

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Quality of life in adults with Multiple Sclerosis: a systematic review
AUTHORS	Gil-González, Irene; Martín-Rodríguez, Agustín; Conrad, Rupert; Pérez-San-Gregorio, María Ángeles

VERSION 1 – REVIEW

REVIEWER	Dr Lambros Messinis University Hospital of Patras, Greece
REVIEW RETURNED	13-Jul-2020

GENERAL COMMENTS	<p>This is an interesting and up to date systematic review examining the Quality of life in adults with Multiple Sclerosis. In most respects the methodological approach is well justified and the paper is well written. I have only some minor comments that may improve the generalisation of the findings</p> <ol style="list-style-type: none">1. Did the authors refer to the positive impact of recent cognitive rehabilitation interventions on cognition and QOL in MS patients ?2. Did the authors note any studies on the impact of cognitive reserve on QOL as it relates to cognition ?3. Does gender play a role on how MS influences QOL?4. How do the various pharmaceutical treatments differentially impact QOL?5. Authors need to have the paper edited by a native English speaker
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REVIEWER	Dr. Nader Salari Kermanshah university of medical sciences
REVIEW RETURNED	22-Aug-2020

GENERAL COMMENTS	<p>Thank you for taking the opportunity to review this study, and congratulations to the authors of the article. The article is well written but the introduction is very short and the use of the systematic review method is not well explained. Introduction should be expanded and more attention should be paid to the quality of life of patients and its importance.</p> <p>Systematic review to summarize conflicting studies is the right decision. Is the quality of life of patients with multiple sclerosis inconsistent in different studies?</p> <p>If so, cite this as the most important reason for using systematic review that data is inconsistent and needs to be summarized.</p> <p>PRISMA diagram does not exist in the study. Enter it in the results section</p>
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VERSION 1 – AUTHOR RESPONSE

REVIEWER: 1

This is an interesting and up to date systematic review examining the Quality of life in adults with Multiple Sclerosis. In most respects the methodological approach is well justified and the paper is well written.

Answer: Thank you for the encouraging comment.

I have only some minor comments that may improve the generalization of the findings

1. Did the authors refer to the positive impact of recent cognitive rehabilitation interventions on cognition and QOL in MS patients?

Answer: That is a really pertinent and interesting point. However, as outlined on page 5, to be able to handle the vast amount of studies in the covered period we had to restrict our search to psychological interventions primarily aiming at emotional and psychiatric problems and other interventions aiming at health behavior, cognitive rehabilitation or physical activity were excluded from our search. We clarified this point in the methods section. The analyses of cognitive rehabilitation is a very important subject for further reviews.

2. Did the authors note any studies on the impact of cognitive reserve on QOL as it relates to cognition?

Answer: This is an interesting point. In the selected studies about cognition and QOL in MS, just one identified preservation of executive function as a protective factor. We explicitly mentioned this in the revised manuscript. The rest of studies identified cognitive symptoms as risk factors (see page 8).

3. Does gender play a role on how MS influences QOL?

Answer: Surprisingly, just one of the selected studies identified being male as a QoL risk factor. We included this finding in the text (page 10).

4. How do the various pharmaceutical treatments differentially impact QOL?

Answer: Pharmacological treatment is a non-psychological intervention, so it was excluded from the search (page 5 exclusion criteria number one). Despite this, it is a really significant topic to consider in future reviews.

5. Authors need to have the paper edited by a native English speaker

Answer: The manuscript was revised accordingly.

REVIEWER: 2

Thank you for taking the opportunity to review this study, and congratulations to the authors of the article.

Answer: Thanks for the encouraging message.

The article is well written but the introduction is very short and the use of the systematic review method is not well explained. Introduction should be expanded and more attention should be paid to the quality of life of patients and its importance.

Answer: The introduction has been expanded (page 4). As suggested we paid more attention to the relevance of QoL for patients in general and MS patients in particular.

Systematic review to summarize conflicting studies is the right decision. Is the quality of life of patients with multiple sclerosis inconsistent in different studies? If so, cite this as the most important reason for using systematic review that data is inconsistent and needs to be summarized.

Answer: This is a very accurate comment. It has been cited as the main reason (page 4).

PRISMA diagram does not exist in the study. Enter it in the results section

Answer: On page 6, there is a representation of PRISMA flow diagram. The figure is attached separately following the submitting instructions. It can be found at the end of "peer review only" document.

VERSION 2 – REVIEW

REVIEWER	Lambros Messinis University of Patras
REVIEW RETURNED	13-Oct-2020

GENERAL COMMENTS	I am satisfied with the revised paper
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REVIEWER	Dr. Nader Salari Kermanshah university of medical sciences
REVIEW RETURNED	14-Oct-2020

GENERAL COMMENTS	The study is well written
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VERSION 2 – AUTHOR RESPONSE

REVIEWER: 1

I am satisfied with the revised paper.

Answer: Thank you for the supportive comment.

REVIEWER: 2

The study is well written.

Answer: Thanks for the favorable message.