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)	How the reduction of working hours could influence health outcomes: a systematic review of published studies
AUTHORS	Voglino, Gianluca; Savatteri, Armando; Gualano, Maria; Catozzi, Dario; Rousset, Stefano; Boietti, Edoardo; Bert, Fabrizio; Siliquini, Roberta

VERSION 1 – REVIEW

REVIEWER	Yen-Yuan Chen Graduate Institute of Medical Education & Bioethics, National Taiwan University College of Medicine
REVIEW RETURNED	14-Jun-2021

GENERAL COMMENTS	This study, "How the reduction of working hours could influence health outcomes: a review of published studies", was pretty interesting, and made the readers to understand the influence of reducing working hours on health outcomes. However, I tried to propose some suggestions about how this study could be further polished:
	 This seems to be a systemic review. If it is, the title may consider "a systematic review." The participants of the seven studies are very diverse, thus leading to limiting the generalizability of this study. I would suggest to highlight how the diverse participants may limit the generalizability of this study in Strengths and Limitations.

REVIEWER	Marc I White
	University of British Columbia
REVIEW RETURNED	10-Jul-2021

GENERAL COMMENTS	The paper is generally well written. There are several things that
GENERAL COMMENTS	would strengthen the paper. Methodological quality table or embed with the Table of Results. The amalgamation of the results on specific outcomes should also include strength of evidence - all studies were rated X or x,y,z within a specific summary on an outcome the reader should be informed about either limitations or which study results have been rated higher.
	The abstract is very weak in comparison to the paper itself. It states for instance - we selected 7 studies without mentioning following inclusion/exclusion criteria 7 studies were eligible and selected. The methods in the abstract should discuss the databases searched. There is too much unsaid by just stating that the review followed the PRISMA statement. A major concern is the lack of any discussion about the problem of lack of standard outcome measures, and what

VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

- 1. This seems to be a systemic review. If it is, the title may consider "a systematic review". Thanks for this suggestion. We have modified the title accordingly.
- 2. The participants of the seven studies are very diverse, thus leading to limiting the generalizability of this study. I would suggest to highlight how the diverse participants may limit the generalizability of this study in Strengths and Limitations.

Thanks for this comment. We added this sentence at page 14 lines 367-369: "In the end, a great limitation of our review is the remarkable heterogeneity of workers in the seven different studies. Most of the studies focus on health service workers and this may limit the generalizability of the review to the context of health services that represent a particular work setting with high emotional stress."

Reviewer 2:

1. Methodological quality table or embed with the Table of Results. The amalgamation of the results on specific outcomes should also include strength of evidence - all studies were rated X or x,y,z within a specific summary on an outcome the reader should be informed about either limitations or which study results have been rated higher.

We would like to thank you for your suggestion. To inform readers about the results of our quality assessment we added a column in the Table of Results specifying the strength of evidence (weak, moderate and strong) for each of the study we included in our systematic review.

- 2. The abstract is very weak in comparison to the paper itself. It states for instance we selected 7 studies without mentioning following inclusion/exclusion criteria 7 studies were eligible and selected. The methods in the abstract should discuss the databases searched. There is too much unsaid by just stating that the review followed the PRISMA statement.
- Thanks for this remark. We have modified and strengthened our abstract, as you can see in the revised manuscript.
- 3. A major concern is the lack of any discussion about the problem of lack of standard outcome measures, and what outcome measures should be used.
- We appreciate this comment and we modified the manuscript at page 13 lines 260-263:
- "Unfortunately, there is no standard health outcome in the literature that can be used as a comparison in all studies to investigate the effects of reducing working hours on workers' health such as self-perceived health and well-being. Then, we analysed 7 published articles exploring several different health outcomes, and all of them were investigated and discussed."
- 4. A major limitation of this type of work is there are many other factors that can influence organizational culture and it is unclear whether changes in working hours alone is a robust enough factor that influences "stress" or other important measures.

We would like to thank you for this comment and we modified paper as follows (page 15 lines 372-374):

"Factors affecting health in the workplace are manifold and include organizational, cultural and social aspects. It is not clear whether changes in working hours alone is a robust enough factor that influences "stress" or other health variables in workers."

5. I think given the results and the general weaknesses (outcomes, other factors not measured, etc.), that the conclusion may overstep the strength of the results. There could be more advice / guidance on future research.

Thank you for the comment. We changed the conclusions of our study and added important suggestions for future research.

VERSION 2 - REVIEW

REVIEWER	Marc I White
	University of British Columbia
REVIEW RETURNED	25-Oct-2021

GENERAL COMMENTS	Thank you for your revised manuscript.
	There are multiple minor corrections that would further strengthen the paper, which if addressed would not require further scientific review (from my perspective) only editorial. Page 3 line 68 typo "whit" should be "with" Page 5 line 156 add citations for each paper graded "strong for 3 studies xyz, Please note there are many areas In Table and Text where there are unqualified statements of improvements with statistical level of significance - please note stat or qualify level of significance, or note if not known. It would also be more typical to add "citations" in all text including discussion/ description of study for included studies - in a few cases this is done, however in many cases it is not done. Please ensure that each study mentioned and discussed is appropriately cited. This includes reference to Von Thiele et al in text of which there are 2 studies, however it should be addressed for all studies.
	The paper makes an important contribution to the literature, and the limitation section is improved.

VERSION 2 – AUTHOR RESPONSE

Page 3 line 68 typo "whit" should be "with"

Page 5 line 156 add citations for each paper graded ... "strong for 3 studies xyz,

We thank the reviewer for these advices. The sentence in line 156, regarding the outcome of the quality assessment phase, was moved to the result section (page 5, line 183).

Please note there are many areas In Table and Text where there are unqualified statements of improvements with statistical level of significance - please note stat or qualify level of significance, or note if not known.

We appreciate the suggestion and enriched the Table stating if significance levels were reached, and reporting data in the Result section.

It would also be more typical to add "citations" in all text including discussion/ description of study for included studies - in a few cases this is done, however in many cases it is not done. Please ensure that each study mentioned and discussed is appropriately cited. This includes reference to Von Thiele et al in text of which there are 2 studies, however it should be addressed for all studies.

We agree with the reviewer. Quotes were added when needed as properly suggested.