PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Primary care interventions to reduce cardiovascular risk behaviours in adolescents: protocol for a systematic review
AUTHORS	Haller, Dagmar; Pfarrwaller, Eva; Cerutti, Bernard; Gaspoz, Jean-Michel

VERSION 1 - REVIEW

REVIEWER	BINDER Philippe Faculty of Medicine, Department of General Practice, 6 rue de la Miletrie, TSA 51115, 86073 Poitiers, France.
REVIEW RETURNED	08-Apr-2016

GENERAL COMMENTS	1. Is the research question or study objective clearly defined? Page 4 line 15. " To identify the features associated with the effectiveness of interventions, such as communication style, mode of delivery, duration and frequency." According to me, the objective is not sufficiently precisely formulated. 3. Is the study design appropriate to answer the research question? Page 4 line 56 : "As young adults are often considered within a developmental continuum from adolescence into adulthood, studies involving participants up to the age of 24 years will also be eligible, as long as they also include adolescents between 10 and 19 years old." It is necessary to indicate how the studies including 20-to-24-year-olds will be integrated. Indeed, it would be recommended to accept only those that allow for separate consideration of young persons under 20, the reason being that the study is limited to persons not exceeding 19 years of age. 4. Are the methods described sufficiently to allow the study to be repeated? Page 6 , Table 1 : " Adolescents, Teenagers, Youth, Primary Health Care, Family practice, General Practice " seems incomplete. It would be useful to add, as keywords: “General practitioner Family physician/ Physician” 12. Are the study limitations discussed adequately? It apparently lacks the outline of the discussion draft. The broad outlines of the project under discussion are apparently missing. The author is expected to put forward his first thoughts on the heterogeneity of the included studies (type of intervention, target population, duration, etc ...) and not limit himself to analysis of observed heterogeneity. It will also be necessary also to provide extrapolation of the results to practice ...

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REVIEWER	Rebecca Hodder Hunter New England Population Health/The University of Newcastle
REVIEW RETURNED	19-Apr-2016

GENERAL COMMENTS	Well written protocol for a systematic review to address current evidence gap regarding synthesis of primary care interventions targeting adolescent tobacco use, physical activity and healthy eating. Please find below my comments to the authors: 1. Population (p4): Authors describe eligibility as participants aged 10-19 years, however will also include studies where participants are up to 24 year of age. Unclear how this will be applied, i.e. based on mean age of participants of 19 years or under? Is this criteria applied at the time of intervention delivery or age at follow up? 2. Intervention (p5): Note the authors say that "The aim of the interventions should be to reduce tobacco use, increase physical activity/reduce sedentary behaviour and/or promote a healthy diet" does this mean studies that do not explicitly aim to one of the three behaviours will be ineligible? 3. Intervention (p5): Noted that "interventions involving multimedia tools targeting patients identified in the primary care practice" are also eligible, does this only refer to multimedia tools provided directly to participant by the practitioner 4. Data sources and search (p5): Will the authors also search the reference lists of included studies and contact authors of included studies to identify any additional studies not identified in the initial search? 5. Selection process (p6): Conventionally title and abstract are screened at the same time, then full text screened for title/abstracts that are potentially eligible. PRISMA statement does not require reasons for exclusion at the title/abstract screening stage, it is only required for studies for which full texts are reviewed. 6. Assessing risk of bias (p7): Will the review authors be blinded to the names of the authors, institutions, journal or results of studies? 7. Data analysis (p7): Should studies report both objective and subjective outcome data, will both be extracted or only objective? Similarly, if studies report outcome data at multiple follow up points will all be extracted, first follow up only, or final follow up? 8. Data analysis (p7): Are any sensitivity analyses planned, for example excluding studies at high risk of bias? 9. Data analysis (p7): What I2 cut point will be used to determine "substantial heterogeneity"?

VERSION 1 – AUTHOR RESPONSE

Comment	Authors' response	Location of revision in revised manuscript (page

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		number)
Reviewer #1		
Page 4 line 15. " To identify the features associated with the effectiveness of interventions, such as communication style, mode of delivery, duration and frequency." According to me, the objective is not sufficiently precisely formulated	We have provided some examples of these features so as to make this objective clearer	P4
Page 4 line 56 : "As young adults are often considered within a developmental continuum from adolescence into adulthood, studies involving participants up to the age of 24 years will also be eligible, as long as they also include adolescents between 10 and 19 years old." It is necessary to indicate how the studies including 20-to-24-year-olds will be integrated. Indeed, it would be recommended to accept only those that allow for separate consideration of young persons under 20, the reason being that the study is limited to persons not exceeding 19 years of age.	We thank the reviewer for this suggestion. We have modified the manuscript accordingly	P4
Page 6 , Table 1 : " Adolescents, Teenagers, Youth, Primary Health Care, Family practice, General Practice " seems incomplete. It would be useful to add, as keywords: "General practitioner Family physician/ Physician"	We have added key words in relation to these practitioners	P6
It apparently lacks the outline of the discussion draft. The broad outlines of the project under discussion are apparently missing. The author is expected to put forward his first thoughts on the heterogeneity of the included studies (type of intervention, target population, duration, etc ...) and not limit himself to analysis of observed heterogeneity. It will also be necessary also to provide extrapolation of the results to practice.	We followed the PRISMA-P checklist and this does not to our knowledge include pre-empting a discussion of future results from this review. We agree, however, that adding some implications for practice to our concluding remarks make sense and we have thus done so	P8
Reviewer #2		
1. Population (p4): Authors describe eligibility as participants aged 10-19 years, however will also include studies where participants are up to 24 year of age. Unclear how this will be applied, i.e. based on mean age of participants of 19 years or under? Is this criteria applied at the time of intervention delivery or age at follow up?	This was indeed unclear. As proposed by reviewer #1 we have now added the following details about the inclusion of studies involving participants beyond the age of 19: "…studies involving participants up to the age of 24 years will also be eligible, as long as they also include adolescents between 10 and 19 years old *and provide data for this age-group that can be considered separately*. The criterion will be applied as	P4

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	proposed is the selected study, which usually is at time of inclusion, i.e. first intervention delivery.	
2. Intervention (p5): Note the authors say that "The aim of the interventions should be to reduce tobacco use, increase physical activity/reduce sedentary behaviour and/or promote a healthy diet" does this mean studies that do not explicitly aim to one of the three behaviours will be ineligible?	Indeed, studies should at least aim at one of these behaviours or else they will be excluded. Studies of interventions targeting other behaviours but in which these outcomes are measured will not be eligible	
3. Intervention (p5): Noted that "interventions involving multimedia tools targeting patients identified in the primary care practice" are also eligible, does this only refer to multimedia tools provided directly to participant by the practitioner	Our secondary aim is to identify the most successful models. This could include the use of multimedia tools designed outside primary care, the use of which could advised by the practitioner. Thus the multimedia tools will not be limited to those directly provided to participants by the practitioner	
4. Data sources and search (p5): Will the authors also search the reference lists of included studies and contact authors of included studies to identify any additional studies not identified in the initial search?	Yes, we thank the reviewer for pointing this out. We have added this to the description of the search strategy.	P5
5. Selection process (p6): Conventionally title and abstract are screened at the same time, then full text screened for title/abstracts that are potentially eligible. PRISMA statement does not require reasons for exclusion at the title/abstract screening stage, it is only required for studies for which full texts are reviewed.	We agree with the suggestion of screening titles and abstracts together and have changed the manuscript accordingly. Although we are aware that the PRISMA statement does not require reasons for exclusion at the title/abstract level screening stage to be recorded we will still record these for our personal use to facilitate comparison of the independent selection processes and help resolve potential conflicts between the two reviewers.	
6. Assessing risk of bias (p7): Will the review authors be blinded to the names of the authors, institutions, journal or results of studies?	Although we agree that this would be ideal it will unlikely be possible to blind us to the authors of the studies as many of them will likely already been known to us due to our previous interest in the field	
7. Data analysis (p7): Should studies report both objective and subjective outcome data, will both be extracted or only objective? Similarly, if studies report outcome data at multiple follow up points will all be extracted, first follow up only, or final follow up?	We intend to extract both objective and subjective outcome data at all follow-up points and have added this information in the	P7
8. Data analysis (p7): Are any sensitivity analyses planned, for example excluding studies at high risk of bias?	We thank the reviewer for proposing this and have added this option in the data analysis section	P8

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9. Data analysis (p7): What I2 cut point will be used to determine "substantial heterogeneity"?	We will consider moderate to high levels of heterogeneity as “substantial”, and have added this information to the manuscript	P8

VERSION 2 – REVIEW

REVIEWER	Rebecca Kate Hodder Research, Hunter New England Population Health Research and the University of Newcastle, Australia
REVIEW RETURNED	27-Jun-2016

GENERAL COMMENTS	Thanks to the authors for their consideration of previous comments. My final comment relates to the selection of data to be synthesized in meta-analyses which it would be of benefit to pre-specify in the protocol. How will the authors select outcome data for synthesis should studies report both objective and subjective measures of an outcome (objective over subjective?), and/or follow up data from various follow up points (first or final follow up?)?

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