From: Stuart Reece

Sent: Tuesday, 31 July 2007
Subject: Cannabis and Mental Illness in Recent Lancet Edition - Implications for Australian Addiction Advice Industry

Hon. Mrs. Bronwen Bishop,
Chairperson,
Family and Human Services
Standing Committee,
House of Representatives,
Parliament House,
Canberra,
A.C.T., 2600.

Dear Hon. Mrs. Bishop,

Your attention will I am sure have been drawn to the recent major papers published in the medical journal Lancet conducting a meta-analysis of the whole of the cannabis and mental illness scientific literature (see attached). The meta-analysis is accompanied by TWO editorials, one from Danish leaders, and one from the journal itself (also attached).

So substantial are its conclusions that the well known and highly influential medical journal Lancet has now editorialized formally recanting and withdrawing its earlier benign editorial espousing the well known populist decriminalization view, and stating that as far as we can tell now, cannabis is causally linked with a host of mental illnesses, featuring but by no means limited to major and disabling disorders such as schizophrenia, depression, bipolar disorder, suicidal ideation and other major problems.

The major implication of this for Australia, beyond the obvious medical issues and the urgent need now to review laws in those jurisdictions where the laws in relation to cannabis have been down-regulated is that the whole industry which purports to offer advice to Governments of whatever persuasion in this country was quite simply **WRONG** on this major point of the addiction controversy. Your committee will of course be well aware of the individuals and institutions most concerned in this but NDARC would obviously be one of the leaders in this regard.

This conclusion of the literature was entirely to be expected by anyone conversant with the pre-clinical and basic sciences literature on this vast topic. The fact that the industry in this country remains and continues to be not only unaware by completely unqualified to assess this modern science can only mean that more such embarrassing moments of the greatest cultural impact are necessarily to follow. If the job of experts is to advise a nation of its direction and indicate to the ship of state what is lying over the horizon, then our current batch of experts have failed dismally, **and will continue to do so for the foreseeable future;** as is indicated only too well by the recent debacle in the Medical Journal of Australia in relation to naltrexone - which was also championed by NDARC.

I wish to draw the committee's attention to three sentences in the enclosed documents.

In the meta-analysis from Lancet the comments are made:

"Animal models of the long term effects of cannabis on neuropsychological domains relevant to psychotic or affective states could also improve knowledge." (P327).

Surely the question must be asked as to why they are habitually omitted from Government funded reviews in this country? This nonsense is directly responsible for the stone age and misleading science conducted in this country. Biological science including medical science, is and has always

been based on careful experimentation in pre-clinical models which is not possible and frequently completely unethical in humans.

The same source comments:

"The neurobiological sequaelae of cannabis use, including modulated activity of dopaminergic. GABAergic, and glutamatergic neurons, are consistent with abnormalities described in people with psychotic disorders." (P326).

To my knowledge the industry in this country is yet to pen such a line which takes cognizance of the enormous corpus of neuroscience evidence on this important point. It should not be excused.

Finally the piece "The biological basis of tobacco and alcohol addiction" by the Director of NIDA Nora Volkow and colleagues makes an even more important point.

"For example in a recent full genome association scan launched by NIDA to identify the genes that influence the risk of nicotine addiction revealed that 9 of the 10 top candidate genes were not the "usual suspects" but corresponded to genes that encode for proteins involved in synaptic formation, intracellular signalling and transcription factors (unpublished)." (P1)

This means that not only have the described changes in neurotransmitter release induced by addiction been extensively identified and studied, but that these are quite possibly **_NOT_** the main culprits which are deranged in addictive disorders. This could be easily predicted by the well documented involvement of GTP dependent proteins (G-proteins) in a whole host of cellular machinery such as the pathways mentioned above.

The absence of such thinking in our national research agenda is not only a serious reproach on our research establishment but likely to CONTINUE to have dire consequences for social and health policies in the area into the future.

Please note that in making these remarks I am aware of an NDARC study on genetic linkages in addiction with collaborators at QIMR and in Washington USA. Given NDARC's appalling record in the area my remarks remain unperturbed.

I applaud the efforts of the committee to explore in detail the policy and practical outworking of such breaking Science, including the manner in which such methodologies might best be brought into this country.

Yours sincerely,

Stuart Reece.