Reviewer's report

Title: Symptom changes in multiple sclerosis following psychological interventions: a systematic review

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Reviewer: Maria Amato

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The Authors provide a systematic review to assess the impact of psychological interventions on somatic symptoms associated with multiple sclerosis. Only 22 papers fulfilled the required standards and were eventually included in the review. The approach to psychological intervention was quite heterogeneous across the studies, findings suggested a positive relationship between psychological intervention and physiological symptoms in MS. In the majority of the cases, outcomes were self-reported by the patients and there was no objective confirmation. The most beneficial effects were observed for fatigue, sleep disturbance, pain and physical vitality.

The study question is clearly posed. The methodological approach is only partially described: there is, in particular, insufficient description of the procedure followed for the review. Specifically, the following questions should be addressed: 1. how many reviewers assessed independently each papers? 2. Which was the classification of the level of evidence provided by the available literature? 3. How was the susceptibility to bias evaluated? Most of the study reported self-assessed outcomes, the patients were not blinded.

Most of the symptoms found to be improved by the psychological interventions can well overlap with depression, in particular fatigue, sleep disorders, pain and physical vitality. Therefore, the description of the relationship between depression and these symptoms should be assessed and clarified in the Results and more critically addressed in the Discussion. Consequences for clinical management of the patients and directions for future research should be outlined in the Discussion. Some limitations of the work should be better covered in the Discussion. The English is acceptable.

I could not find within the References a Cochrane review addressing a similar question.