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EDITORIAL

Can we brace for a Canadian-type cannabis storm?

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Fischer et al.[1] have now translated the 2017 Lower-Risk Cannabis Use Guideline (LRCUG) to Brazilian Portuguese. The LRCUG includes "a set of 10 recommendations on how cannabis users may most effectively reduce the risks for associated health harms," being aimed at those who are already using cannabis. I offer the following comments on the recommendations:

Recommendation 1 – No comment.

Recommendation 2 – "… most clearly that which begins before age 16 years… is associated with multiple subsequent adverse health and social effects…" – Cannabis interferes with the 'pruning' of synapses, myelination, and other milestones in the development and maturation of the nervous system since conception, and it does not stop at age 16. This recommendation could help prevention efforts by stating: "… initiation, if inevitable, should be delayed until full adulthood (age 22-25 years)."

Recommendation 3 – "… it is advisable to use cannabis containing high CBD:THC ratios" – High doses of CBD may lead to dissociative states.[2] A safer recommendation might be: "Do not use cannabis. If you cannot abstain, avoid preparations rich in THC and low in CBD."

Recommendation 4 – The authors consider the available evidence limited. Synthetic cannabinoids are full agonists of cannabinoid receptors, are more potent than THC, are clearly associated with psychotic states, and may be more neurotoxic than phyto-cannabinoids.[3]

Recommendation 5 – "it is… preferable to avoid routes of administration that involve smoking combusted cannabis material (e.g., by using vaporizers or edibles)" – Vaping is increasingly used in North America, including by minors, which involves the possibility of inhaling high THC concentrations from cannabis oil, wax, or liquid preparations.[4]

Recommendation 6 – "… avoid practices such as 'deep inhalation' breath-holding, or the Valsalva maneuver… as these practices disproportionately increase the intake of toxic material into the pulmonary system." – This recommendation could mention the higher blood and brain levels of THC and other cannabinoid substances, with their own toxic effects from these maneuvers.

Recommendation 7 – "… keep cannabis use occasional (e.g., use only on 1 day/week, weekend use only, etc.) at most." – In a cohort of 50,000 Swedish Army conscripts, it was found that using cannabis 50 times (e.g., once a week for one year) by the age of 18 (in 1969) resulted in a 3.7 higher risk of schizophrenia, a 2.2 higher risk of brief psychosis and a 2.0 higher risk of other non-affective psychoses. Contrary to what Fischer et al. claim,[1] the risks of schizophrenia and depression are not the same, and schizophrenia carries a much worse prognosis. Other consequences from cannabis use include amotivational syndrome, impaired memory, schizotypal personality features, and subsyndromal psychotic symptoms.

Recommendation 8 – No comment.

Recommendation 9 – "There are some populations at probable higher risk for cannabis-related adverse effects who should refrain from using cannabis. These recommendations, in part, are based on precautionary principles." – Experts used to dismiss the evidence that cannabis causes dependence. Telling dependent pregnant women to stop using cannabis is not enough. Young-Wolff et al.[5] report the increased use in California from 2009 to 2018. As for cannabis and schizophrenia, the evidence that has accumulated since 1987 is overwhelming. A multisite investigation of patients admitted for their first episode of psychosis at 11 sites in 10 cities in England, Holland, France, Spain, Italy and Brazil[6] found that daily cannabis use was associated with a 3.2 higher risk of psychosis. Daily use of high-potency cannabis (10% THC content, irrespective of CBD) raised this risk to 4.8 – assuming causality, the population attributable factor for cannabis indicates that 12.2% of first episodes of psychosis could be prevented by the eliminating daily use of high potency cannabis (the reduction for London and Amsterdam would be 30% and 50%, respectively, due to the higher THC content). Alcohol, tobacco, LSD, heroin, cocaine and crack are not associated with a higher risk of schizophrenia. Cannabis is not less harmful than alcohol or tobacco – they have different profiles of harm.

Recommendation 10 – "… it is likely that the combination of some of the risk behaviors listed above will magnify the risk of adverse outcomes from cannabis use… a focus for prevention. [Evidence Grade: Limited]" – This, too, is obvious, but as a focus for prevention it should not downplay the magnitude of the available evidence.

Medical ethics does not endorse social experiments merely for the sake of scientific knowledge or for less humanitarian objectives. Let us hope our nation will not be exposed to such a risky trial. If it is, perhaps we should brace for it.

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Disclosure

The author reports no conflicts of interest.

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