Qeios

Peer Review

Review of: "Benefits to Mental Wellbeing from Making Positive Changes in Health-Related Behaviours: An Ultra-Rapid Review"

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The topic is important with potentially massive public health implications. Given this, I think it would be more suitable to undertake a more formal and thorough review of the literature, whether of primary literature or of the reviews available. A rapid review and/or umbrella review would be more thorough and suitable to the gravity of the topic.

Abstract – there is some description of the method, indicating perhaps an efficient targeted approach to the literature. Results should include a description of how many reviews or other documents were identified, how many were selected, perhaps for each of the main health behaviours in view.

Introduction – this reports the rationale for an 'ultra-rapid review'. The source reference is in the context of time-sensitive decision-making. I do not think this topic area needs time-sensitive (very rapid) evidence review and decision-making. Rather, it would be better to review, appraise, and summarise the topic fully, to show the weight and quality of evidence available to warrant investment in public health campaigns. It makes me worry that this is a veneer of scientific rigour which makes the output seem more rigorous and ready to impact than it should be, and it may be little more than selected articles to support expert opinion (notably from a highly experienced author in the field).

The potential weaknesses of AI in this type of research are well articulated. Whilst the authors have adopted a mixture of manual and automated searching, again given the gravity and burden relating to the topic matter, it feels to me that these potential weaknesses are a significant risk for bias.

The rationale for not specifying how much alcohol should be reduced or what changes in diet should be achieved is presented. With such a lack of specificity in the scope and inclusion criteria, this will lead to

doi.org/10.32388/B823AP

an imprecise understanding of the effects. There should be clearer outcomes, changes in outcomes, and studies sought that address those scenarios, for the evidence to be useful in public health and practice.

Methods – I could not access the protocol on OSF.

For Search Phase 2, it is not clear whether Elicit was selecting 25 papers per health behaviour domain or in total. From the outputs, it appears it was 25 per domain.

For alcohol, 6 articles are cited from the Google search and 2 further from Elicit. Whilst this evidence may be consistent as a body, it is unclear whether there are alternative findings from other papers. The method may have good specificity for the topic, but sensitivity is highly uncertain, so findings must be interpreted with caution.

For smoking, eight papers are cited for Google Scholar, and 'several' are noted from Elicit, without references. Likewise, for diet, 11 studies are noted at the manual stage and 'several' others referred to from Elicit. For physical activity, it is 5 papers. The supplementary files are lists and not summarised or digestible to ascertain what has been undertaken and considered for inclusion/exclusion or relative importance to the topic in question. What is included is described, but information about what was excluded is not available to be able to explore such issues of weight of evidence, heterogeneity, etc.

Discussion – the main findings are summarised well. Whilst caveats are noted regarding the gaps in evidence, the 'ultra-rapid' methodology makes it much more uncertain as to whether these findings would stand the test of a more rigorous review method. We do not know how many relevant papers have not been selected, in particular those which may report more heterogeneous evidence. The risks from missing relevant studies and over-emphasising low-quality evidence are acknowledged, but the extent of these risks is, I feel, understated or under-estimated. Given these uncertainties, I feel the concluding statement "the findings suggest a role for public messaging that highlights relatively rapid mental wellbeing benefits as a motivator for health behaviour change" is not substantiated (yet) by the evidence available here. It may be quite likely to be substantiated by a more rigorous review, but we cannot say that as yet. As above, the main author is a highly experienced, respected authority in the field, but this methodology may be at risk of making expert opinion appear higher up the hierarchy of evidence than it should be.

Declarations

Potential competing interests: No potential competing interests to declare.