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Title	The adverse health effects and harms related to marijuana use: an overview review
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Reviewer 1	Carly Heung
Institution	Alcohol Policy Network, Ontario Public Health Association, Toronto, Ont.
General comments (author response in bold)	<p>Background: The background briefly contextualizes use of marijuana as an international health issue but is missing information as to why people might use marijuana, the benefits around its use as well as statistics on the use of marijuana in Canada. I would recommend that the authors consider including some contextual information around the use of marijuana in Canada, benefits considered by users, and introduce why it is currently being use or its use might be increasing. We have now rewritten the introduction to introduce the Canadian context.</p> <p>Objectives: The authors do a good job explaining why they conducted the study, which in the abstract as they stated is to consider the harms associated with marijuana use to inform public policy development in Canada. The intent, as it appears, is to provide a complete picture of harms and risks through this systemic review (page 3 line 34-36). Research Question: The objective, as they report in the manuscript, is to synthesize the evidence of the health effects and harms of marijuana use, to provide clinicians with a broad and comprehensive overview of possible health impacts (page 3 line 36 to 39). Study Design: The study design is appropriate for the author's stated purpose of the study. Thank you for highlighting the strengths of the paper.</p> <p>Methodology: The authors describe their search strategy in sufficient detail, including the sources of reviews and their use of the AMSTAR checklist to assess quality of reviews. The manuscript is however missing information on the year of inception (page 3 line 46). I would recommend the author include the year of inception for each database that was searched. The data have now been clarified on page 4. We searched from inception of each database to May 2018.</p> <p>Results: The final results included the analysis of 64 reviews. The outcomes as summarized in the results section of the manuscript are difficult to interpret. By categories, brain changes, mental health, cognitive effects, prenatal exposure and overall health effects and harms are not surprising categories. I would recommend the authors include a synthesis of the outcomes extracted from the studies by outcome categories so that it is easier for the reader to determine whether a harm/adverse health effect of that category was reported in the reviews or not. We prefer to leave the results reported by category as the individual outcomes are diverse. Our goal is to point out the broad areas of harms and then specific outcomes within each category. We feel this presents understandable areas of concern for the public and clinical audience (e.g. there are harms and risks associated with pre-natal exposure so if my patient is pregnant, we need to discuss marijuana exposure and use). If the editors feel strongly, we will rewrite our results organized by outcome.</p> <p>Interpretation: The first paragraph (page 9 line 1 through 15) does a good job interpreting the data in the results. However, the authors should consider the results within a policy lens, particularly within the current context of the Canadian legislation and the perception of marijuana use in the public. We have now reframed the interpretation to reflect the fast moving Canadian context.</p> <p>Tables and Figures: Figure 1 is a good summary of the results of the studies that were included in the review. A summary table of the adverse health effects/harms and outcomes would be helpful. Thank you. For ease of our readers, we have now included a box that categorizes the findings into harm, inconclusive, no evidence. However, I defer to the editors about whether this is a useful addition or repetitive of the information presented in Table 1 and Figure 2.</p>
Reviewer 2	Siavash Jafari
Institution	University of British Columbia, School of Population and Public Health, Vancouver, BC
General comments (author response in bold)	<p>Your systematic review attempts to answer an important clinical question. Your team has done a great job in obtaining and reviewing relevant publications. Your paper has summarized the available evidence very effectively and presents the results in a simple-to-follow format in the table 4. It was a great pleasure reading your manuscript. Thank you for your kind words.</p>