Reviewer’s report

Title: The contribution of major depression to the global burden of ischaemic heart disease: a comparative risk assessment

Version: 2 Date: 20 September 2013

Reviewer: Peter de Jonge

Reviewer’s report:

I do have some reservations regarding this article. First of all, the authors keep hinting that the association between depression and heart disease is causal. For instance lines 312-313: "not definitively proved" should be "not proved despite enormous efforts". In addition, referring to depression as an independent risk factor seems inaccurate to me, since there is no mention of confounding, while in fact there is a substantial amount of confounding in the association. There is probably more evidence that heart disease and its precursors is a risk factor for depression than the other way around. In addition (although I am reluctant in my role of reviewer to promote work in which I am involved myself), the others do cite one of the debate pieces that were recently published in this journal (i.e. the paper by Carney and Freedland) and simply ignore the other one (Meijer et al) in which the causality argument is challenged. This gives a one-sided picture.

The reason why I am concerned about this is that readers may conclude that screening for and treating of depression will simply lead to better cardiac health. This would be a questionable assumption, and one that has been challenged in the past (i.e. Thombs et al JAMA 2008).

My other reservation concerns the use of the term major depression while in fact the majority of studies have used self-report measures of depression. The argument that this is the state of the literature in my opinion is not valid and suggests that it is too early to conduct this meta-analysis. It is more appropriate to refer to ‘depressive symptoms’, ‘likely presence of depression’, ‘elevated depressive symptoms’ than to major depression which suggests it is MDE what you are measuring. Also it suggests that it is treatable depression, which is really a matter of debate. Mild depression is not that treatable as we had hoped for.

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

no competing interests