Reviewer’s report

Title: A Comparison of Depression Prevalence Estimates in Meta-Analyses based on Screening Tools and Rating Scales versus Diagnostic Interviews: A Meta-research Review

Version: 0 Date: 26 Nov 2018

Reviewer: James Paulson

Reviewer’s report:

This manuscript describes a meta-review and synthesis of published meta-analyses that document depression prevalence. The review specifically addresses the discrepancies between studies that utilize self-report rating scales, structured diagnostic interviews, and a combination of these methods. The topic is of great importance to researchers and practitioners who are concerned with depression and the methods utilized to inform study conclusions are well-done and appropriate. However, the authors are notably dismissive of rating scales and their established validity while largely ignoring a number of well-documented shortcomings in structured diagnostic interviews.

The following specific critiques and suggestions are offered:

1. The title of the manuscript suggests the unsupported conclusion that higher estimates produced by studies that utilize rating scales, when compared to those relying on structured diagnostic interviews, necessarily represents overestimation;

2. The use of the term "validated" is applied only to structured diagnostic interviews in this context, when both types of case ascertainment method are, in fact, generally validated as a precondition of their use and publication;

3. Ln74-80: The authors describe research that utilizes structured diagnostic interviews as adhering to a "gold standard." This is problematic for a few reasons. Most studies that use structured diagnostic interviews to report case "diagnosis" rates rely on appropriately trained students or lay community members to conduct these interviews. This removes interview results from the context in which clinical diagnosis is made. A number of studies (see Rettew et al., 2009, Eaton et al., 2000, and others) show that when compared to practicing clinicians, typical administrations of structured diagnostic interviews show poor agreement and may underestimate diagnosis in certain groups. While this suggests against the use of absolute language like "gold standard," a reasonable alternative would be regarding structured diagnostic interviews as a case ascertainment method with its own strengths and weaknesses. This might create an opportunity for a more productive discussion of what can be learned in the comparison of findings from these different methods;
4. Ln89: Related to the previous concern, the assumption that rating scales necessarily inflate prevalence seems to be an overreach;

5. Ln100: The assumption that rating scales necessarily overestimate is repeated;

6. The approach to aggregating and summarizing study findings is well done and appropriate;

7. Ln224: It would be very interesting to see the proportion of studies that utilized structured diagnostic interviews administered by practicing clinicians. If these are sufficient in number, this could be a focus of sensitivity or subgroup analysis;

8. A more appropriate title and tone for this manuscript would omit foregone conclusions about one measurement approach or the other and instead directly address what occurs in the methods: two popular approaches to case ascertainment that are widely reported in meta-analyses are quantitatively summarized and compared.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Not applicable

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

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