

Peer Review Report

Review Report on Community-based interventions for cardiovascular disease prevention in low- and middle-income countries: a systematic review

Systematic Review, Public Health Rev

Reviewer: Pablo Perel

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EVALUATION

Q 1 Please summarize the main theme of the review.

This review summarized 27 studies evaluating the effectiveness of community-based interventions for primordial or primary prevention of cardiovascular disease in low- and middle- income countries.

Q 2 Please highlight the limitations and strengths.

The main limitation is that there is a lack of clear link between the risk of bias evaluation and the presentation of the studies results therefore it is difficult to assess the strength of the evidence for the results presented. There is an too much emphasis in the reporting of a long list of "statistically significant" or not significant results. The review would be more useful if a clearer link is made between the strength of the evidence and the findings. Also, with the type of complex interventions that is the focus of the review it would be informative to include issues beyond effectiveness (e.g. aspects which can facilitate or hinder implementation)

Q 3 Please provide your detailed review report to the authors, structured in major and minor comments.

Major comments

It would be important to make a specific link between the characteristics of the studies in terms of risk of bias and the finding of the studies. The two sections are not linked now, and the risk of bias is quite short. For a better understanding of the finding, I would suggest putting less emphasis on "statistically" or " not statistically" results and refer to the strength of evidence which should consider on top of the potential role of chance (statistical tests) the potential role of bias due to study design . It would also be useful to include aspects that were reported in process evaluation of the studies that can hinder or facilitate implementation as this information might be quite useful when considering the implementation of the interventions to different settings.

Also, although the authors include as one of the key research questions "What community-based interventions and strategies have been implemented for CVD prevention in LMICs?" I do not think that actually the review answers this question as it only focussed on research studies (not all community-based interventions and strategies) and because even within the research studies the eligibility criteria and the language limitation means that this question is not fully answered by the review.

Minor comments

As the main review question is related to "community based interventions" it would be useful to include a definition of this term in the introduction.

If possible structure the eligibility criteria as PICO and Include a rationale for the selected criteria (why 150 participants , 9 months, 40% attrition, etc)

Because of the nature of the review and the lack of meta-analysis it is not clear why outcomes should be predefined as "primary" or "secondary", I would suggest to display all the outcomes measured (perhaps include a heat map?) rather than artificially dividing in primary and secondary ones.

Would be useful to include the search terms in the search strategy (not sure if I missed them but could not find them)

I would suggest to expand the discussion and details of risk of bias (and, as mentioned before, link specifically the bias with the result section)

It would also be interesting to report how many of the studies clearly described the intervention (a major limitation in complex intervention studies)

For presenting the overall results in the “Variety of community-based interventions” section it might make the reading easier if the authors structure this on a table or figure What (content of the intervention) , where (setting, including clinical and geographical setting) and how (who were involved in delivering the intervention) or any other format that authors might consider appropriate.

As mentioned before I would suggest to put less emphasis on "positive" or significant studies in the conclusion , also highlights research needs in relation to current methodological limitations

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

Yes

Q 5 Are the keywords appropriate?

I would add prevention

Q 6 Is the English language of sufficient quality?

Yes

Q 7 Is the quality of the figures and tables satisfactory?

No.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?

I suggest to include latest figure of GBD study (2019 instead of 2016)

Reference 5 is not so recent suggest to edit accordingly.

Q 9 Does this manuscript refer only to published data? (unpublished data is not allowed for Reviews)

Yes.

Q 10 Does the manuscript cover the issue in an objective and analytical manner

Yes.

Q 11 Was a review on the issue published in the past 12 months?

No.

Q 12 Does the review have international or global implications?

The topic is highly relevant but the way is written now with a long list of "statistically" or "not statistically" "significant" results is not very informative

QUALITY ASSESSMENT

Q 13 Quality of generalization and summary



Q 14 Significance to the field



Q 15 Interest to a general audience



Q 16 Quality of the writing



REVISION LEVEL

Q 17 Please take a decision based on your comments:

Major revisions.