Reviewer’s report

**Title:** Screening for depression in women during pregnancy or the first-year postpartum and in the general adult population: a protocol for two systematic reviews to update a guideline of the Canadian Task Force on Preventive Health Care

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**Reviewer:** Amélie Boutin

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**Title:** Screening for depression in women during pregnancy or the first-year postpartum and in the general population: a protocol for two systematic reviews to update a guideline of the Canadian Task Force on Preventive Health Care

**Summary**

The manuscript presents the protocol for two systematic reviews aiming at estimating the benefits and harms of screening for depression in the general population and in the subpopulation of pregnant postpartum women. The authors will include randomized controlled trials comparing the use of screening question(s) or questionnaire to no screening. The outcomes evaluated will be the symptoms of depression or diagnosis of major depression disorder, health-related quality of life, day-to-day functionality, lost time at work/school, impact on lifestyle behavior, suicidality, false positive result, overdiagnosis, or overtreatment, and labeling/stigma in the general population. For the pregnant and postpartum women, mental health outcomes (symptoms of depression diagnosis of major depression disorder, health-related quality of life, suicidality, false positive screens, overdiagnosis, or overtreatment, labeling/stigma, harms of treatment), parenting outcomes (relationship with partner and other supports, reported/observed capacity to parent, mother-child interactions including mutual touching, smiling, vocalizations, and impact on other children) and infant outcomes (infant health and development, cognitive, emotional, motor and neural functioning and development, infant responsiveness) will be evaluated.

This review is very important, and the protocol is quite thorough. The manuscript's length is adequate, although the importance given to of each section could be revised. A few points should be considered before publication.

As mentioned by previous reviewers, the combination of two reviews in one protocol makes it sometimes a little difficult for the reader to follow and clearly distinguish what is specific to each review. Although the authors specified the overlap in the methods was the reason for the
combined protocol, considering those are two distinct separate reviews, publication of two protocols would have been worth consideration and would have improved the clarity of each project from the readers' perspective. The combined version could be improved to further ease the reading.

Comments:

Abstract
It is mentioned that 2 independent reviewers will screen articles. Considering the process described in the methods, the process will not be "independent".

It is stated that the quality of studies will be assessed using Cochrane Risk of Bias tool. This tool does not exactly assess the quality but the risk of bias or internal validity of included studies.

Introduction
The background/introduction section is very long (almost 6 pages) and leaves the impression of being a little disorganized or overwhelming. I think this is mainly due to the combination of the two studies. It becomes difficult to introduce both studies in an organized, clear way. Moreover, the beginning of the introduction looks more like a variable definition section.

I am under the impression that the introduction should be simplified and aim at explaining 1) why depression is a disease important to screen for, 2) why the pregnant and postpartum women population is particularly of interest and 3) what is currently known about the benefits and harms of screening in the general and perinatal population as well as what are the current guidelines saying. The information is already there, but there is a lot more, which might possibly undermine the clarity of the rationale for those two reviews.

Line 118, I would suggest adding the words "feeling of" in the sentence: "Depression is a mood disorder characterized by states of sadness, [feeling of] worthlessness or emptiness […]"

Line 120, please consider repositioning the mention of the appendix as "poor sleep (Appendix file 1) serious" to ease the reading.

The MDE abbreviation is defined in 121-127, but not MDD.

Line 161 needs a reference.
On line 165-168, it is mentioned that the annual per-capita cost among those with MDD was higher than the comparison group; could it be specified if the adjusted or non-adjusted costs are reported.

Line 189-190 needs a reference.

Line 191, in the sentence "A recent US study in which women were interviewed, and diagnosis made using the DSM-IV criteria, found the 12-month period prevalence of MDD to be 8.4% among pregnant women, 9.3% among postpartum women, and 8.1% among non-pregnant women [26]." the 8.4% in the original paper does not refer to pregnant women but past-year pregnant women (includes currently pregnant and postpartum women).

Line 213, it is mentioned that postpartum depression may lead to infanticide. I could not find mention of such increased risk of infanticide in the references listed. Please clarify.

Lines 241-249 present eligibility criteria and seems to be repeated in the eligibility criteria tables. Please consider moving this section on the definition of a controlled trial of screening intervention in the methods section.

Line 265-266/272-273. Please consider adding the comparator in the research questions.

Line 279-299. In the objectives section, key questions 2 and 2a are mentioned. Perhaps, the criteria to undertake this subsequent review needs to be clarified. I would also suggest reducing the length of the section (and maybe refer to an appendix) as this is not part of the current reviews and will involve the development of a specific protocol. It is part of the guideline development, but not strictly related to the current protocol of systematic reviews.

Methods

Line 301-302, the meaning of "or as methods are updated by the Task Force" is unclear.

In line 302, It is mentioned that the Depression Working Group developed the list of outcomes and that outcomes were rated by patients. Please consider adding information on the methods used to create the list: how the group of patients that would grade the outcomes was formed, a description of those patients who contributed, were there women who experienced depression during pregnancy and/or postpartum, etc. Further details about this part of the methods could be made available through an appendix.
Line 325: Were the eligibility criteria identical in the previous review on the general population? If the list of criteria is (slightly) different, potentially eligible publications published prior to May 2012 could have been excluded from the previous systematic review. If so, how will this be addressed?

Will screening for any diagnosis of depression (MDE, MDD, etc.? defined according to the DSM-IV or -V, etc.) be included? If all are eligible, will sensitivity/subgroup analyses be conducted?

Line 359-367. It is stated that the websites of some medical organizations will be searched. Please provide clarifications regarding the type of documents (guidelines? research articles? abstract?) searched and years of documents of interest.

Line 368. The authors mention the grey literature will be confined to what can be searched in one week by one person. Considering the large list of documents that needs to be searched, I would recommend prioritizing, as also suggested by a previous reviewer. The time criteria could be problematic especially in the context of this dual review if, for example, the reviewer starts with the general population and do not have time to look at the websites specific to the pregnant and postpartum population. I would suggest targeting a few major documents/organizations to prioritize and absolutely look at, and if there is still time available, provide a list of additional websites that will potentially be consulted. Please clarify this section.

Line 375, a word is missing: "with the first stage [being] a broader screening" or "with [in] the first stage a broader screening".

Line 394. If abstracts are excluded as part of the search strategy in Embase and Cochrane, the list of potentially relevant studies published only in abstract (line 395) will not be exhaustive.

Line 408-411. The data extraction process described is not independent ("Full data abstraction will be completed by one reviewer and verified by a second reviewer."). Will the data extraction be independently conducted only for the piloting of the form?

Line 415. "As done in other reviews" [plural] but only one reference is given. Moreover, the reference given does not provide more information about the rationale behind this method. Please provide further information to clarify this decision.
Line 429-430. Please specify the customization of the risk of bias assessment planned for specific study designs. Some elements to consider in the assessment of the risk of bias in cluster RCT are provided in the Cochrane Handbook.

Line 445-446. It is specified that hazard ratios will be pooled using generic inverse variance method. What will be the methods used for the pooling of other measures of association?

Line 483. There is a section on "small study effects". Could the authors consider mentioning/commenting on publication bias?

How will RCTs of different screening approaches (tools, definitions of depression, timing of screening, etc.) be handled? Will they all be pooled? If so, will the effect of each approach be explored separately in subgroup analyses?

A few abbreviations need to be defined: "AHRQ SR", "IRSCTN".

Reference 1 needs to be corrected (P.H.A. of Canada -> Public Health Agency of Canada or PHAC).

Other items

Who is the guarantor of the review?

Is the funding received by BT from the CIHR supporting the conduct of these review? If so, it should be listed in the Funding section.

Figures

The authors mentioned that "The analytic framework depicts the structure used to address the key questions for evaluating the benefits and harms of depression screening (see Figure 1 & 2)". However, the figures do not present the comparator. Since it is meant to address the key questions, please consider adding the comparator to the figure.
Search strategy

Was the adult filter tested? It is not rare to read abstracts where the word "adult" is not used to describe the population or any of the word or combination of words used in the filter. For example, a sample of adults might alternatively be described as being a sample of patients over 18 years old. The "ADULT" section of the search strategy would not allow to find such studies as it restricts the search to entries with either Adult Subheading or keywords such as "adult(s)", "adulthood", "man", "men", "woman", "women", "middle-age", "age", "elderly", "geriatric", "gerontology", "old-age", or "senior", or a combination of the keywords "older" with "female", "male", "patient", "person", "people" or "population".

In addition to the vocabulary used in the PREGNANCY/ANTENATAL/POSTNATAL PERIOD section of the search, gestation* could be added as the population of pregnant women can be sometimes referred to in the abstract according to gestational age or trimester of pregnancy/gestation.

Screening form

The authors might want to consider adding the study design in question 1 for title and abstract screening.

Data abstraction form

Items listed in Table 3 (line 477, please consider adding a title) should be listed in the data abstraction form.

Level of interest

Please indicate how interesting you found the manuscript:

An article of importance in its field that should be highlighted to relevant networks

Quality of written English

Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

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No