

Peer Review Report

Review Report on The influence of climate, atmospheric pollution, and natural disasters on cardiovascular diseases and diabetes mellitus in drylands: a scoping review

Review, Public Health Rev

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EVALUATION

Q 1 Please summarize the main theme of the review.

The discussion effectively summarizes the findings of the scoping review, outlining the various factors studied, including climatic variables, atmospheric pollutants, and natural disasters, and their impacts on CVD and DM.

Q 2 Please highlight the limitations and strengths.

Strengths:

The section discusses the significant findings related to the influence of extreme temperatures, precipitation, air pollutants, and natural disasters on the incidence and exacerbation of CVD and DM. It highlights the direct and indirect pathways through which these factors affect health outcomes.

The review also underscores the importance of interdisciplinary collaboration and policy interventions, such as adherence to the Paris Agreement targets, in mitigating the health impacts of climate change, pollution, and disasters. It emphasizes the need for tailored health interventions and further research in this area.

Limitation:

There are limitations of this review including variability in population size and composition across the analyzed studies, as well as the lack of consideration for factors like public policies and socioeconomic status, which could influence the results.

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

Major comments:

Clarity and Coherence: The introduction gives a thorough summary of the field's work and sets the scene for how climate change affects diabetes mellitus (DM) and cardiovascular illnesses (CVD). It does a good job of highlighting how important it is to research these problems in dryland areas. But it's important to make sure that the main ideas and goals are presented in a clear and coherent manner.

Formulation of the Research Question: The research question is well-defined and in line with the goals of the study, having been developed through the use of the Population, Concept, and Context (PCC) framework. To better direct the next parts, it could be helpful to include a clearer definition of the review's main objective.

Criteria for Inclusion and Exclusion: The eligibility requirements are well-defined, covering pertinent study designs and concentrating on answering the research questions. If there are any language limitations or other exclusions, it would be beneficial to explain or justify them.

Search Plan: The search plan covers a large number of databases and sources from the grey literature and is methodical and precise. Verifying the search strategy's comprehensiveness is crucial, particularly with regard to its inclusion of pertinent keywords and concepts associated with drylands, DM, CVD, and climate change.

Study Selection Procedure: A strict method is used to reduce bias in the well-described study selection procedure. But it's a good idea to be more explicit about how disagreements among reviewers were settled, especially when it comes to the decision-making procedure and participation.

Minor comments:

Methodological Quality Assessment: While it's appropriate to omit bias risk assessment or quality assessment for a scoping review, it might be beneficial to briefly discuss the implications of this decision in terms of potential limitations or gaps in the evidence base.

Discussion Section: The discussion effectively synthesizes the findings of the scoping review, highlighting key associations between climatic variables, air pollution, natural disasters, and CVD/DM in dry regions. However, some paragraphs could benefit from clearer transition sentences to improve the overall coherence and flow of ideas.

PLEASE COMMENT

Q 4 Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes

Q 5 Does this manuscript refer only to published data? (unpublished data is not allowed for Reviews)

Yes.

Q 6 Does the manuscript cover the issue in an objective and analytical manner

Yes.

Q 7 Was a review on the issue published in the past 12 months?

No.

Q 8 Does the review have international or global implications?

Yes! The review focuses on the importance of interdisciplinary collaboration and policy interventions, such as adherence to the Paris Agreement targets, in mitigating the health impacts of climate change, pollution, and disasters. It emphasizes the need for tailored health interventions and further research in this area.

Q 9 Is the title appropriate, concise, attractive?

Yes!

Q 10 Are the keywords appropriate?

Yes!

Q 11 Is the English language of sufficient quality?

Yes!

Q 12 Is the quality of the figures and tables satisfactory?

Yes.

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:

Minor revisions.