Reviewer's report

Title: Population attributable fraction of type 2 diabetes due to physical inactivity in adults: a systematic review

Version: 2 Date: 7 January 2014

Reviewer: Abiodun Oluyomi

Reviewer's report:

REVIEWER'S REPORT
Overall, this manuscript addresses contemporarily important issues. However, the manuscript may require a significant amount of revisions. Please review the following points. A copy of the manuscript with comments is also attached.

(A) Discretionary Revisions

(B) Minor Essential Revisions

1. Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion and conclusion sections are generally supported by the reported data, but there is room for improvements.

2. Are limitations of the work clearly stated?
The only limitation listed is authors' inability to conduct meta-analysis due to the heterogeneity of the studies that they reviewed. Authors may need to revisit this point – to highlight other avenues for limitations could have resulted from the use of other articles (as is the case in systematic reviews), or limitations that are inherent to the methodological approaches for the conduct of systematic reviews in general.

3. Is the writing acceptable?
Authors need to review and revise manuscript writing for grammar and style. Importantly, authors need to make sure that sentences/statements are complete and clear (throughout the paper). Also, thoughts/arguments/discussions need to flow better from one part of the paper to the next (in an orderly sequence).

4. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Authors may need to improve on this in the background section and the discussion section.

5. Is the question posed by the authors well defined?
Authors described the manuscript as a systematic review. They also claim that, to their knowledge, no systematic review has ascertained the PAF of DM-2 attributable to physical inactivity, and, therefore the aim of the current manuscript is to (i) quantify the PAF of DM-2 attributable to physical inactivity and absence of sport participation or exercise for men and women.

Generally, the background / introduction section provides authors the opportunity to present the prevailing knowledge about their topic, establish the basis for their inquiries, and define, in clear statements and unambiguous terms, the objective of their paper.

The background section of this manuscript touched on some important issues that are relevant to the topic of interest. However, the introductory discussions presented are too scanty to support the premise that the objective of the paper is well defined. A more robust background section may be necessary.

(C) Major Compulsory Revisions

1. Are the data sound?
It is not clear whether authors actually excluded studies with data from cross-sectional studies and case-control studies as they had stated in the study selection and eligibility section. (See manuscript: Rows 85-89 vs. Rows 237-238). Authors may need to clarify this issue throughout the paper.

2. Do the title and abstract accurately convey what has been found?
Authors reported in the Abstract section that: “… of all eight articles reporting PAFs ….” Meanwhile, in the body of the manuscript and tables, authors suggest that PAFs were calculated using previously reported data (e.g. table 2, with the phrase: “plugged into PAF crude formula.”). Somehow, it is not clear to the reader WHO did the plugging. Essentially, authors may need to reconcile the abstract content with the body of the manuscript, if indeed the current authors actually calculated the PAFs. Otherwise the manuscript needs to clarify these issues.

OTHER COMMENTS:

1. Are the methods appropriate and well described?
Overall, the methods seem well defined.

2. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Authors reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) standards.

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.