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)	Health Promotion Intervention Delivered by Trained Community	
	Health Workers (CHWs) for Obesity Prevention and Control among	
	Adult People: A Scoping Review Protocol	
AUTHORS	Fitriadi, Yogi; Danawati, Wahyu; Sutomo, Adi Heru	

VERSION 1 – REVIEW

REVIEWER	Francesco Venturelli	
	Azienda USL di Reggio Emilia, Epidemiology unit	
REVIEW RETURNED	15-Mar-2023	

OFNEDAL COMMENTS	Dan Fillian	
GENERAL COMMENTS	Dear Editor,	
	Thank you for the opportunity to revise the manuscript titled "Health Promotion Intervention Delivered by Trained Community Health Worker (CHW) For Obesity Prevention and Control Among Adult People: A Scoping Review Protocol" submitted for publication on your eminent journal.	
	The review topic is relevant since obesity is still a health condition with a high burden on people health, quality of life and on health care services worldwide.	
	Below I report my comments, hoping that they may help to increase the value of the authors work.	
	Best regards	
	General comments:	
	- English language revision is needed.	
	Major comments:	
	- Strategy for searching (page 5): more details on how grey literature will be searched should be provided (i.e. sources, strategies). Preprint databases will be considered?	
	- Strategy for searching (page 5): since the aim of this scoping review is to provide a broad overview on a specific type of intervention, the search may be extended to ongoing trials databases (i.e. Clinicaltrial.gov) that can provide evidence on up-to-date interventions in this field. I think it would increase the value of the review authors' work.	
	- Strategy for searching (page 5): The authors should provide a justification for limiting the publication date to the 2010-2022 period?	

- Eligibility criteria (Page 5, lines 38-39): "The primary/secondary outcome of the health promotion intervention must be BMI, and/or waist circumference, and/or weight." Despite the most relevant outcomes of interventions tackling obesity are anthropometric measures and obesity-related health consequences, it is common that "more proximal" outcomes (i.e. change in obesity related behaviours) are used to assess the effectiveness of interventions, especially in the health promotion context. In my opinion, limiting the inclusion to studies reporting anthropometric measures as outcomes in a scoping review will limit the completeness of the resulting picture compared to the actual practice. I think the authors should reconsider this point or at least discuss this as a limitation of their review and how it can affect the value of the review results.

Minor comments:

- Page Research Ethics and Dissemination (Abstract): a plain language summary may be a useful tool to disseminate the review results, you may consider it in your dissemination plan.
- Strengths and limitations of this study Section: "Because of some research papers related to this topic may not have been published or made accessible, our review may not include all of them." This is an intrinsic limitation of any literature review, I think it's not necessaire to report it and it may be more appropriate to focus this paragraph on limitations more specific to your review protocol (i.e. limiting the search to articles written in English may exclude many relevant articles published in context that may take great advantage from health promotion interventions implemented in the community setting, such as Spanish speaking countries in Latin America).
- Introduction, page 2, lines 15-18: the sentence on the impact of policies related to COVID-19 pandemic on obesity related behaviours needs a reference. The sentence following the one on COVID-19 related policies seems to be connected with the previous one but the reference was published in 2012. This paragraph should be revised for clarity.
- Introduction, page 3, lines 34-35: "This intervention is to support the management of non-communicable diseases with medicines given by health professionals." This sentence is not clear. To what intervention it refers?
- Strategy for searching (page 5): Elderly are included? Should search terms related to elderly subjects be considered in the search strategy? At least a comment about this point may be appropriate.
- Strategy for searching (page 5): I see no comments on the geographical area or socio-economic criteria in the eligibility criteria. Studies were included regardless the country, healthcare system or socioeconomic subgroups of people in which they were implemented? Could you add a comment on this point? The authors may also consider these variables to describe the interventions when reporting the review results.
- Collating, summarizing and reporting results of the review (page 6): since community interventions may overcome some limitations related to the access to health care services, they may affect the related health inequalities. I suggest the authors to consider this

	topic when summarizing the available evidence. At least reporting for how many interventions the impact on health inequalities has been assessed.	
	- Expert Consultation (page 7): the sentence under this chapter should be revised.	
REVIEWER	Carl Lavie	
	The University of Queensland School of Medicine	
REVIEW RETURNED	08-May-2023	
GENERAL COMMENTS	The paper is fine and publishable, although I see no strong reason that this methods paper is needed nor will it be cited except when the completed papers are published.	
REVIEWER	Bruno Bizzozero-Peroni Universidad de Castilla-La Mancha - Campus de Cuenca, Health and Social Research Center	
REVIEW RETURNED	19-Jun-2023	
GENERAL COMMENTS	This manuscript provides a protocol for a scoping review to map the available evidence on health promotion intervention delivered by trained CHWs to prevent and to control obesity among the adult population in the community setting. A good introduction and rationale for the study is provided. The methodology section should be revised and should include important information that has not been considered. Below are my comments and suggestions to improve and strengthen this protocol. 1. The objective of the scoping review is "to chart the existing evidence on health promotion intervention delivered by trained CHWs to prevent and to control obesity among the adult population in the community setting"; and the research question is to "What are the characteristics of the health promotion intervention delivered by trained CHW to prevent and control obesity among adult population?" However, the authors provided only 4 items in the data extraction according to the intervention characteristics (frequency, intervals, person or group responsible, and level of prevention). Throughout the protocol it is not entirely clear what the authors are looking for with the scoping review. That is, they would seek to detail the characteristics of the intervention, but for this more information about the intervention is needed (e.g., type, participation-follow-up and dropout rates, patient perception, etc.). The definition and practices of health promotion interventions by trained CHW for obesity prevention and control are not well understood or documented at the different levels of prevention? Would you seek to systematize this information and narrate the conceptualization and implementation of health promotion interventions in these contexts? Please specify, detail, and clarify in the protocol. 2. Protocol and registration is one item of PRISMA-ScR. The authors do not specify that the review will be registered, only that PROSPERO does not accept scoping review protocols. There are	

3. Throughout the text should state "scoping review" and not just "review" (e.g., page 4, 6...). In addition, I recommend that scoping review (ScR) be abbreviated.

- 4. Methodology. Page 4. It should be noted that the Joanna Briggs Institute guidelines were followed.
- 5. Page 4. Please, specify the six stages of the framework for scoping reviews developed by Arksey and O'Malley. Detail these stages in your protocol, indicating them in each subtitle. For example, Stage 1: Identifying the research question.
- 6. Line 46 (page 4): "A published method for scoping reviews is the Arksey and O'Malley framework..." Please, remove this remove this part of the sentence as it has been stated above, and here it is repeated and redundant.
- 7. Strategy for searching. Page 5: Differentiate search platforms from databases and specify both for your search strategy. For example, MEDLINE is the database, which is available for searching on different platforms (e.g., Ovid, PubMed, Web of Science).
- 8. Page 5: Specify where the search for gray literature will be conducted.
- 9. Page 5: Provide detailed search strategies for electronic databases (PubMed, Cochrane, .etc.). Consider placing it as supplementary material.
- 10. Page 5: Justify why articles published only from 2010 to 2022 will be searched.
- 11. Eligibility criteria. Page 5: Specify from what age the adult study population will be included.
- 12. Page 6. "In accordance with Peters et al., the following information ..." Please, provide reference and year.
- 13. Supplementary material. The PRISMA-ScR checklist should be included in the scoping review manuscript, as stated on page 4. However, it should not be included as supplementary material in the protocol. In this case, although it is not a systematic review, you should consider including the PRISMA-P (specifically for protocols) to prepare the protocol for this scoping review.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Francesco Venturelli, Azienda USL di Reggio Emilia, University of Modena and Reggio Emilia Comments to the Author:

Dear Editor,

Thank you for the opportunity to revise the manuscript titled "Health Promotion Intervention Delivered by Trained Community Health Worker (CHW) For Obesity Prevention and Control Among Adult People: A Scoping Review Protocol" submitted for publication on your eminent journal.

The review topic is relevant since obesity is still a health condition with a high burden on people health, quality of life and on health care services worldwide.

Below I report my comments, hoping that they may help to increase the value of the authors work. Best regards

General comments:

- English language revision is needed.

Reply: we received a support from the university translation service to proofread our article. We have proofread our article based on your comment.

Major comments:

- Strategy for searching (page 5): more details on how grey literature will be searched should be provided (i.e. sources, strategies). Pre-print databases will be considered? Reply: we elaborate the explanation of searching strategy for grey literature, as stated in page 5 lines 9-11 (search strategy) "...We will search for the peer review articles and grey literature from ongoing trial, dissertation, thesis, and conference paper, with English Language published from 2010 until 2022...."
- Searching strategy (page 5): since the aim of this scoping review is to provide a broad overview on a specific type of intervention, the search may be extended to ongoing trials databases (i.e. Clinicaltrial.gov) that can provide evidence on up-to-date interventions in this field. I think it would increase the value of the review authors' work.

Reply: we agree with your suggestion, and we have added the database used for searching (using clinicaltrial.gov as stated in page 5 line 9-11 (search strategy). "We will conduct a comprehensive literature search in the MEDLINE via PubMed, Cochrane, Scopus, ProQuest, medRxiv preprint database, and Clinicaltrial.gov ongoing trial database."

- Strategy for searching (page 5): The authors should provide a justification for limiting the publication date to the 2010-2022 period?

Reply: we agree with your statement, and we have added a justification about the limitation period of publication date as stated in page 5 line 13-17 (search strategy) "...Literature search started from publication since 2010, after recommendation from WHO report, that CHW can integrate in national health system has been published. CHW integration in national health system may bring an impact on the improvement of community health activity, especially in health promotion aspect..."

- Eligibility criteria (Page 5, lines 38-39): "The primary/secondary outcome of the health promotion intervention must be BMI, and/or waist circumference, and/or weight." Despite the most relevant outcomes of interventions tackling obesity are anthropometric measures and obesity-related health consequences, it is common that "more proximal" outcomes (i.e. change in obesity related behaviours) are used to assess the effectiveness of interventions, especially in the health promotion context. In my opinion, limiting the inclusion to studies reporting anthropometric measures as outcomes in a scoping review will limit the completeness of the resulting picture compared to the actual practice. I think the authors should reconsider this point or at least discuss this as a limitation of their review and how it can affect the value of the review results.

Reply: we agree with your suggestion, and we have added the eligibility criteria also for other studies which have "more proximal outcome" (behavior related obesity) particularly on physical activity and dietary pattern as stated at page 5 lines 29-30

Minor comments:

- Page Research Ethics and Dissemination (Abstract): a plain language summary may be a useful tool to disseminate the review results, you may consider it in your dissemination plan.

 Reply: we agree with your comment, and we have added this information in page 8 lines 3-4. Ethics and dissemination part. "We will give a plain language summary to disseminate the review result."
- Strengths and limitations of this study Section: "Because of some research papers related to this topic may not have been published or made accessible, our review may not include all of them." This

is an intrinsic limitation of any literature review, I think it's not necessaire to report it and it may be more appropriate to focus this paragraph on limitations more specific to your review protocol (i.e. limiting the search to articles written in English may exclude many relevant articles published in context that may take great advantage from health promotion interventions implemented in the community setting, such as Spanish speaking countries in Latin America).

Reply: we agree with your comment. We have added this information at page 2 lines 1-3. Abstract Strength and Limitation of this study "The search for articles was limited to those written in English and excluded many relevant articles published in the context that may take great advantage of health promotion interventions implemented in the community setting, such as Spanish speaking countries in Latin America."

- Introduction, page 2, lines 15-18: the sentence on the impact of policies related to COVID-19 pandemic on obesity related behaviors needs a reference. The sentence following the one on COVID-19 related policies seems to be connected with the previous one, but the reference was published in 2012. This paragraph should be revised for clarity.

Reply: we have updated the paragraph for clarity purposes based on your comment and added reference for this particular sentence "Predicting Obesity Using Facial Pictures during COVID19 Pandemic" as stated in page 2 line 9-11 "The risk of obesity has increased with the increase in sedentary lifestyle during the coronavirus disease (COVID 19) pandemic. Several government policies, such as the Work at Home policy and social restrictions, caused all activities to be completed from home."

- Introduction, page 3, lines 34-35: "This intervention is to support the management of non-communicable diseases with medicines given by health professionals." This sentence is not clear. To what intervention it refers?
- Reply: we agree with your comment, this sentence is not clear, so we eliminate this sentence on revised version of our manuscript
- Strategy for searching (page 5): Elderly are included? Should search terms related to elderly subjects be considered in the search strategy? At least a comment about this point may be appropriate.

Reply: in our review, elderly people is not included in the inclusion criteria which supported by the author's statement in the inclusion paragraph at Eligibility criteria page 5 line 27 that we have added age restriction only for adult (18-64 years old).

- Strategy for searching (page 5): I see no comments on the geographical area or socio-economic criteria in the eligibility criteria. Studies were included regardless the country, healthcare system or socioeconomic subgroups of people in which they were implemented? Could you add a comment on this point? The authors may also consider these variables to describe the interventions when reporting the review results.

Reply: We included all studies in this review with different geographical area (urban, suburban, rural) and socioeconomic criteria. In addition, we also included all studies from LMICs and HICs, to identify the different strategies and implementation of health promotion and intervention delivered by trained CHW to control obesity among adult people. We add this information at table 1 PCC eligibility criteria section at page 6 lines 5-6

- Collating, summarizing and reporting results of the review (page 6): since community interventions may overcome some limitations related to the access to health care services, they may affect the related health inequalities. I suggest the authors to consider this topic when summarizing the available evidence. At least reporting for how many interventions the impact on health inequalities has been assessed.

Reply: we agree with your comment that this information is essential to be added in this article. Additional information in p.6 stage 5 about collating, summarizing, and reporting result of the ScR have been added by the author as stated, "We also summarize the topic about how many health promotion interventions delivered by trained CHW have impacts on health inequality and what is the impact of this intervention in the health inequalities." in page 7 lines 13-15.

Detail for health inequality aspects have been described in table 1 PCC element at context part, page 6 lines 5-6

- Expert Consultation (page 7): the sentence under this chapter should be revised. Reply: We agree with you and modify the sentence in this section with the following statement: "Expert in health promotion and obesity will be contacted for consultation to confirm our findings and interpretations" as stated in page 7 line 20

Reviewer: 2

Dr. Carl Lavie, The University of Queensland School of Medicine Comments to the Author: The paper is fine and publishable, although I see no strong reason that this methods paper is needed nor will it be cited except when the completed papers are published.

Reply: Thank you Dr. Carl Lavie

Reviewer 3 Reviewer: 3

Dr. Bruno Bizzozero-Peroni, Universidad de Castilla-La Mancha - Campus de Cuenca, Universidad de la Republica Uruguay Comments to the Author:

This manuscript provides a protocol for a scoping review to map the available evidence on health promotion intervention delivered by trained CHWs to prevent and to control obesity among the adult population in the community setting. A good introduction and rationale for the study is provided. The methodology section should be revised and should include important information that has not been considered. Below are my comments and suggestions to improve and strengthen this protocol.

1. The objective of the scoping review is "to chart the existing evidence on health promotion intervention delivered by trained CHWs to prevent and to control obesity among the adult population in the community setting"; and the research question is to "What are the characteristics of the health promotion intervention delivered by trained CHW to prevent and control obesity among adult population?" However, the authors provided only 4 items in the data extraction according to the intervention characteristics (frequency, intervals, person or group responsible, and level of prevention). Throughout the protocol it is not entirely clear what the authors are looking for with the scoping review. That is, they would seek to detail the characteristics of the intervention, but for this more information about the intervention is needed (e.g., type, participation-follow-up and dropout rates, patient perception, etc.). The definition and practices of health promotion interventions by trained CHW for obesity prevention and control are not well understood or documented at the different levels of prevention? Would you seek to systematize this information and narrate the conceptualization and implementation of health promotion interventions in these contexts? Please specify, detail, and clarify in the protocol.

Reply: We agree with the comment that it is necessary for the author to specify and clarify the protocol. We made a revision in page 4 line 28-29 and page 5 lines 1-4 "This ScR was conducted to chart the evidence of health promotion interventions delivered by trained CHWs to prevent and to control obesity. We aimed to answer the following queries:

- 1. How are the characteristics of the studies about health promotion interventions delivered by trained CHWs to prevent and control obesity among adult populations?
- 2. How are the gaps in the sociodemographic of participants and health promotion intervention strategies delivered by trained CHWs to prevent and control obesity among adult populations?

The author also added some information based on the reviewer comment to specify our ScR regarding the characteristic of intervention in p. 6 stage 4: Data Charting and Extraction "... We also gathered additional information about the evidence of health promotion such as: type of intervention, participation-follow-up and dropout rates, also patient perception in accordance with our review question and your comment." as stated in page 7 lines 3-5

2. Protocol and registration is one item of PRISMA-ScR. The authors do not specify that the review will be registered, only that PROSPERO does not accept scoping review protocols. There are other platforms to register scoping reviews such as OSF (Open Science Framework). This is mandatory for a scoping review protocol.

Reply: we agree with your comment, so we have registered the ScR protocol in Open Science Framework (OSF) on 2 July 2023 with link https://osf.io/gtbw9. We add this information in supplementary file (PRISMA P) at registration section.

- 3. Throughout the text should state "scoping review" and not just "review" (e.g., page 4, 6...). In addition, I recommend that scoping review (ScR) be abbreviated.
- Reply: We agree with your suggestion to simplify our manuscript. The author abbreviated the term "Scoping Review" to become "ScR" as stated first in study objective at page 4 line 5.
- 4. Methodology. Page 4. It should be noted that the Joanna Briggs Institute guidelines were followed. Reply: we agree with your suggestion, and we have added this information in page 4 lines 20-22. "The outline included the identification of the research question, search for relevant studies, selection of eligible research, charting and collation of data, and summary and reporting of results based on Joanna Briggs Institute (JBI) guideline."
- 5. Page 4. Please, specify the six stages of the framework for scoping reviews developed by Arksey and O`Malley. Detail these stages in your protocol, indicating them in each subtitle. For example, Stage 1: Identifying the research question.

Reply: we agree with your comment, and we have added this information in each subtitle of the six stages framework in our manuscript

6. Line 46 (page 4): "A published method for scoping reviews is the Arksey and O'Malley framework..." Please, remove this remove this part of the sentence as it has been stated above, and here it is repeated and redundant.

Reply: we agree with your comment and we have removed this particular section

7. Strategy for searching. Page 5: Differentiate search platforms from databases and specify both for your search strategy. For example, MEDLINE is the database, which is available for searching on different platforms (e.g., Ovid, PubMed, Web of Science).

Reply: We revised our manuscript and differentiate search platforms from several databases and specified into searching strategy as stated in the following statement at page 5 line 8 "We conducted a comprehensive literature search on MEDLINE via PubMed, Cochrane, Scopus, and ProQuest electronic database."

- 8. Page 5: Specify where the search for gray literature will be conducted.
- Reply: We revised our manuscript based on reviewer comment, particularly in page 5 lines 9-12 Strategy for searching, we wrote this following statement "We will also search for the grey literature from ongoing trial, dissertation, thesis, and conference paper at Scopus, ProQuest thesis and dissertation, medRxiv preprint database, and Clinicaltrial.gov ongoing trial database."
- 9. Page 5: Provide detailed search strategies for electronic databases (PubMed, Cochrane, etc.). Consider placing it as supplementary material.

Reply: we have added search strategies for all databases in the supplemental material 2 as stated at page 5 lines 20-21. We use references number 25 and 26 for inputting keyword in conducting searching strategy.

- 10. Page 5: Justify why articles published only from 2010 to 2022 will be searched. Reply: we added this information on page 5 lines 13-17 strategy for searching: "Literature search started from articles published since 2010, in accordance with the recommendations of a World Health Organization report that integrated CHWs in the national health system. CHWs integration in the national health system may have an impact on the improvement of community health activity, especially in the health promotion aspect."
- 11. Eligibility criteria. Page 5: Specify from what age the adult study population will be included. Reply: we added the age range of adult population in the included study for the ScR page 5 line 26-27 Eligibility criteria "....are included in this ScR as long as they delivered health promotion interventions among general adult populations (age 18 to 64 years old), adults who have obesity"
- 12. Page 6. "In accordance with Peters et al., the following information ..." Please, provide reference and year.

Reply: we added the citation reference for this sentence in page 6 lines 20-21 stage 4: Data Charting and Extraction "In accordance with the work of Peters et al. (2015),(27) the following information were gathered for data extraction:"

13. Supplementary material. The PRISMA-ScR checklist should be included in the scoping review manuscript, as stated on page 4. However, it should not be included as supplementary material in the protocol. In this case, although it is not a systematic review, you should consider including the PRISMA-P (specifically for protocols) to prepare the protocol for this scoping review. Reply: we agree with your comment, and we prepare this scoping review protocol with PRISMA P checklist stated at page 4 lines 24-26. we have added this information at supplemental material 1 based on your comment.

VERSION 2 – REVIEW

REVIEWER	Francesco Venturelli	
	Azienda USL di Reggio Emilia, Epidemiology unit	
REVIEW RETURNED	05-Oct-2023	

GENERAL COMMENTS	Dear Editor,
	thank you for the opportunity to revise this Review Protocol. The study authors addressed all the points I raised during the review process. I only suggest revising the sentence under the Expert Consultation section (page 7) which is reported in an uncorrected verbal tense.
	I look forward to reading the results of this interesting systematic review.
	Best regards

REVIEWER	Bruno Bizzozero-Peroni Universidad de Castilla-La Mancha - Campus de Cuenca, Health and Social Research Center
REVIEW RETURNED	27-Sep-2023

GENERAL COMMENTS	The authors responded satisfactorily	to all comments.