

Overwhelming Agreement in the Strange Cannabis Debate

Impact of Cannabis Use on Health



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“Despite earlier suggestions that cannabis use was relatively benign, problems associated with the use of the drug are now well recognized.” (Teesson¹)

It is important to appreciate the tactical significance of the medical marijuana debate as the medical marijuana issue is widely touted by the pro-drug liberalization movement as the thin edge of the wedge, the Trojan horse, of full drug decriminalization².

Nevertheless:

- 1) *It is agreed* that cannabis causes addiction and drug dependency in as many as 30% of heavy users¹,
- 2) *It is agreed* that cannabis causes many mental disorders including depression, anxiety, psychosis, schizophrenia and bipolar disorder. This includes aggressive behaviours both in intoxication and withdrawal^{3,4}. For example many violent criminals including Martin Bryant and the recent Boston bombers were known to be cannabis users.
- 3) *It is agreed* that cannabis causes many lung conditions including chronic cough, sputum production, and respiratory and asthmatic symptoms.
- 4) *It is agreed* that cannabis acts causally as a gateway drug to the use of harder drugs, and with tobacco and alcohol addiction and abuse,
- 5) *It is agreed* that cannabis is a sedative and that this action may be linked with a lack of motivation seen in many heavy users;
- 6) *It is agreed* that cannabis dependency causes lower achievement of educational and occupational goals⁵⁻⁷;
- 7) *It is agreed* that a dose-response relationship occurs with its several toxicities;
- 8) *It is agreed* that all these problems are worse in long term and heavy users⁸, and particularly in patients whose use commences in their teenage years when the brain is undergoing its critically important teenage growth spurt which lasts into the late 20's;
- 9) *It is agreed* that acute cannabis use causes dangerous and intoxicated driving making intoxicated patients a danger both to themselves and others on the roads. The association of cannabis with fatalities on the roads is particularly strong⁹.
- 10) *It is agreed* that cannabis suppresses (in most cases) the immune system;
- 11) There is almost uniform agreement from most studies that the incidence of serious birth defects of children born to cannabis dependent mothers is greatly increased. Gastroschisis, or babies born with their bowels hanging out of their bellies, features particularly strongly, but neural tube closure defects (including spina bifida) and cardiac septal defects (atrial and ventricular septal defects), and being born with deformed or absent ears (and to a lesser extent eyes) are also reported by many studies¹⁰.
- 12) Five forms of cancer have also been reported to be associated with cannabis, including four cancers seen in babies and small children, strongly implying a congenital toxicological and causal mechanism³.
- 13) Severe abnormalities of sperm have also been found in cannabis dependent humans

and experimental animals ^{11, 12}.

- 14) It is clear that those countries reporting the highest rates of cannabis use also report the highest rates of cannabis problems.
- 15) It is clear that within each country that the age, sex, locality and racial groups reporting the highest use rates of cannabis also report the highest rates of cannabis-related problems ¹³⁻¹⁵.
- 16) Cannabinoids receptors are also found in the brain's arcuate nucleus of the hypothalamus, the central appetite regulating organ of the body. This explains the "munchies" seen in patients who use cannabis, and the very high rates of other drug use.
- 17) Cannabis plants can grow to 10 feet tall in the wild.

(11) and (12) and (13) together strongly imply severe genetic and / or chromosomal and / or epigenetic inheritable damage. One simplified way to understand Epigenetics is analogous to the wrapping around the genes on their chromosomes which controls gene expression a little bit like the wrapping around Christmas presents controls the availability of the toys found inside. This means that not only do some of these babies not get a chance to be born normally, some are born to get usually highly aggressive forms of cancer in their earliest years.

UN figures estimate that there are approximately 160-200 million cannabis dependent people globally ^{3, 16, 17}. Whilst recent Australian statistics show that the 12-month use rates of cannabis have declined substantially from 12% in 1995 to 9% in 2004 and dropped from 32% of school children in 1996 to 14 % in 2005, youngest cohorts 10-19 years of age were still twice as likely to smoke it heavily (more than 10 cones daily equivalent to 1g) ⁸. Hospitalizations for the treatment of cannabis dependence rose from 23,000 in 2001 to 31,000 in 2006, a trend which was not related to increased law enforcement activity (which remained unchanged). Cannabis presentations to hospitals especially in young people are becoming more frequent and more severe ¹³.

The harm attributable to cannabis has been grossly and generally habitually underestimated by many agencies. For example on study of the effects of cannabis on depression used multivariate statistical techniques to remove the effects of locality, income, employment status and marital status without appreciating that cannabis itself affects all these key variables (bidirectionally) ¹³. Another study purporting to demonstrate that alcohol and tobacco had larger burdens of global disease attributable to them, nevertheless denied most forms of cannabis related pathology (including depression, suicidality, lung disease, cancer, brain damage, common mental disorders and its role in poly-drug overdoses) ¹⁶.

Treatment for cannabis dependence is often not well advanced, although various forms of counselling, rehabilitation, social supports and the treatment of its complications (bipolar disorder, schizophrenia, asthma) have all been used with some (usually partial) success ⁸.

Most of the disorders for which cannabis was proposed as a treatment have much better treatments available. This applies to wasting diseases, glaucoma, epilepsy, asthma and

multiple sclerosis. All authorities agree that cannabis in its smoked form is not an appropriate form of treatment for any condition. Research on the body's own cannabinoid system will likely yield new drugs which will be delivered in pure form in standardized doses by safe and effective routes of administration – none of which include inhaling combusted smoke.

Indeed by far the most dominant finding to emerge from the research of the last 10-15 years is that earlier fears related to cannabis safety have been strongly confirmed. That is, the major salient point from the research literature is the high level of agreement by workers from many different nations and many differing philosophical points of view.

So what is the debate about?? Why are we having this discussion – if the medical evidence is agreed by both sides???

Clearly it is not driven by any form of reputable medical evidence. It seems that what is actually driving the debate are three inter-related factors. The first is overwhelmingly money. Californian medical marijuana dispensaries are being prosecuted with earnings of \$5million and \$8million. So this is big business. Moreover for the really large players, the major suppliers to the industry – the global cannabis supply giants (“Weed to the World”) they are sitting on an industry like no other. Since cannabis is addictive and its demand therefore essentially infinite, and since it is intended that the Government will eventually pay for it, they have an infinite demand, and assured payer, and potentially unlimited profits. It is an industry like no other; and moreover since growers can harvest several crops annually.

Then drugs are supposed to be “fun” short term; so one motivation is hedonism which jibes perfectly with the self-indulgent hedonistic culture “so long as nobody gets hurt.” However when the above harms are added up it is very clear that very many people are hurt every day. Drug addiction clinics see its victims each and every day.

The third driving force may well be the seldom described link to the homosexual community. Cannabis use rates in all surveys of this group show that cannabis is used much more heavily by this group than the rest of the community. Reports from this demographic reveal that Cannabis is used as part of sexual activity and also viewed partly as a “love drug”. One of the strongest pushes for medical marijuana comes from AIDS patients as a treatment for their muscle wasting. This is a little like giving cannabis to cannabis addicts because they want it. Reputable surveys of community attitudes to cannabis show that the community in general is aware of the harms and risks of cannabis use, and alert to its several dangers including its gateway activities to other drug use¹⁸.

Conclusion

Cannabis has well established and widely agreed *common* adverse effects on the lungs, brain and immune system and driving abilities. Societally its most severe effects are related to the damage done to young growing brains and the developmental trajectory of a young person's life which is not infrequently aborted by a failure to form long term stable personal relationships and engage in gainful employment, and not infrequently in heavy users,

combined with mental disorders usually including aggression and moodiness, which can be very dangerous indeed to other people; frequently leading to other drug use. Perhaps the most pernicious effects of cannabis relate to its ability to induce permanent and inheritable chromosomal and genetic damage leading to cancer formation and serious congenital abnormalities in the babies exposed to it *in utero*. Then there are the thousands of children who are retarded, can't speak, have learning and behavioural difficulties and are hyper-agitated, also due to brain damage sustained *in utero*.

Notwithstanding the now uniform agreement on cannabis related medical toxicopathologies amongst professionals in the field and researchers, there is nevertheless a real possibility that social elites driven by crass profit motivations, hedonism or simple self-indulgence may yet hijack the debate under their relentless propaganda barrage fuelled by seeming tsunami's of cash from some of the world's wealthiest individuals and global malefactors.

Governments urgently need to correct the chronic underfunding of cannabis related research. So many questions remain. Whilst the money devoted to excusing cannabis is enormous, why is not a research fighting fund – not controlled by the usual academics who in this country are largely pro-cannabis - created to address issues such as “What are the primary mechanisms of neurotoxicity”, “Given the plethora of toxic effects, is there evidence that cannabis exposed cells in the test tube, lab rats in the cage, and human patients are ageing more quickly?” “What of the negative effects of cannabinoids on stem cells?” “Does the combined immune and stem cell effects accelerate the ageing process in cannabis dependence as it is believed to occur in other chemical dependencies?” And especially for the general community, “What lessons can we learn from the pattern of accelerated age-related disease in cannabis patients affecting so many different organ systems, which can help us develop better treatments for age-related and degenerative disorders in the rest of the community; particularly given that the increasing prevalence of age-related diseases in our rapidly aging populations is a ubiquitous concern of Governments worldwide?”

The public health message that cannabis is relatively harmless and less damaging than tobacco and alcohol cannot be parroted by anybody half way familiar with the traumas of youth culture; as indicated above its evidentiary basis is terminally suspect. The research drive needs to be coupled with an effective and purposeful public education program to warn ALL our young people away from it and expose the scam of its image as a “soft” drug. It does not make medical sense that Australia has top rate education and publicity programs for alcohol and tobacco but simplistically excuses cannabis. Many experts from both sides of the debate champion this educational call ^{3,4}.

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