

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

Global Dengue Fever Management in Health Systems: Identifying Strategies, Challenges, and Solutions - A Scoping Review Protocol

Authors

Salehi, Mehrdad; Mousa Farkhani, Ehsan; Moghri, Javad; ghasemian, amir; Tabatabaee, Seyed Saeed; hooshmand, elaheh

VERSION 1 - REVIEW

Reviewer	1
Name	Douglas, Kirk Osmond
Affiliation	Centre for Biosecurity Studies, The University of the West Indies, Centre for Biosecurity Studies
Date	23-Dec-2024
COI	None

I would consider the differences in regions where dengue is endemic. Additionally, I would recommend classification of severe and non-severe dengue and discuss commonalities and differences in management in different geographical regions.

Reviewer	2
Name	Ng, Wei Leik
Affiliation	Department of Primary Care Medicine, Faculty of Medicine, Universiti Malaya
Date	26-Dec-2024
COI	None

The research question is relevant and the protocol is appropriate for a scoping review. The refinement of search strategy will be important as the number of articles to be screened are expected to be high.

Reviewer	3
Name	SAHIMIN, NORHIDAYU
Affiliation	Universiti Malaya, Kuala Lumpur
Date	08-Feb-2025
COI	None

This protocol paper presents a scoping review on global dengue fever management within healthcare systems. Overall, the protocol adheres closely to the established methodology by Arksey and O'Malley. However, several concerns are noted in the manuscript. Please check the attachment.

****** The reviewer provided a marked copy with additional comments. Please contact the publisher for full details. ******

Reviewer	4
Name	Dittrich, Sabine
Affiliation	Deggendorf Institute of Technology, ECRI
Date	14-Feb-2025
COI	None

The authors describe the work that is planned to understand strategies for dengue management around the world. They have chosen to do a scoping review with specifically outlined research questions. Given the importance of Dengue this is a very useful and valuable undertaking. Below are some minor suggestions to improve the protocol and plan:

- In stage 2: be clear that you will need to adapt search strategies depending on the database. Also you might want to also search the Cochrane library.
- In stage 3: you describe that "independent reviewers" will be doing the screening etc... I am assuming the reviewers and also 3rd consultant are the authors and it might be useful to add the abbreviations of the authors' names that fulfil the respective function in the text.
- In stage 4: I am missing any data being collected in regards to level of the health system? which is listed as a sub-RQ. Also objective challenges should also be specifically recorded (eg. procurement issues) as those might be different from the "perceptions":
- A tip would be to use a Google Form questionnaire design for the extraction as it will simplify work across different reviewers

VERSION 1 - AUTHOR RESPONSE

Response to Reviewer 1 – Dr. Kirk Osmond Douglas

I sincerely thank the esteemed reviewer for the thorough review, valuable comments, and constructive suggestions that significantly contributed to improving the quality of the manuscript.

Comment: I would consider the differences in regions where dengue is endemic. Additionally, I would recommend classification of severe and non-severe dengue and discuss commonalities and differences in management in different geographical regions.

Response: Thank you for this valuable suggestion. We have added discussion points regarding the geographic variability in dengue burden and the classification of dengue severity. These considerations are now reflected in our data charting framework and will be captured during data extraction. (Page 14)

Response to Reviewer 2 – Dr. Wei Leik Ng

I sincerely thank the esteemed reviewer for the thorough review, valuable comments, and constructive suggestions that significantly contributed to improving the quality of the manuscript.

Comment The research question is relevant and the protocol is appropriate for a scoping review. The refinement of search strategy will be important as the number of articles to be screened are expected to be high.

Response: We agree with the importance of a refined search strategy. We fully acknowledge the critical importance of optimizing the search strategy. Accordingly, the search methodology will be regularly reviewed and updated by a multidisciplinary team to ensure that both MeSH terms and free-text keywords are systematically developed and appropriately tailored to the specific indexing structure and requirements of each database. (Page 6)

Response to Reviewer 3 – Dr. Norhidayu Sahimin

I sincerely thank the esteemed reviewer for the thorough review, valuable comments, and constructive suggestions that significantly contributed to improving the quality of the manuscript.

Comment: italicize all instances of the term 'Aedes' throughout the manuscript.

Response: All occurrences of the term 'Aedes' have been italicized in accordance with scientific nomenclature standards. (Page 3)

Comment: The statement regarding the dengue outbreak in Tokyo after 70 years lacks a proper reference.

Response: Thank you for pointing this out. Reference reviewed and corrected. (Page 3 and 10)

Comment: Some sentences use conjunctive adverbs redundantly, such as two uses of 'however' in succession.

Response: The sentences identified have been revised for clarity and grammatical correctness, avoiding redundancy in conjunctive adverbs. (Page 4)

Comment: Clarify the meaning of 'supportive treatment' in dengue management.

Response: The term 'supportive treatment' has been clarified in the revised manuscript to reflect its focus on symptom management and complication prevention in the absence of antiviral therapy. (Page 4)

Comment: Dengue fever management involves a multi-faceted approach that can be categorized into vector control, surveillance and monitoring, clinical management, public education, research, vaccination programs, etc. How are these sub-questions able to provide the relevant literatures?

Response: The sub-questions are systematically structured to comprehensively address the multifaceted nature of dengue fever management. Each question targets a specific analytical dimension:

Sub-question 1 identifies the structural levels within health systems (e.g., community, primary care, tertiary care, national policy) where strategies are implemented, enabling analysis of organizational frameworks.

Sub-question 2 captures the breadth of intervention types—such as vector control, clinical care, vaccination, and public education—ensuring a holistic review of management strategies.

Sub-question 3 focuses on contextual and operational challenges, facilitating cross-country comparisons and identification of barriers in implementation.

Sub-question 4 elicits solutions and best practices, contributing to evidence-based recommendations.

Together, these sub-questions provide a robust framework for identifying, categorizing, and synthesizing relevant literature across various components of dengue prevention and control within global health systems.

Comment: Clarify the future application of this scoping review.

Response: That findings from this scoping review will inform the development of an evidence-based implementation framework for dengue management strategies in health systems. (Page 9)

According to the editor's recommendation (who stated: *"Please remove the conclusion section, as it is not part of the protocol article format."*), this section has been removed accordingly.

Response to Reviewer 4 – Dr. Sabine Dittrich

I sincerely thank the esteemed reviewer for the thorough review, valuable comments, and constructive suggestions that significantly contributed to improving the quality of the manuscript.

Comment: In stage 2, clarify that search strategies will be adapted to each database, and consider adding the Cochrane Library.

Response: The method section has been revised to indicate that database-specific adaptations will be made to search strategies. Additionally, the Cochrane Library has been added as a source to be searched. (Page 6)

Comment: In stage 3, clarify who the independent reviewers are by including author initials.

Response: Author initials (e.g., M.S. and A.G) have been added to identify the independent reviewers responsible for title/abstract screening and full-text review. (Page 7)

Comment: In stage 4, consider collecting data related to the level of the health system and differentiating between objective and perceived challenges.

Response: The data extraction form has been updated to include fields for the level of the health system (e.g., community, primary, tertiary) and a distinction between objective and perceived implementation challenges. (Page 7 and 14)

Comment: Consider using a Google Form-based data extraction template to simplify collaboration.

Response: We appreciate this practical suggestion. We will use a structured Google Form for data extraction to ensure consistency and ease of collaboration among team members.
