PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Workplace interventions for cardiovascular diseases: protocol of a systematic review and meta-analysis
AUTHORS	Moretti Anfossi, Christian; Tobar Fredes, Christian; Pérez Rojas, Felipe; Cisterna Cid, Francisca; Siques Urzúa, Christian; Ross, Jamie; Head, Jenny; Britton, Annie

VERSION 1 – REVIEW

REVIEWER	Gao, Lan Deakin University, Deakin Health Economics
REVIEW RETURNED	03-Mar-2022

GENERAL COMMENTS	The protocol is generally well-written. The authors presented a protocol for a planned systematic review and meta-analysis for workplace interventions for CVD. I have the below comments: 1. When defining the intervention, it stated that 'Any individual, group, or organisational workplace/worksite intervention that seeks to prevent CVDs or improve cardiovascular risk factors.' It would be better to specify the CVD risk factors here. 2. For inclusion criteria, is there any restriction on the sample size of individual study? 3. Since the search was carried out Dec 2021, it would be necessary to sepcify the name of two reviewers who are undertaking the screening etc.. 4. For data extraction in terms of the intervention, would there be a type that has not be listed above since this is not one of the selection criteria: type of intervention (health promotion programmes, stress-management, organizational prevention strategies). Do you need to extract the length of follow up? Data will be extracted based on ITT or PP? 5. For the pre-specified subgroup analyses, could authors please provide some justifications? 6. I would recommend the discussion around the need and rationale for workplace intervention to tackle CVD. Why would an intervention in the workplace work better (if any) than the one applied in the community setting?

REVIEWER	Nauman, Javaid United Arab Emirates University, Institute of Public Health
REVIEW RETURNED	30-May-2022

GENERAL COMMENTS	Anfossi et al present a protocol of a systematic review and meta-analysis for workplace interventions and cardiovascular diseases. The protocol is well-written, proposed methodology is robust, and writing follows the appropriate guidelines and proposed framework. I have few comments that I feel would improve the quality of the

	manuscript, and make it clearer for the readers. 1/. If possible, then 'cardiovascular' risk factors can be replaced with 'cardiometabolic' risk factors. Most often, the worksite intervention studies in relatively healthy participants have cardiometabolic conditions as outcomes. 2/. Maybe having CVD mortality as a primary outcome is ambitious in the framework of this proposed protocol and considering the workplace interventions. It would be better to acknowledge this point as a potential limitation. 3/. Few studies could have outcome measured at different time points, for example, 3 months, 6 months, 12 months etc. It is possible that an early outcome measurement date may have a favorable intervention effect because of adherence issues for a longer follow-up period. Authors have briefly mention this in the manuscript but a more detailed account will be helpful. Minor comments: - Article summary, strengths & limitations: replace 'mobility' with 'morbidity' (line 77) - Data synthesis: kindly add 3 months also together with 6, 12, 24 months (lines 367-368).

VERSION 1 – AUTHOR RESPONSE

Comments Reviewer: 1

1. When defining the intervention, it stated that 'Any individual, group, or organisational workplace/worksite intervention that seeks to prevent CVDs or improve cardiovascular risk factors.' It would be better to specify the CVD risk factors here.

Answer:
We included the outcomes in brackets (lines 187– 189), however we kept the details in the "Outcomes" section following the PICO framework order.

2. For inclusion criteria, is there any restriction on the sample size of individual study?

Answer:
No restriction for sample size will be applied

3. Since the search was carried out Dec 2021, it would be necessary to specify the name of two reviewers who are undertaking the screening etc.

Answer:
For screening, selection, data extraction and quality assessment, the roles of the reviewers working in parallel and the third for consensus would be assumed by any of the authors. Included in lines 256-258.

4. For data extraction in terms of the intervention, would there be a type that has not be listed above since this is not one of the selection criteria: type of intervention (health promotion programmes, stress-management, organizational prevention strategies). Do you need to extract the length of follow up? Data will be extracted based on ITT or PP?

Answer:

In the “interventions” section a specification was included that for the inclusion criteria the interventions in the studies must be classifiable as health promotion programmes, stress-management or organizational strategies (lines 187 – 189).

Length of the follow up will be included in the data extraction form (line 278).

Data will be extracted based on intention-to-treat (ITT) if these results are available, however, we will go with per-protocol (PP) if they are not (line 269-270)

5. For the pre-specified subgroup analyses, could authors please provide some justifications?

Answer:
Included (lines 370-379)

6. I would recommend the discussion around the need and rationale for workplace intervention to tackle CVD. Why would an intervention in the workplace work better (if any) than the one applied in the community setting?

Answer:
More elements related to this were included in the Discussion (lines 424-428)

Comments Reviewer 2:

7/. If possible, then ‘cardiovascular’ risk factors can be replaced with ‘cardiometabolic’ risk factors. Most often, the worksite intervention studies in relatively healthy participants have cardiometabolic conditions as outcomes.

Answer:
We agree. The change has been done were appropriate.

8/. Maybe having CVD mortality as a primary outcome is ambitious in the framework of this proposed protocol and considering the workplace interventions. It would be better to acknowledge this point as a potential limitation.

Answer:
We agree. The change has been done (lines 452-455).

9/. Few studies could have outcome measured at different time points, for example, 3 months, 6 months, 12 months etc. It is possible that an early outcome measurement date may have a favorable intervention effect because of adherence issues for a longer follow-up period. Authors have briefly mention this in the manuscript but a more detailed account will be helpful.

Answer:
Included (lines 376-379).

Minor comments:
- Article summary, strengths & limitations: replace ‘mobility’ with ‘morbidity’ (line 77)

Answer:
The whole sentence was deleted because it didn´t fit the requirement of “strengths and limitations” section.

- Data synthesis: kindly add 3 months also together with 6, 12, 24 months (lines 367-368).

Answer:
Added (line 378).

VERSION 2 – REVIEW

REVIEWER	Nauman, Javaid United Arab Emirates University, Institute of Public Health
REVIEW RETURNED	03-Jul-2022

GENERAL COMMENTS	The authors have responded to my comments, and made the changes in the manuscript accordingly. I wish them good luck with the study, and looking forward to read the published results.