Reviewer’s report

Title: The role of psychosocial stress in the development of chronic musculoskeletal pain disorders: protocol for a systematic review and meta-analysis

Version: 0 Date: 17 Jul 2017

Reviewer: Alison Scope

Reviewer's report:

This paper describes the protocol for a systematic review and meta-analysis of the role of psychosocial stress in the development of chronic musculoskeletal pain disorders. It is an interesting and important topic and the authors aim to assess the evidence for an aetiological role of psychological stress in chronic musculoskeletal pain disorders.

The background to the protocol makes sense and builds a rationale for the review, although it was not clear how the results of the review would inform clinical practice. This aspect needs to be explained in more detail.

The review question is: Does non-work related psychosocial stress have an aetiological role in the development of chronic MDs in the general population? It is unclear how the answer to this question in terms of cause and effect will emerge from a review.

The searches are clear and appear appropriate, although a date limit is not mentioned in this section. It is stated later stated that only evidence published before May 2017 would be included. What is the rationale for this?

The section describing the inclusion and exclusion criteria for the primary studies was unclear and difficult to follow. Although the standard PICOS framework may not be appropriate for this particular review, some elements of it should have been applied, and would have given the section an appropriate structure. For example, the population, outcomes and study design could all have been described together with their respective inclusion and exclusion criteria. This has been attempted to some degree for population in the 'types of participants' section, although this is followed by a heading inclusion criteria but these do not all relate to the population. It would be easier to follow if all inclusion and exclusion criteria relating to the population were in the same paragraph, with a similar paragraph for study design, and outcomes.

Other aspects of the methods, data management, data extraction and quality assessment appear appropriate and it is clearly explained how they will be conducted.
The plan for analysis appears appropriate, although the authors should be careful not to confuse narrative analysis with qualitative synthesis. Qualitative synthesis refers to the synthesis of qualitative (e.g. interview) data. I assume the authors are not intending to do this, as it has not been mentioned previously, and are referring to narrative synthesis of the quantitative data should meta-analysis not be possible.

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