

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)	Patient and Provider's perspective on barriers and facilitators for medication adherence among adult patients with Cardiovascular Diseases and Diabetes Mellitus in India – A qualitative evidence synthesis
AUTHORS	Krishnamoorthy, Yuvaraj; Rajaa, Sathish; Rehman, Tanveer; Thulasingam, Mahalakshmi

VERSION 1 – REVIEW

REVIEWER	Kannusamy, Sivaranjini Tata Memorial Hospital, Department of Preventive Oncology
REVIEW RETURNED	03-Aug-2021

GENERAL COMMENTS	<p>The authors have tried to synthesis evidence on "Patient and Provider's perspective on barriers and facilitators for medication adherence among adult patients with Cardiovascular Diseases and Diabetes Mellitus in India", it is a methodologically sound study which suits the publication criteria of BMJ.</p> <p>Despite the methods the authors can focus on the following for refining the manuscript further:</p> <p>General comments: Authors can improve the language and minor grammatical issues</p> <p>Introduction: Adding a few more references to support the rationale of undertaking a Qualitative evidence synthesis for medication adherence needs to be considered. Authors need to consider stressing upon the importance and novelty of undertaking a "Qualitative evidence synthesis" towards deciphering the facilitators and barriers of medication adherence.</p> <p>Methods: The authors have claimed to have used the ENTREQ statement to review the evidence synthesis. However, it would be of much use if the authors could attach the same at the end of the review to support their work. Add references to to the statement "CASP has been widely used for assessing the quality of qualitative studies including Qualitative evidence synthesis"</p> <p>Results: The authors could have avoided using repetition of sentences in the results section and the tables section.</p>
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	<p>Discussion: The authors can consider adding more references, studies pertaining to SEAR, if not Indian studies, to support their evidence.</p> <p>Authors should give a conclusion at end of the manuscript summarising the points synthesised</p>
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REVIEWER	Sakthivel, Manikandanesan
REVIEW RETURNED	18-Aug-2021

GENERAL COMMENTS	<p>The manuscript is written precisely and it deals with an important public health problem. The authors have done an extensive systematic review to generate evidence to asses "Patient and Provider's perspective on barriers and facilitators for medication adherence among adult patients with Cardiovascular Diseases and Diabetes Mellitus in India – A qualitative evidence synthesis"</p> <p>However, the current manuscript lacks a few more information to further refine the manuscript. Here are some important ones:</p> <p>Comments for the authors:</p> <p>General comments: The authors should improvise on their grammatical writing, punctuations and abbreviations</p> <p>Abstract: The authors have to followed the BMJ abstract format</p> <p>Introduction: The authors have not placed the research question in the right way. They need to precisely let out the research question. Why need this literature review? Points or evidence to support the same is lacking Authors need to provide information and necessary references to support or substantiate the burden and importance of medication adherence for NCDs in India</p> <p>Methods: In the Methods, line 30, the authors have stated they have used the ENTREQ statement to report the article. Please do provide or attach the ENTREQ statement at the end or as an supplement The authors have stated in line 20 of page 10, Disagreements during the quality assessment process were resolved by discussion with the third investigator. How was this done? How were mutual consensus reached? The outcome sub heading in methods is an overloaded statement. Please do break into points and reframe it to an easier version</p> <p>Results: Th repetition of statements from the tables and in the results section to be avoided.</p> <p>Discussion: In the discussion section the authors have cited a few systematic reviews to support their findings. However, authors may cite a few more recent articles that has explored patient and providers' barriers and facilitators especially from an Indian setting. You may cite: Sridharan SG, Chittem M, Maya S. Patients' Experiences of Barriers and Facilitators for Adherence to Type 2 Diabetes Mellitus: A Meta-Ethnography. Journal of Social Health and Diabetes. 2019 Dec;7(02):61-72.</p> <p>References: The references 14 and 20 are not in accepted Vancouver format, authors need to revisit the referencing once again</p>
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REVIEWER	Hughes, Joel Kent State University, Applied Psychology Center
REVIEW RETURNED	22-Nov-2021

GENERAL COMMENTS	<p>This is a review of BMJ Open 2021-055226</p> <p>This systematic review and synthesis of studies reporting patient and provider perspectives on barriers and facilitators for medication adherence was expertly prepared. Preregistration on PROSPERO and use of the ENTREQ statement are strengths. The topic is important. The results are not that surprising, and are valuable. My primary feedback is conceptual, with minor grammar editing.</p> <p>Although consideration of culture will go beyond the data, the authors might consider whether there are cultural factors influencing barriers and facilitators of medication adherence in India. The individual studies conducted in India will not be able to compare the cultures of India with those of other countries, and neither can the findings of the synthesis. However, the authors might be able to speculate on these matters or place the findings into perspective. Also, much medication non-adherence is intentional and not a matter of forgetting. The level of intentionality in non-adherence can vary, as deciding not to refill a prescription because the patient would rather attempt to treat the condition in other ways. Still, many people mistakenly believe that patients would take their medications if they could remember, had effective reminding systems, and had access. This is not always true. Perhaps the authors could consider how the barriers and facilitators are related to the patient's choice to adhere or not, rather than an inability to adhere (e.g., forgetting, no access). For an international audience, would there be any value in mentioning that people of the Indian subcontinent have a higher risk of CVD than people of other race/ethnic backgrounds in many countries? That is, there appears to be a genetic risk of CVD among people of Indian race/ethnicity that makes management of CVD (and DM) an especially urgent global health priority.</p> <p>There are very minor grammatical mistakes, such as "Another major facilitator from the health system side is the trust that patient has on their physician and follow the advice related to self-care and adherence effectively" (p. 15 line 12 ff). I would reword, "Another major facilitator from the health system side is the trust that patient has in their physician and their willingness to effectively follow advice related to self-care and adherence." I'm sure the editors would assist with these during the copy-editing and proof stage.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1	Authors can improve the language and minor grammatical issues	Thanks for the suggestion, we have fully proof read the article again	P1-18
	Adding a few more references to support the rationale of undertaking a Qualitative evidence synthesis for medication adherence needs to be considered.	Thanks for the suggestion, appropriate changes have been made accordingly	P6, 2
	Authors need to consider stressing upon the importance and novelty of undertaking a "Qualitative evidence synthesis" towards deciphering the facilitators and barriers of medication adherence.	Thanks for the comment. We have made necessary changes	P6, 2-9
	The authors have claimed to have used the ENTREQ statement to review the evidence synthesis. However, it would be of much use if the authors could attach the same at the end of the review to support their work.	Thanks for the suggestion. ENTREQ statement is attached	Supplement 2
	Add references to the statement "CASP has been widely used for assessing the quality of qualitative studies including Qualitative evidence synthesis"	Thanks for the comment. We have made necessary changes	P9, 6
	The authors could have avoided using repetition of sentences in the results section and the tables section.	Thanks for the comment. We have made necessary changes	P10-14
	The authors can consider adding more references, studies pertaining to SEAR, if not Indian studies, to support their evidence.	Thanks for the comment. We have made necessary changes	P16, 4
	Authors should give a conclusion at end of the manuscript summarising the points synthesised	Thanks, Conclusion has been added	P18, 15-21

Reviewer 2	The authors should improvise on their grammatical writing, punctuations and abbreviations	Thanks for the suggestion, we have fully proof read the article again	P1-18
	The authors have to followed the BMJ abstract format	Thank you, we have changed the same	P2,3
	The authors have not placed the research question in the right way. They need to precisely let out the research question. Why need this literature review? Points or evidence to support the same is lacking	Thanks for the suggestion, appropriate changes have been made accordingly	P6, 2-9
	Authors need to provide information and necessary references to support or substantiate the burden and importance of medication adherence for NCDs in India	Thanks for the comment. We have made necessary changes	P4, 8
	In the Methods, line 30, the authors have stated they have used the ENTREQ statement to report the article. Please do provide or attach the ENTREQ statement at the end or as an supplement	Thanks for the suggestion. ENTREQ statement is attached	Supplement 2
	The authors have stated in line 20 of page 10, Disagreements during the quality assessment process were resolved by discussion with the third investigator. How was this done? How were mutual consensus reached?	Any disagreements in the literature review was discussed with the third investigator. Consensus were primarily sought for disagreements in study type, thematic analysis, and coding. They were addressed by taking the mutual consensus with all three authors	
	The outcome sub heading in methods is an overloaded statement. Please do break into points and reframe it to an easier version	Thanks for the comment. We have made necessary changes	P7, 16-19

	The repetition of statements from the tables and in the results section to be avoided.	Thank you, changes have been incorporated	P10-14
	In the discussion section the authors have cited a few systematic reviews to support their findings. However, authors may cite a few more recent articles that has explored patient and providers' barriers and facilitators especially from an Indian setting. You may cite: Sridharan SG, Chittem M, Maya S. Patients' Experiences of Barriers and Facilitators for Adherence to Type 2 Diabetes Mellitus: A Meta-Ethnography. Journal of Social Health and Diabetes. 2019 Dec;7(02):61-72.	Thanks, we have cited new references	P16, 18
	The references 14 and 20 are not in accepted Vancouver format, authors need to revisit the referencing once again	Thanks we have corrected the same	P20,21
Reviewer 3	Although consideration of culture will go beyond the data, the authors might consider whether there are cultural factors influencing barriers and facilitators of medication adherence in India. The individual studies conducted in India will not be able to compare the cultures of India with those of other countries, and neither can the findings of the synthesis. However, the authors might be able to speculate on these matters or place the findings into perspective.	Thank you for the valuable suggestion, we have also considered the same	P15, 21-25
	The level of intentionality in non-adherence can vary, as deciding not to refill a prescription due to cost is different than choosing not to take medication because the patient would rather attempt to treat the condition in other ways. Still, many people mistakenly believe that patients would take their medications if they could remember, had effective reminding systems, and had access. This is not always true. Perhaps the authors could consider how the barriers and facilitators are related to the patient's choice to adhere or not, rather than an inability to adhere (e.g., forgetting, no access) Also, much medication non-	Thank you for the valuable suggestion, we have considered the same	P16, 22-25 P17, 1-2

	adherence is intentional and not a matter of forgetting.		
	For an international audience, would there be any value in mentioning that people of the Indian subcontinent have a higher risk of CVD than people of other race/ethnic backgrounds in many countries? That is, there appears to be a genetic risk of CVD among people of Indian race/ethnicity that makes management of CVD (and DM) an especially urgent global health priority.	Thank you for the valuable suggestion, we have also considered the same	P17, 21-23
	There are very minor grammatical mistakes, such as “Another major facilitator from the health system side is the trust that patient has on their physician and follow the advice related to self-care and adherence effectively” (p. 15 line 12 ff). I would reword, “Another major facilitator from the health system side is the trust that patient has in their physician and their willingness to effectively follow advice related to self-care and adherence.” I’m sure the editors would assist with these during the copy-editing and proof stage.	Thank you, we have proof read the manuscript once again	P 14, 6-8

VERSION 2 – REVIEW

REVIEWER	Hughes, Joel Kent State University, Applied Psychology Center
REVIEW RETURNED	10-Dec-2021

GENERAL COMMENTS	<p>This is a review of BMJ Open 2021-055226</p> <p>This systematic review and synthesis of studies reporting patient and provider perspectives on barriers and facilitators for medication adherence was expertly prepared. Preregistration on PROSPERO and use of the ENTREQ statement are strengths. The topic is important. The results are not that surprising, and are valuable. Minor grammar editing remains.</p> <p>For example, on page 15, line 24-25, the authors state, “A few studies have also shown evidence of improvisation in medication adherence where efforts were taken to overcome the cultural barriers.” I think that improvisation is the wrong word choice. Do the authors mean improvement? This would read, “A few studies have also shown evidence of improvement in medication adherence where efforts were taken to overcome the cultural barriers.”</p> <p>Other than these minor grammar issues, I am satisfied with the revision. This version of the manuscript is stronger.</p>
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VERSION 2 – AUTHOR RESPONSE

Reviewer 1

For example, on page 15, line 24-25, the authors state, “A few studies have also shown evidence of improvisation in medication adherence where efforts were taken to overcome the cultural barriers.” I think that improvisation is the wrong word choice. Do the authors mean improvement? This would read, “A few studies have also shown evidence of improvement in medication adherence where efforts were taken to overcome the cultural barriers.”

Thanks for the comment. We have made necessary

changes P16, 2-4