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) | GPs' views on the implementation of combined lifestyle interventions |
|---------------------|--|
| | in primary care in the Netherlands: a qualitative study. |
| AUTHORS | van der Heiden, W.; Lacroix, J.P.W.; Moll van Charante, Eric P; |
| | Beune, Erik |

VERSION 1 – REVIEW

| REVIEWER | Marie Broholm-Jørgensen National Institute of Public Health |
|-----------------|---|
| REVIEW RETURNED | 27-Sep-2021 |

| GENERAL COMMENTS | Thank you for the opportunity to review this manuscript regarding GPs experiences and views on their role in lifestyle support and implementation of CLIs. The study contributes with knowledge about how GPs perceives prevention and their own role in providing prevention to the patients, which is a highly relevant area of research. However, I do have concerns about the study which I will address below: |
|------------------|--|
| | Introduction: The introduction is acceptable, though I am not sure about whether the aim is clear. Mainly because a different aim is stated in the abstract. Please provide a clear aim for the study. An introduction to how the Dutch primary health care sector is organized could help clarify in what way the reimbursement policy is new (page 4 line 59). |
| | Methods: Overall, the data collection methods, analysis and choice of theory are presented very briefly and only superficially motivated. Please provide a solid description and argument for how thematic saturation was gained (page 6 line 44). In the methods sections, the TAM model is briefly mentioned as a theoretical framework, but the authors do not elaborate on why and how the theory was applied in the analytical process. The analytical process would appear clearer if you provided an example of what actually happened, which codes you found and how these were modified through the analytical process. |
| | Results: The result section appears superficial and lacks depth. The quotes do not add additional information than already provided in the text. Table 4 is difficult to read. I suggest the authors integrate the quotes in the text. This common practice in qualitative studies. In qualitative studies it is also common to report the characteristics of the informants in the methods section and not as a result. The organisation of the analysis and results are unclear. For example, why aren't all subheadings in the results section part of the |

barriers and facilitators? On page 10 line 20-21 the authors write: Lack of convincing scientific evidence on effectiveness was also mentioned as a barrier to implementation. How is this different from the section: Perceived effectiveness of lifestyle interventions?

The use of the FAM Model has been used to analyze the data material is not clear to me in the result section.

There is no evidence presented to support that the GPs believe the CLI's to be effective (page 9 line 52).

Also, the results of this study are not new. A lot of research has been published about GPs perception of their role in prevention, thus I miss an in-depth analysis and discussion of how the results contribute with new insights to this area of research (which is definitely needed). There is much more pertinent literature and studies to include.

In conclusion, the findings regarding the GPs perceptions of their role in prevention are of interest, but due to a lack of an in-depth analysis of the data and a thorough discussion of how the results contribute with new knowledge, this manuscript is not yet ready for publication.

| REVIEWER | Carl Brandt |
|-----------------|---|
| | Syddansk Universitet Det Sundhedsvidenskabelige Fakultet, |
| | Researvch unit for General practice, Department for public health |
| REVIEW RETURNED | 14-Oct-2021 |

GENERAL COMMENTS

This is a good and important paper bringing new knowledge to an area of great importance for implementation of newer and better intervention in traditional medicine.

Abstract.

Objectives. Be specific about who CLI can be used for obesity BMI30+ and BMI25+risks.

Design. Line 15 .. consisted of thematic coding and...

Outcomes. In line 22 state as later and in discussion and conclusion that GPs find: "lifestyle interventions was considered important by all GPs..." page 9 line 4

In line 23 you don't have to repeat that they have little experience. Use the space for your main themes and findings especially the first two the themes that you explain about in your results. Conclusion. Try to let your main findings integrate in your conclusion. I can't find data on the "reimbursement policy". Do the GPs ask for reimbursement for referrals?

Article summary.

As far as I understand CLI is special due to the fact that the cost for the patient is reimbursed which is important in an international perspective as this limits inequality in delivering healthcare. Add the word reimbursed in line 47 to what CLI is as done on page 4.

Introduction.

In the first paragraph it should be stated how often things takes many years to implement even though evidence is present. It is important to state in paragraph 2 the evidence behind a 2 year intervention to support lifelong lifestyle benefits for the patient not to let the reader believe that there is no evidence.

Page 5 line 1 and 2. What do you mean by overweight and obesity? You have to be consistent on your goal also stated in objectives in abstract where you are talking about the role of the GP.

Method in Recruitment explain how many "health care centres" you have compared to "care groups" is it fifty-fifty?

Results.

I would consider moving the GP characteristics to the appendix and just mention it in text as it takes up space in the start of the result section.

It improves the reader experience to include quates in the text in brackets instead of a table.

In line 17 to 22 page 9 you talk about the GPs own experience - is that for them as persons or professionals only? And is personal professional feedback important for the implementation?

Discussion.

Main findings.

Start with the findings not background (first sentence). Add findings from other studies to comment each finding and put your findings into an international context i.e. line 45 right away.

Related work should be included in your main findings. Line 19-20. This is not the case if the intervention stretches over several years like CLI. Finish cohort, Da Gong cohort, but most GPs are looking at old literature like AHEAD and Cochrane looking at short term interventions for few years and often advice given many years ago.

Strengths and limitations.

Line 47.48 What about practice nurses. Do they have a role in the Nederland's?

Conclusion

Line 56. Overall health care, GP or CLI resources? You have a statement about involvement of key stakeholders. In your data you talk about the difference between clinics using CLI and clinics not using it. Can your data support your statement? Line 59 and 60 needs to relate to your findings about implementation. You mention monitoring and evaluation. It is not clear if that is personal feedback to GPs on a patient level (progress, goal achievement) or from a statistical overall perspective or both.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1 Comments to the Authors:

The study contributes with knowledge about how GPs perceives prevention and their own role in providing prevention to the patients, which is a highly relevant area of research.

Response: We are pleased to hear and would like to thank the reviewer for this positive feedback and for underlining the importance of our study.

Introduction:

The introduction is acceptable, though I am not sure about whether the aim is clear. Mainly because a different aim is stated in the abstract. Please provide a clear aim for the study.

An introduction to how the Dutch primary health care sector is organized could help clarify in what way the reimbursement policy is new (page 4 line 59).

Response: Thank you for this constructive feedback. By looking critically at the introduction adjusting

where necessary, we have tried to clarify the aim of this study and made sure this is described the same in the abstract (page 4, lines 35-37):

"This study explored GPs' experiences and views on the implementation of CLIs in primary care to identify barriers and facilitators to the successful implementation and scaling of healthcare innovations in primary care."

Methods:

Overall, the data collection methods, analysis and choice of theory are presented very briefly and only superficially motivated. Please provide a solid description and argument for how thematic saturation was gained (page 6 line 44).

Response: We thank the reviewer for this comment. The paragraph 'data collection' describes how we as a research team arrived at a number of 15 general practitioners, based on thematic saturation. We have tried to clarify more with adjustment in the description of this process (page 6, lines 13-15): "The research team read all (WH & JL) or a subset of the coded transcripts (EMvC & EB), discussed them among the team members and established the level of data saturation, based on the results of new interviews in relation to the previous findings. Thematic saturation (33) was verified in consultation with the research team and occurred after 15 interviews."

In the methods sections, the TAM model is briefly mentioned as a theoretical framework, but the authors do not elaborate on why and how the theory was applied in the analytical process. The analytical process would appear clearer if you provided an example of what actually happened, which codes you found and how these were modified through the analytical process.

Response: In the paragraph 'data analysis' we have deepened the application of the TAM model and described it step by step (page 6, lines 25-32):

"Transcripts were coded using both an inductive and deductive approach with supporting qualitative data analysis software ATLAS.ti 8 (35). Two separate researchers (WH & JL) coded the transcripts, starting with an inductive open coding phase, identifying categories and applying a code to a line or paragraph. After the first three transcripts, these open codes were deductively assigned to the categories of the TAM model (27). Applied categories were perceived utility, perceived ease of use and intention to use, including their subcategories, creating a coding scheme. When a code did not fit TAM the model, a new category was created, capturing the essence of the code. After the full research team agreed on the identified categories and codes, the final coding scheme emerged, which then was applied on all transcripts."

Results:

The result section appears superficial and lacks depth. The quotes do not add additional information than already provided in the text. Table 4 is difficult to read. I suggest the authors integrate the quotes in the text. This common practice in qualitative studies.

Response: We thank the reviewer for these suggestions. Table 4 has been deleted and the quotes are integrated in the text. However, that does mean we exceed the maximum number of 4000 words with 300 words. In addition, we left out some of the excessive text most of which was already

displayed in the quotes (page 8, lines 37-38 and page 9, lines 13 and 30). We replaced some of our quotes with more informative ones (page 8, lines 46-47 with page 9, lines 1-4 & page 11, lines 4-10): "Whatever they are going to do, lifestyle coaches must refer too. They are not dietitians, physiotherapists, nor psychologists themselves." is replaced by: Do I believe in it (lifestyle coach)? Well, I am not convinced yet. A lifestyle coach is a new profession in healthcare. What is their background, what can they do? I think you can easily call yourself a lifestyle coach. When I will cooperate with someone, I need to have a little bit of faith in someone. I want to know that someone can actually do what is asked.

"Actually, you would like to have a step-by-step plan that we need to go through, but also someone who coordinates that a bit. An external person might be practical... who will consciously implement it... I think that would be a kind of ideal picture." **is replaced by:** "We have a regional primary care organization for the entire region, so to speak. Almost all general practitioners are affiliated with it. They are responsible for the organisation of chronic care, people with cardiovascular disease, diabetes and COPD for example. This (CLIs) is actually part of it, so the organization will pick it up and inform us (GPs) on it."

In qualitative studies it is also common to report the characteristics of the informants in the methods section and not as a result.

Response: We thank the reviewer for the feedback. We had chosen to report the characteristics in de results, because we used purposive sampling as a method for recruiting and therefore did not select the general practitioners in advance on certain characteristics. Therefore, it did not seem appropriate to place the table in the methods section and we decided to move it to the appendix 1 eventually.

The organisation of the analysis and results are unclear. For example, why aren't all subheadings in the results section part of the barriers and facilitators?

Response: To clarify why certain themes and sub-themes have been chosen in the results, a short paragraph has been included, called 'Perceptions, intentions and behaviour of GPs' (page 7, lines 15-20):

"The perception, intentions and behaviour of GPs regarding the implementation of CLIs in primary care could be categorized into three main themes: 1) Relevance and use of lifestyle interventions in general, 2) Relevance and use of CLIs, and 3) Barriers and facilitators to the implementation of CLIs. Each theme will be discussed below, with the corresponding sub-themes, as summarized in Table 2." We have chosen to split up the results into views on lifestyle interventions in general before focusing on the CLIs and the barriers or facilitators for their implementation. Therefore, we have chosen not to adjust the organisation and we presume that this introduction with its titles and subtitles will clarify it.

On page 10 line 20-21 the authors write: Lack of convincing scientific evidence on effectiveness was also mentioned as a barrier to implementation. How is this different from the section: Perceived effectiveness of lifestyle interventions?

Response: By scientific evidence is meant the available research on achieved results by participants of the CLIs (page 10, line 34). By perceived effectiveness is meant the GPs belief in the potential

effectiveness of the CLIs and the added value to other existing lifestyle support. With small adjustments in the text around these two definitions we have tried to clarify the difference (page 10, line 34 & (page 14, line 35).

The use of the TAM Model has been used to analyse the data material is not clear to me in the result section.

Response: We thank the reviewer for the comment. In the paragraph data analysis, we have now explained how we used the TAM model, which has been used for inspiration of the interview guide and for the coding of the transcript. As we described this more explicitly, we hope we have now better clarified the use of the TAM. Even though the model helped us with coding, it is not dominant in the display of the results.

"Transcripts were coded using both an inductive and deductive approach with supporting qualitative data analysis software ATLAS.ti 8 (35). Two separate researchers (WH & JL) coded the transcripts, starting with an inductive open coding phase, identifying categories and applying a code to a line or paragraph. After the first three transcripts, these open codes were deductively assigned to the categories of the TAM model (27). Applied categories were perceived utility, perceived ease of use and intention to use, including their subcategories, creating a coding scheme. When a code did not fit TAM the model, a new category was created, capturing the essence of the code. After the full research team agreed on the identified categories and codes, the final coding scheme emerged, which then was applied on all transcripts."

There is no evidence presented to support that the GPs believe the CLI's to be effective (page 9 line 52).

Response: We thank the reviewer for their important feedback. We have tried to state this difference more clearly in the manuscript and have also added a quote that clearly shows the believe of GPs in a potential effect (page 9, lines 37-44):

"I think something like that (CLI) is much better than all those pills we prescribe. These are the things that have been proven to be good for you, if you exercise it is good for the prevention of cardiovascular disease, for diabetes, it is good for everything."

Also, the results of this study are not new. A lot of research has been published about GPs perception of their role in prevention, thus I miss an in-depth analysis and discussion of how the results contribute with new insights to this area of research (which is definitely needed). There is much more pertinent literature and studies to include.

Response: Thank you for this critical feedback, which has made us look critically at the discussion again and improved the manuscript. In the paragraph 'related work' we emphasised how the key findings relate to earlier work in this domains (page 13, lines 27-52):

"Previous implementation research has shown that GPs have different perceptions on whether lifestyle support is part of their core tasks (36–38). This is in line with our findings, showing a broad range of preferred strategies, from provision of personalised, active lifestyle support to referral of patients to other health care professionals. A crucial prerequisite for adopting preventive

interventions, including lifestyle guidance, appears GPs' belief in their effectiveness (36,39). Conversely, the perceived lack of scientific evidence for their (long-term) effectiveness, or belief that health care authorities are better equipped to provide preventive care withholds GPs to implement interventions in practice (20,36,38,40–43).

Our study demonstrated a lack of awareness among GPs on the CLI and the reimbursement policy. Sufficient awareness and knowledge among GPs on content and effectiveness of new programs appear to be important requirements for a positive attitude towards healthcare innovations (36,44–46). The visibility and sustained provision of behavioural lifestyle interventions is an additional factor that affects GPs' willingness to utilize them in their daily care (47). This appears to be strengthened by GPs' mention of their unfamiliarity with the CLI-program's content and lifestyle coaches' new and unknown role as important barriers to its implementation. There is some evidence that education and early involvement of key stakeholders (e.g., those needed to implement the innovation) increase the adoption of healthcare innovations (41,44,48–51). Facilitating increased awareness and knowledge on CLIs among GPs through actively involving GPs in an early phase could therefore contribute to their overall implementation.

Other factors that may impede implementation of behavioural lifestyle support programs are high workload, lack of time and lack of finances (36–38,41,44). In our study, burden of work or time constraints were hardly mentioned, possibly since the intervention mostly lay outside GPs' care provision. Nevertheless, they did raise concerns about potential limitations in funding and professional resources, which have been shown important factors for successful adoption (48,52). On the other hand, it was emphasized that coordination at the GP cooperative level was a clear potential facilitator for early adoption and implementation of the CLI."

In conclusion, the findings regarding the GPs perceptions of their role in prevention are of interest, but due to a lack of an in-depth analysis of the data and a thorough discussion of how the results contribute with new knowledge, this manuscript is not yet ready for publication.

Response: We thank you for your extensive feedback and hope that the adjustments we have made may have led to a more in-depth analysis and discussion outlining the contributions of this study.

Reviewer 2

This is a good and important paper bringing new knowledge to an area of great importance for implementation of newer and better intervention in traditional medicine.

Response: We would like to thank you for your positive feedback and we are pleased to hear the added value of this study being endorsed in this important research area.

Abstract.

Objectives. Be specific about who CLI can be used for obesity BMI30+ and BMI25+risks. Design. Line 15 ...consisted of thematic coding and...

Outcomes. In line 22 state as later and in discussion and conclusion that GPs find: "lifestyle interventions was considered important by all GPs,.." page 9 line 4

In line 23 you don't have to repeat that they have little experience. Use the space for your main themes and findings especially the first two the themes that you explain about in your results. Response: Thank you for this feedback. We have applied the suggested modifications of the abstract, to clarify specific sentences (page 2, lines 3, 13 and 30-32).

Conclusion. Try to let your main findings integrate in your conclusion. I can't find data on the "reimbursement policy". Do the GPs ask for reimbursement for referrals?

Response: We would like to thank you for the important feedback. To explain the reimbursement policy, we have applied an extra sentence in the introduction (page 4, line 12-14):

We also added a paragraph in the method in which the organization of primary care in the Netherlands is explained (page 5, lines 16-24):

"In the Netherlands, more than eighty percent of GPs share a practice with other GPs (31). Most GPs work closely with practice nurses, who support them with the care for patients with a chronic condition within the general practice, for example diabetes and cardiovascular diseases. Some of the general practices are part of a health centre, which are defined as multidisciplinary primary care practices with additional primary care providers (including practice nurses, physical therapists, dieticians, etc.). In addition, general practices and/or health centres can be part of a care group, which are defined as local or regional GP networks, involved in shared contracts on chronic care delivery with health insurance companies (31)."

Article summary.

As far as I understand CLI is special due to the fact that the cost for the patient is reimbursed which is important in an international perspective as this limits inequality in delivering healthcare. Add the word reimbursed in line 47 to what CLI is as done on page 4.

Response: Thank you for the comment. CLIs are special because it is a combination of interventions. Guided by a lifestyle coach participants go through physical training and dietary adjustments in group sessions. However, the reimbursement policy is what new about them and that is indeed important to reach more eligible people. We have applied word 'reimbursed' as suggested in the paragraph 'strengths and limitations' (page 3, line 6).

Introduction.

In the first paragraph it should be stated how often things takes many years to implement even though evidence is present.

Response: We would like to thank you for this feedback. To start the introduction more forcefully, we've added the phrase as suggested, along with an appropriate reference (page 3, lines 2-3): "Even when evidence for a new intervention is present, the implementation takes years to be implemented (2)."

It is important to state in paragraph 2 the evidence behind a 2 year intervention to support lifelong lifestyle benefits for the patient not to let the reader believe that there is no evidence.

Response: We would like to thank you for this constructive feedback. To support the choice for a 2-

year program, we have added the rationale behind it referring to studies showing that a shorter intervention is not useful (page 4, lines19-20):

"The intervention takes two years, because previous research has shown that a shorter intervention is often ineffective (14,15)."

Page 5 line 1 and 2. What do you mean by overweight and obesity?

Response: Thank you for your comment. We have applied specific BMI scores for overweight and obesity to clarify these definitions (page 2 line 5 and page 4 lines 12-14).

You have to be consistent on your goal also stated in objectives in abstract where you are talking about the role of the GP.

Response: Thank you for this important comment. The aim of this study was not to explore the role of the GP in prevention or lifestyle interventions explicitly. However, during the interviews emerged that how GPs view their own role, does play a major role in their view on both prevention in general and lifestyle interventions in particular.

<u>Method</u> in Recruitment explain how many "health care centres" you have compared to "care groups" is it fifty-fifty?

Response: We would like to thank the reviewer for the feedback. However, some of the GPs in health centres can also be linked to a care group. Therefore, it is not exactly fifty-fifty. In the method we have tried to clarify the distinction between the two definitions (page 5, lines 16-24).

Results

I would consider moving the GP characteristics to the appendix and just mention it in text as it takes up space in the start of the result section.

Response: We agreed with the reviewers' feedback and decided to move the table 'GP characteristics' to the appendix, as we believed it to be more confusing instead of clarifying in the result section. The important characteristics have been written in de beginning of the results.

It improves the reader experience to include quates in the text in brackets instead of a table. Response: To increase readability we deleted table 4 and included the quotes in the text. However, that does mean that we exceeded the maximum number of words of 4000 for the manuscript with 300 words.

In line 17 to 22 page 9 you talk about the GPs own experience - is that for them as persons or professionals only? And is personal professional feedback important for the implementation? Response: We would like to thank you for your comments. Because we mean the professional experience of the GPs we have tried to clarify that in the specific paragraph (page 8, line 35).

Discussion

Main findings.

Start with the findings not background (first sentence).

Add findings from other studies to comment each finding and put your findings into an international context i.e. line 45 right away. Related work should be included in your main findings.

Response: Thank you for the feedback. We have looked at previously published qualitative studies in the BMJ and noted that the publications usually follow the same classification as we have done. Therefore, we chose to keep 'main findings' and 'related work' separate from each other and to present them in this order.

Line 19-20. This is not the case if the intervention stretches over several years like CLI. Finish cohort, Da Gong cohort, but most GPs are looking at old literature like AHEAD and Cochrane looking at short term interventions for few years and often advice given many years ago.

Response: We thank the reviewer for the critical evaluation and comment. When we reconsidered the references used in this paragraph, we agree that these are mainly about short-term lifestyle interventions. We completely revised and improved this paragraph of the discussion (page 13, lines 26-52).

Strengths and limitations.

Line 47.48 What about practice nurses. Do they have a role in the Nederland's?

Response: To specify the role of practice nurses in the Netherlands, we added a paragraph in the method in which the organization of primary care in the Netherlands is explained (page 5, lines 17-24).

Conclusion

Line 56. Overall health care, GP or CLI resources?

Response: Thank you for this feedback. Because it was not entirely clear in the conclusion who exactly was meant (health care/GPs/CLI providers), we clarified this (page 14, lines 35, 36, 40).

You have a statement about involvement of key stakeholders. In your data you talk about the difference between clinics using CLI and clinics not using it. Can your data support your statement? Response: The interviews with experiences GPs have told us that involvement of key stakeholders (which ideally would be GP cooperatives of care groups) could improve implementation. This is illustrated by the last two quotes (page 11, lines 7-10 and 13-16):

"We have a regional primary care organization for the entire region, so to speak. Almost all general practitioners are affiliated with it. They are responsible for the organisation of chronic care, people with cardiovascular disease, diabetes and COPD for example. This (CLIs) is actually part of it, so the organization will pick it up and inform us (GPs) on it."

"You need someone who takes care of the organisation. A GP cooperative is quite an appropriate organisation for that, I think. Someone who examines: do we have lifestyle coaches in the region, how are we going to get more, how are we going to arrange referrals from general practitioners to lifestyle coaches and how do we ensure that they become known to general practitioners?"

Line 59 and 60 needs to relate to your findings about implementation. You mention monitoring and evaluation. It is not clear if that is personal feedback to GPs on a patient level (progress, goal

achievement) or from a statistical overall perspective or both.

Response: We would like to thank the reviewer for this feedback. We have clarified that we meant personal feedback to GPs on achieved results by participating patients (page 11, line 42-43).

VERSION 2 - REVIEW

| REVIEWER | Marie Broholm-Jørgensen |
|-----------------|-------------------------------------|
| | National Institute of Public Health |
| REVIEW RETURNED | 08-Dec-2021 |

GENERAL COMMENTS

Thank you for considering and including many of my comments from the first review in this manuscript. I am happy with the changes and responses and it is my opinion that the article is moving in a good direction, but there are still a few things to do.

My main concern reading the first draft of this article was the result section and discussion. While the authors have dealt very thoroughly and improved the discussion by including literature from this field of research, I do not see the same improvements in the result section. I am aware that the authors are restricted by the word count, but as a reader it is not clear how the result section answer the overall aim. For example, it is unclear how the sections "relevance and use of lifestyle interventions in general", "GP's role in lifestyle modification interventions" and "Perceived effectiveness of lifestyle interventions" answer your aim (which is: to explore GPs' experiences and views on the implementation of CLIs to identify barriers and facilitators to the successful implementation in primary care). I recommend that you either structure the result section into two main sections (1) barriers and 2) facilitators) or summarize how these sections add to knowledge about barriers and facilitators for implementation after each section to make sure these are clear to the reader.

In the discussion the authors write that GPs views on lifestyle support programmes appeared to be related to the way they put personal lifestyle guidance into practice (page 12 line 12-14). This relation needs to be illustrated in the results section; this relation is not clear in the current draft.

While I read the manuscript, I highlighted following barriers, which I do not see in the summary of barriers for the implementation of CLIs in the discussion section (Page 13 line 1-15):

- Only a few GPs were aware of the recently introduced CLI (page 9 line 17)
- Most GPs indicated already providing lifestyle advice on a daily basis (Page 10 line 21)

In my opinion these factors are also important barriers for successful implementation of CLI's in primary care. Is there a reason why these are not mentioned in the short summary on page 12?

Minor comments:

You write that you exceed the maximum number of words. In page 5 line 27-29 and page 7 line 3-5 there is an iteration of information. You can consider whether you can do without one of the sentences.

It is unclear what the very first quote adds to the above text (page 8 line 10-11)? You can do without this quote.

Page 9 line 34 the authors write: "GPs believed CLIs could be effective in the prevention of chronic diseases.". This is not

| consistent with quotes from GP3, GP4, GP13 and GP14. I suggest the authors write "Some GPs belived" Similarly, in line 38 on the same page, I suggest you write "However, some were skeptical" |
|--|
| Additionally, there are some issues with word choice, grammar, and sentence structure that require editing work. |

| REVIEWER | Carl Brandt |
|-----------------|---|
| | Syddansk Universitet Det Sundhedsvidenskabelige Fakultet, |
| | Researvch unit for General practice, Department for public health |
| REVIEW RETURNED | 13-Dec-2021 |

| GENERAL COMMENTS | The paper has improved significantly from the review and can be |
|------------------|---|
| | accepted as it stands. |

VERSION 2 – AUTHOR RESPONSE

Reviewer 1 Comments to the Authors:

Thank you for considering and including many of my comments from the first review in this manuscript. I am happy with the changes and responses and it is my opinion that the article is moving in a good direction, but there are still a few things to do.

Response: We are pleased to hear that the changes we made and the responses we wrote were to your satisfaction. We would like to thank the reviewer for the additional feedback to improve the article.

My main concern reading the first draft of this article was the result section and discussion. While the authors have dealt very thoroughly and improved the discussion by including literature from this field of research, I do not see the same improvements in the result section.

Response: We would like to thank the reviewer for this feedback. We are sorry to hear the result section has not improved enough. We propose the changes mentioned below (blue coloured section).

I am aware that the authors are restricted by the word count, but as a reader it is not clear how the result section answer the overall aim. For example, it is unclear how the sections "relevance and use of lifestyle interventions in general", "GP's role in lifestyle modification interventions" and "Perceived effectiveness of lifestyle interventions" answer your aim (which is: to explore GPs' experiences and views on the implementation of CLIs to identify barriers and facilitators to the successful implementation in primary care). I recommend that you either structure the result section into two main sections (1) barriers and 2) facilitators) or summarize how these sections add to knowledge about barriers and facilitators for implementation after each section to make sure these are clear to the reader.

Response: Thank you for your detailed comment. We have chosen for these specific paragraphs in the results, because a) it is in line with the order of the list of topics from the interviews where we started with views and experiences with lifestyle interventions in general to sufficiently understand the interviewee's broader view on the topic, and then naturally funnelled the discussion to CLIs specifically, and b) the general views and experiences reported provide a frame of reference to the reader and appeared to be related to the GPs' perceptions and behaviours towards CLIs. As such

they helped to interpret the findings. To clarify how these sections add to our aim, we summarized their additional value after each section.

Relevance and use of lifestyle interventions in general: "Both, a proactive attitude of GPs in offering lifestyle support and more experience with lifestyle interventions, made GPs more convinced of the potential effectiveness and usefulness of lifestyle interventions in general." (page 9, line 16-18). Relevance and use of combined lifestyle interventions: "Limited awareness of CLIs among GPs and lack of belief in the long-term effect or the added value of CLIs -on top of established interventions-, may result in barriers for the implementation of CLIs. On the contrary, GPs who are convinced CLIs may be effective and who have a positive experience, may contribute successful implementation of CLIs." (page 10, line 22-25).

In the discussion the authors write that GPs views on lifestyle support programmes appeared to be related to the way they put personal lifestyle guidance into practice (page 12 line 12-14). This relation needs to be illustrated in the results section; this relation is not clear in the current draft.

Response: We would like to thank the reviewer for this comment. We presume the sentence

mentioned above has clarified the relation.

"Both, a proactive attitude of GPs in offering lifestyle support and more experience with lifestyle interventions, made GPs more convinced of the potential effectiveness and usefulness of lifestyle interventions in general." (page 9, line 16-18).

While I read the manuscript, I highlighted following barriers, which I do not see in the summary of barriers for the implementation of CLIs in the discussion section (Page 13 line 1-15):

- Only a few GPs were aware of the recently introduced CLI (page 9 line 17)
- Most GPs indicated already providing lifestyle advice on a daily basis (Page 10 line 21) In my opinion these factors are also important barriers for successful implementation of CLI's in primary care. Is there a reason why these are not mentioned in the short summary on page 12? Response: We thank the reviewer for these comments. We have summarized the main findings in this section and therefore these barriers were not mentioned. However, we agree with the reviewer that these are important barriers to acknowledge, and therefore we did include them in the revised manuscript.
- "First, there was limited awareness of CLIs among GPs, and also the content of the CLIs and its effectiveness was not entirely clear." (page 13, line 10-11).
- "Most GPs indicated they provided lifestyle support on a daily basis themselves." (page 13, line 13-14)

Minor comments:

You write that you exceed the maximum number of words. In page 5 line 27-29 and page 7 line 3-5 there is an iteration of information. You can consider whether you can do without one of the sentences.

Response: Thank you for this feedback. We have removed the iterative sentence in the results and only refer to the appendix.

It is unclear what the very first quote adds to the above text (page 8 line 10-11)? You can do without this quote.

Response: We would like to thank the reviewer for this feedback and we agree that the first quote is not of additional value to the text. Therefore, we left this quote out in the revised manuscript.

Page 9 line 34 the authors write: "GPs believed CLIs could be effective in the prevention of chronic diseases.". This is not consistent with quotes from GP3, GP4, GP13 and GP14. I suggest the authors write "Some GPs believed...." Similarly, in line 38 on the same page, I suggest you write "However, some were skeptical..."

Response: Thank you for these comments. We agree with the proposed adjustments and have therefore applied them.

Additionally, there are some issues with word choice, grammar, and sentence structure that require editing work.

Response: We have checked the manuscript ourselves as much as possible and made some changes here and there to the words, grammar and sentence structure. Therefore, we hope the manuscript has been improved on these points.

Reviewer 2 Comments to the Authors:

The paper has improved significantly from the review and can be accepted as it stands.

Response: We would like to thank the reviewer for their positive feedback and are pleased to hear that the changes we made were to your satisfaction.

VERSION 3 - REVIEW

| REVIEWER | Marie Broholm-Jørgensen |
|------------------|--|
| | National Institute of Public Health |
| REVIEW RETURNED | 11-Jan-2022 |
| | |
| GENERAL COMMENTS | Thank you for considering and including my comments. I am happy with the changes and I find this manuscript ready for publication in |