramount official national drug policy making body. Harm minimisation suggest that the highest priority should be to reduce the harms resulting from drugs, in this case cannabis use. Reducing consumption may be one way of reducing harms. However, the effectiveness of drug law enforcement in reducing cannabis availability is poor. Despite the considerable resources allocated to enforcing cannabis prohibition, the proportion of Australian respondents reporting that 'hydro' cannabis was 'easy' or 'very easy' to obtain was 89% (2004), 89% (2005), 91% (2006) and 89% (2007) (Roxburgh A. & Burns L. Cannabis use among sentinel groups of drug users in Australia: Findings from the Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS). Drug Trends Bulletin, June 2008. Sydney: National Drug and Alcohol Research Centre, University of New South Wales. Data Source: IDRS and EDRS participant interviews, 2004-2007). Cannabis prohibition is relatively ineffective, expensive and associated with severe unintended negative consequences.

A 1999 study commissioned by the National Drug Strategy Committee, and implemented by a collaborating team of researchers under the coordination of the Drug and Alcohol Services Council, South Australia and the Department of Health and Aged Care, Canberra compared cannabis offenders in South Australia, where a more liberal Cannabis Expiation Notice (CEN) System was introduced in 1986, with offenders from Western Australia, where a more Draconian system operated.

The prohibition of minor cannabis offences in WA failed to deter cannabis use by the vast majority of those convicted. But the WA system often produced adverse impacts on employment, relationships and accommodation.

Under the infringement notice system in SA, minor cannabis offenders who paid their fine within a set period did not have a criminal conviction recorded against them.

This study documented the social harms associated with a conviction under the then total prohibition system in WA.

The study documented the range of negative impacts on the lives of first time minor cannabis offenders and their families:

- 32% of the WA group vs only 2% of the SA infringement notice group were either sacked from a job, did not get a job they applied for, or stopped applying for some jobs as a result of their conviction;
- 20% of the WA group vs only 5% of the SA infringement notice group experienced relationship problems, including family disputes and separations;
- 16% of the WA group had to move house or lost work accommodation as a result of their conviction (compared to none of the SA infringement notice group);
- 32% of the WA group vs none of the SA infringement notice group identified at least one subsequent involvement with the criminal justice system related to their cannabis conviction or CEN.

The study found that a criminal conviction or an infringement notice had limited impact on subsequent cannabis use, with about 90% of each group saying it had not reduced their use of the drug. However, more of the WA group experienced significant social costs as a result of their minor cannabis offence. (Simon Lenton, Paul Christie, Rachel Humeniuk, Alisen Brooks, Mike Bennett, Penny Heale. The Social Impacts of the Cannabis Expiation Notice Scheme in South Australia. Infringement versus Conviction: the Social Impact of a Minor Cannabis Offence Under a Civil Penalties System and Strict Prohibition in Two Australian States. May 1998. Monograph Series Number 36. National Drug Strategy).

5. What law enforcement methods and penalties should be used to reduce cannabis use?

Law enforcement has not been shown to reduce use of cannabis. Yet law enforcement is expensive and has significant unintended negative consequences. Law enforcement resources allocated to enforcing cannabis prohibition are unavailable for policing serious crimes, including property and violent crimes.

The following quotations are from the 2009 Global Cannabis Commission Report. (Robin Room, Wayne Hall, Peter Reuter, Benedikt Fischer, Simon Lenton. The Beckley Foundation. Global Cannabis Commission Report. 2009. http://www.beckleyfoundation.org/pdf/BF_Cannabis_Commission_Report.pdf)

> 'Despite its prohibition in every country apart from the Netherlands, experimentation with cannabis is a routine part of the experience of adolescence in many Western nations. Use is more common among males than females, but even among females a large proportion has tried the drug by their early adult years. A substantial fraction of those who experiment go on to use the drug frequently, and a modest share of those experience problems of dependence'.
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> 'It is useful to compare the price of cannabis to that of other sources of intoxication. In the United States a standard drink (e.g. a 12 oz. can of inexpensive beer) costs about $1, at package store (off-sale) prices. For the average person, a moderate level of intoxication would require about three drinks. If a joint contains 0.4 grams, at a price of $12 per gram, it only costs $5 to get high. The comparison is of course a very rough one, but it indicates that prohibition still leaves cannabis competitive with a taxed legal commodity as a source of intoxication'.
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> 'Though cannabis is very much more expensive than it would be if it could be legally produced and remained untaxed, the drug is readily available in many Western societies at a cost that allows cannabis to compete with alcohol as a source of intoxication'.
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> 'On its face, enforcement of cannabis prohibition seems unsuccessful. Certainly it has not succeeded in preventing cannabis use becoming a routine behavior for large percentage of young people in many Western countries. Although the actual punishments imposed are quite modest, it is reasonable to ask whether the large numbers of arrests have a deterrent effect.'
>
> 'The literature is thin, but provides no evidence that higher rates of arrest are associated with lower rates of cannabis use'.

There is now increasing interest in the taxation and regulation of cannabis. Support in the Gallup poll for the 'legalisation of marihuana' in the USA increased from 12% in 1969 to 44% in 2009 while opposition declined from 82% in 1969 to 54% in 2009. This is supported by many other polls.

http://www.gallup.com/poll/123728/u.s.-support-legalizing-marijuana-reaches-new-high.aspx

6. *What treatment options should be available to cannabis users?*

Treatment research for cannabis has a relatively short history. Treatment offered to cannabis users should be voluntary, attractive, effective, cost-effective and based on evidence.

Professors Wayne Hall and Louisa Degenhardt (Adverse health effects of non-medical cannabis use. Lancet 2009; 374: 1383–91) were appropriately circumspect about the effectiveness of treatment of cannabis users:

> 'Cognitive–behavioural therapy reduces cannabis use and cannabis-related issues, but only 15% of people remain abstinent 6–12 months after treatment.'

7. *What approaches should be used to reduce cannabis use in Aboriginal and Torres Strait Islander communities?*

The main approach to cannabis use among Aboriginal and Torres Strait Islander communities should be reducing the gaps in health, social well being, education, employment, housing and economic prosperity.

8. The committee invites comments about any of the strategies mentioned above or any alternative strategies for reducing cannabis use.

With respect, this inquiry should consider more than measures to reduce use. There is increasing evidence of the medicinal benefits of cannabis and growing support for finding ways to provide cannabis for therapeutic use. Cannabis should be available for cautious medicinal use in Australia. Cannabis was included in the US pharmacopeia until 1937. Although cannabis in not considered presently a first line drug for any medical condition, it is accepted as a second line or third line drug for many conditions where conventional medications often fail. The use of cannabis as a medicine is legal in a number of countries including currently 14 states of the USA (plus Washington DC), Canada, Austria, Germany, the Netherlands, Spain, Israel, Italy, Finland and Portugal.

Medicinal cannabis has been endorsed by a number of major organisations and recent reviews including: the American Medical Association, Australian National Task Force on Cannabis; Australian Medical Association; British Medical Association; Canadian AIDS Society (2004); Canadian Medical Association (2001); French Ministry of Health (1997); Health Canada (1997); House of Lords (UK) Select Committee on Science and Technology (1999); Medical Association of Jamaica (2001); and the Preventive Medical Center, Netherlands (1993).

In 1999, the US Institute of Medicine, in the most comprehensive study of medical marijuana's efficacy to date, concluded, "Nausea, appetite loss, pain and anxiety . . . all can be mitigated by marijuana." (Marijuana and Medicine: Assessing the Science Base Janet E. Joy, Stanley J. Watson, Jr., and John A. Benson, Jr., Editors; Institute of Medicine, National Academy Press, Washington, D.C.)

The UK House of Lords Science and Technology Committee published a report in November 1998 supporting the medicinal use of cannabis (Cannabis: The Scientific and Medical Evidence. http://www.parliament.the-stationery-office.co.uk/pa/ld199798/ldselect/ldsctech/151/15101.htm)

This was followed by a Second Report in 2001 (Therapeutic Uses Of Cannabis. House of Lords Science and Technology Committee http://www.parliament.the-stationery-office.co.uk/pa/ld200001/ldselect/ldsctech/50/5001.htm)

Following calls by the Australian Medical Association (AMA) and the Law Society of New South Wales for people with illnesses such as cancer and AIDS to be prescribed cannabis, the NSW Government convened a working party to advise the Government on the efficacy and safety of cannabis for medical purposes. The NSW report endorsed the recommendations of the 1999 Institute of Medicine report and the 1998 House of Lords Science and Technology Committee report (Working Party on the Use of Cannabis for Medical Purposes, 2000.

http://www.druginfo.nsw.gov.au/medicinal_use_of_cannabis/medicinal_cannabis_nsw/canrep1.pdf (Vol. 1):
http://www.druginfo.nsw.gov.au/medicinal_use_of_cannabis/medicinal_cannabis_nsw/canrep2.pdf (Vol. 2))

A report just published:

Diane E. Hoffmann, Ellen Weber. Medical Marijuana and the Law. N Engl J Med 362;16. 2010. 1453-1457.

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