

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Community Health Workers Involvement in Preventative Care in Primary Health Care: A Systematic Scoping Review
AUTHORS	Sharma, Nila; Harris, Elizabeth; Lloyd, Jane; Mistry, Sabuj; Harris, Mark

VERSION 1 – REVIEW

REVIEWER	Miya Barnett University of California, Santa Barbara USA
REVIEW RETURNED	04-Jun-2019

GENERAL COMMENTS	<p>The paper, Community Health Workers Involvement in Preventative Care in Primary Health Care: A Scoping Review, presents the results of a systematic/ scoping review of CHW involvement in primary care settings. This area of research is of interest, especially in regards to reducing disparities for underserved communities. The paper could be strengthened by a few framing concerns and careful editing.</p> <p>Recommendations are listed below:</p> <ol style="list-style-type: none"> 1. The authors point to how structural and systematic barriers can lead to health disparities, but use the example of language, which still may place the blame on the individual rather than the system of care. Perhaps this issue could be framed around the inadequate professional workforce that speaks multiple languages. Other societal level barriers, such as discrimination, lack of insurance, etc. might be highlighted here as well. 2. The authors state that “CHWs can be a professional or lay workforce.” However, in their definitions (consistent with most definitions in practice and the literature), CHWs are typically a lay workforce. Please provide a consistent definition or include a citation about how CHWs are a professional workforce. 3. Was there an inclusion criteria related to the need to focus on physical health not mental health? It appears that studies that investigated CHWs delivery of mental health interventions, including within primary care, (e.g., Waitzkin et al., 2011, Promotoras as mental health practitioners in primary care). On this note, when the authors discuss potential roles for CHWs, they might want to include examples from the mental health literature, which includes CHWs delivering evidence-based treatments. 4. In the results and discussion sections, challenges with implementation were discussed. Connecting these findings with
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	<p>implementation science literature could deepen this discussion.</p> <p>5. The authors state that “The objective of this review was to assess the effective models of community health workers involvement in preventive care for disadvantaged patients in primary health care that could be applicable to Australian context,” but it appears that the objective is to establish if these models are effective.</p> <p>6. The following minor edits will help with readability:</p> <ul style="list-style-type: none"> a. Please introduce the acronym CALD on page 4 when it is first used as opposed to the participants section b. Please use CHWs consistently after introducing the acronym. Community health workers is still used intermediately throughout the paper. c. Page 3, Line 32 – should read prevention and management “of” these conditions d. Page 12, Line 23 – please change “Male CHWs were used” to “included Male CHWs” as saying that people are “used” can be problematic for a workforce that often comes from disadvantaged communities. e. Please define what the authors mean by “mature aged” f. Table 5 needs a note about what the numbers mean
REVIEWER	<p>Ricardo Batista Postdoctoral Research Fellow Ottawa Hospital Research Institute-ICES Ottawa Ottawa, Canada</p>
REVIEW RETURNED	24-Jul-2019
GENERAL COMMENTS	<p>This is a very important topic and CHWs are an important element in community-oriented health strategies that have demonstrated a positive impact on access to healthcare and improving the health conditions of the population. This study provides a breath of CHW experiences in developed countries.</p> <p>I think the manuscript presents a very detailed description of the results and the presentation is very well structured. However, there are a few comments and suggestions to the authors that I think need some clarification.</p> <p>Main comments/suggestions</p> <ol style="list-style-type: none"> 1. Is this a scoping or systematic review? The title indicates ‘scoping review’, but the manuscript rather describes a systematic review approach. Please clarify this. 2. Why the review is limited to OECD countries? There is copious evidence of CHW experiences in developing countries/regions reporting positive outcomes/impact on different health problems, such as infant and maternal health, infectious diseases control, and even chronic diseases prevention and control. Many of those experiences could be beneficial or applied to the Australian context. Can the authors explain the decision to restrict the review to developed countries? 3. Related to that, among the selected studies, there is one study from Mexico, which is not an OECD member. 4. There are numerous reports and studies on the integration of CHW into primary health care strategies, however, there is little or no reference or discussion on the interaction of the CHW with the health system itself in this study, particularly at the primary care level. Have the authors found any information in the reviewed literature on this relationship? And whether that relationship, if exist, enables better outcomes? Perhaps this can be noted/discussed as a potential limitation.

	<p>5. The final paragraph of page 18, is not clear what the authors mean by "...there is no mention of the clinical roles that can be seen in underserved settings such as Aboriginal Health Workers in Australia, rural health workers in parts of the USA and maternal and child workers in less developed countries." What is the clinical role? Are you talking about a 'clinical role' identified in the reviewed literature or in different literature? Or is it a role that is currently carried out by CHW in Australia? Can you please, clarify more this?</p> <p>Other comments</p> <p>In the section 'Types of disease', the sentence "Others were aimed at improving infant mortality" (line 32, page 10), it sounds a bit odd to say, 'improve mortality', perhaps 'at reducing infant mortality' is better in this case.</p> <p>In the section 'Types of Community Health Workers' Role' (1st line, page 14), although the table provides the details, it would be worth to list the roles in the text, so the reader can quickly know which are the main roles identified in the literature.</p> <p>Later in the discussion, there is a list of roles identified in the literature (ref 65), that seems to be disconnected in the text, so, it could be inserted as a textbox.</p> <p>When describing the results, some references seems to be missing or are far from the initial inclusion in the text. For example, the first paragraph of page 15, contains several sentences describing/quoting results from the studies, but no reference is provided. Are these from reference 58? If so, it should be indicated.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

The paper, Community Health Workers Involvement in Preventative Care in Primary Health Care: A Scoping Review, presents the results of a systematic/ scoping review of CHW involvement in primary care settings. This area of research is of interest, especially in regards to reducing disparities for underserved communities. The paper could be strengthened by a few framing concerns and careful editing.

Recommendations are listed below:

1. The authors point to how structural and systematic barriers can lead to health disparities, but use the example of language, which still may place the blame on the individual rather than the system of care. Perhaps this issue could be framed around the inadequate professional workforce that speaks multiple languages. Other societal level barriers, such as discrimination, lack of insurance, etc. might be highlighted here as well.

Review response: There are both systematic and provider barriers: These include cost, reluctance to use interpreters (or bilingual workers), and lack of cooperation/integration of care between health professionals and services. We have edited the text to explain this (See Page 5)

2. The authors state that "CHWs can be a professional or lay workforce." However, in their definitions (consistent with most definitions in practice and the literature), CHWs are typically a lay workforce. Please provide a consistent definition or include a citation about how CHWs are a professional workforce.

Review response: Community health workers are essentially lay community persons who have some training to equip with knowledge and skills to undertake specific roles or responsibilities. We removed "CHWs can be a professional or lay workforce" from the revised manuscript and checked for any inconsistencies in definition of CHW throughout the manuscript.

3. Was there an inclusion criterion related to the need to focus on physical health not mental health? It appears that studies that investigated CHWs delivery of mental health interventions, including within primary care, (e.g., Waitzkin et al., 2011, Promotoras as mental health practitioners in primary care). On this note, when the authors discuss potential roles for CHWs, they might want to include examples

from the mental health literature, which includes CHWs delivering evidence-based treatments.

Review response: Mental health prevention was not excluded. However, the search for “preventive care” may not have captured interventions involving CHW in mental health promotion. This has been added to the discussion. (See Page 22)

4. In the results and discussion sections, challenges with implementation were discussed. Connecting these findings with implementation science literature could deepen this discussion.

Review response: This has been added to the discussion of limitations. (See Page 22).

5. The authors state that “The objective of this review was to assess the effective models of community health workers involvement in preventive care for disadvantaged patients in primary health care that could be applicable to Australian context,” but it appears that the objective is to establish if these models are effective.

Review response: The review has gone beyond establishing if interventions are effective to also describe how the interventions work and how they are implemented and sustained. We have edited the objective on Page 6.

6. The following minor edits will help with readability:

a. Please introduce the acronym CALD on page 4 when it is first used as opposed to the participants section

Review response: This has been corrected in the revised manuscript.

b. Please use CHWs consistently after introducing the acronym. Community health workers is still used intermediately throughout the paper.

Review response: We have checked throughout the manuscript and replaced community health worker with CHW in places where we found relevant.

c. Page 3, Line 32 – should read prevention and management “of” these conditions

Review response: Corrected in the revised manuscript.

d. Page 12, Line 23 – please change “Male CHWs were used” to “included Male CHWs” as saying that people are “used” can be problematic for a workforce that often comes from disadvantaged communities.

Review response: The sentence has been corrected in the revised manuscript. New line is “CHWs were mostly females (only in few instances CHWs were male) and were members of the communities they served.”

e. Please define what the authors mean by “mature aged”

Review response: The sentence has been corrected in the revised manuscript. New line is “CHWs were mostly females (only in few instances CHWs were male) and were members of the communities they served.”

f. Table 5 needs a note about what the numbers mean

Review response: A note under table 5 has been added to explain about the meaning of the number.

Reviewer: 2

This is a very important topic and CHWs are an important element in community-oriented health strategies that have demonstrated a positive impact on access to healthcare and improving the health conditions of the population. This study provides a breath of CHW experiences in developed countries. I think the manuscript presents a very detailed description of the results and the presentation is very well structured. However, there are a few comments and suggestions to the authors that I think need some clarification.

Main comments/suggestions

1. Is this a scoping or systematic review? The title indicates ‘scoping review’, but the manuscript rather describes a systematic review approach. Please clarify this.

Review response: We define the study as ‘scoping review’ and we checked thoroughly to keep it consistent in the revised manuscript.

2. Why the review is limited to OECD countries? There is copious evidence of CHW experiences in developing countries/regions reporting positive outcomes/impact on different health problems, such as infant and maternal health, infectious diseases control, and even chronic diseases prevention and control. Many of those experiences could be beneficial or applied to the Australian context. Can the authors explain the decision to restrict the review to developed countries?

Review response: The justification of limiting to OECD countries are included in revised manuscript as “The health care have diverse applications in different health systems. We focused in countries with developed health systems where the CHW role supplements rather than replaces traditional roles of doctors, nurses and other health professionals. Therefore, we selected studies that were conducted in Organisation for Economic Cooperation and Development (OECD) countries.” (Page 8)

3. Related to that, among the selected studies, there is one study from Mexico, which is not an OECD member.

Review response: Mexico is an OECD member (joined in 1994)

4. There are numerous reports and studies on the integration of CHW into primary health care strategies, however, there is little or no reference or discussion on the interaction of the CHW with the health system itself in this study, particularly at the primary care level. Have the authors found any information in the reviewed literature on this relationship? And whether that relationship, if exist, enables better outcomes? Perhaps this can be noted/discussed as a potential limitation.

Review response: The reviewer has raised an interesting point especially in the USA where many CHWs are employed by non-government organisations. We have considered this in our data and included some discussion. We have noted that there is a growing consensus that CHWs are most effective when they are part of multidisciplinary health care team within the existing health system. We have also looked at the evidence of the integration of CHW within health care teams in the included studies. (See Discussion Page 21)

5. The final paragraph of page 18, is not clear what the authors mean by “...there is no mention of the clinical roles that can be seen in underserved settings such as Aboriginal Health Workers in Australia, rural health workers in parts of the USA and maternal and child workers in less developed countries.” What is the clinical role? Are you talking about a ‘clinical role’ identified in the reviewed literature or in different literature? Or is it a role that is currently carried out by CHW in Australia? Can you please, clarify more this?

Review response: We meant the clinical preventive role and corrected the line mentioning “clinical preventive role” in revised manuscript. The clinical preventive roles may include measuring and treating physiological risk factors such as high blood pressure and obesity and giving immunisations. For example, rural Aboriginal Health Workers are involved in monitoring blood pressure and immunisations (Page 20).

6. Other comments

6.1 In the section ‘Types of disease’, the sentence “Others were aimed at improving infant mortality” (line 32, page 10), it sounds a bit odd to say, ‘improve mortality’, perhaps ‘at reducing infant mortality’ is better in this case.

Review response: Corrected in the revised manuscript.

6.2 In the section ‘Types of Community Health Workers’ Role’ (1st line, page 14), although the table provides the details, it would be worth to list the roles in the text, so the reader can quickly know which are the main roles identified in the literature.

Review response: Added in the revised manuscript as “This review identified four broad categories of role (i.e., education, navigation, support and research) played by the CHWs in preventive care”

6.3 Later in the discussion, there is a list of roles identified in the literature (ref 65), that seems to be disconnected in the text, so, it could be inserted as a textbox.

Review response: The information is added in a text box in the revised manuscript.

6.4 When describing the results, some references seems to be missing or are far from the initial inclusion in the text. For example, the first paragraph of page 15, contains several sentences describing/quoting results from the studies, but no reference is provided. Are these from reference 58? If so, it should be indicated.

Review response: This has been corrected

VERSION 2 – REVIEW

REVIEWER	Miya Barnett University of California, Santa Barbara United States of America
REVIEW RETURNED	07-Oct-2019

GENERAL COMMENTS	The authors have been responsive to reviewer comments. A few typos remain. Though the authors now say this is a scoping review, the methods section says it was guided by systematic review methodology. In a few instances, the authors continue to fully write out acronyms (e.g., community health worker after CHW is introduced).
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REVIEWER	Ricardo Batista Postdoctoral Research Fellow Ottawa Hospital Research Institute, The University of Ottawa, Canada
REVIEW RETURNED	09-Oct-2019

GENERAL COMMENTS	<p>Thank you to the authors for addressing and responding to the comments and suggestions to the manuscript. It has certainly improved and gained clarity.</p> <p>However, the methodological approach still needs to be reviewed. The authors have defined the study as a scoping review, but there is no reference to the scoping review methodology used. The approach followed in the study continue to have elements of a systematic review approach, as indicated by the referenced protocol (Ref. 18) and the work carried out to the study. This is fine, but it needs to be consistently described and supported. There are some published examples of “systematic scoping reviews” in the literature that combine a scoping and a systematic review approaches (see for examples below), which the authors could use as a reference to this study.</p> <p>I have no other comments on the manuscript.</p> <ul style="list-style-type: none"> - Peters MDJ, Godfrey CM, Khalil H, McInerney P, Parker D, and Soares CB. Guidance for conducting systematic scoping reviews. International Journal of Evidence-Based Healthcare. 2015; 13: 141-6. - Samaan Z, Mbuagbaw L, Kosa D, et al. A systematic scoping review of adherence to reporting guidelines in health care literature. J Multidiscip Healthc. 2013;6:169–188. Published 2013 May 6. doi:10.2147/JMDH.S43952 - Booth V, Hood-Moore V, Hancox JE, et al Systematic scoping review of frameworks used to develop rehabilitation interventions for older adults BMJ Open 2019;9:e024185. doi: 10.1136/bmjopen-2018-024185
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VERSION 2 – AUTHOR RESPONSE

Reviewer: 1

1. The authors have been responsive to reviewer comments. A few typos remain. Though the authors now say this is a scoping review, the methods section says it was guided by systematic review methodology.

Review response: The authors consider your opinion and agree that there are elements of systematic reviews while it is being reported as scoping review. This has been addressed through using the term 'systematic scoping review', a blending of these two review types throughout the revised manuscript. We have also added the following literatures in support of this claim.

2. In a few instances, the authors continue to fully write out acronyms (e.g., community health worker after CHW is introduced).

Review response: We checked this thoroughly and corrected where necessary in the revised manuscript.

Reviewer: 2

Thank you to the authors for addressing and responding to the comments and suggestions to the manuscript. It has certainly improved and gained clarity. However, the methodological approach still needs to be reviewed. The authors have defined the study as a scoping review, but there is no reference to the scoping review methodology used. The approach followed in the study continue to have elements of a systematic review approach, as indicated by the referenced protocol (Ref. 18) and the work carried out to the study. This is fine, but it needs to be consistently described and supported. There are some published examples of “systematic scoping reviews” in the literature that combine a scoping and a systematic review approaches (see for examples below), which the authors could use as a reference to this study.

- Peters MDJ, Godfrey CM, Khalil H, McInerney P, Parker D, and Soares CB. Guidance for conducting systematic scoping reviews. International Journal of Evidence-Based Healthcare. 2015; 13: 141-6 [PubMed](#) .

- Samaan Z, Mbuagbaw L, Kosa D, et al. A systematic scoping review of adherence to reporting guidelines in health care literature. J Multidiscip Healthc. 2013;6:169–188. Published 2013 May 6. doi:10.2147/JMDH.S43952

- Booth V, Hood-Moore V, Hancox JE, et al Systematic scoping review of frameworks used to develop rehabilitation interventions for older adults BMJ Open 2019;9:e024185. doi: 10.1136/bmjopen-2018-024185

Review response: We agree to your comment and believe that though it is a scoping review it has elements of systematic review and could well be termed as systematic scoping review. We have incorporated this throughout the revised manuscript. We have also added the articles you have mentioned in support of this claim.

VERSION 3 – REVIEW

REVIEWER	Ricardo Batista University of Ottawa
REVIEW RETURNED	21-Nov-2019
GENERAL COMMENTS	Thank you for the response to the coments. I think that the changes are appropriate. I have no additional observations.