Author's response to reviews

Title: Is there a demand for physical activity interventions provided by the health care sector? Findings from a population survey

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Author's response to reviews: see over
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To The BioMed Central Editorial Team.

Thank you for giving us the opportunity to respond to the reviewers’ comments and revise our manuscript “MS: 1105837906278229 Is there a demand for physical activity interventions provided by the health care sector? Findings from a population survey.”

We are grateful to the editor and the reviewers for a number of relevant and helpful questions and comments. We have carefully considered these and revised our manuscript. On the following pages, we have addressed each of these comments and described how we have implemented them into the revised manuscript.

We believe the revisions have improved the manuscript and hope the revised version and our replies will meet your approval and that you will find the manuscript suitable for publication in BMC Public Health.

We would be happy to supply any additional information you require.

Yours Sincerely,

Matti E Leijon, on behalf of all authors
### Reviewer 2 Comments for Author

**Discretionary Revisions**

1. When designing the question asking if they would welcome "active targeted support", what exactly was in mind, and could this have been interpreted in a different way by the subjects?

***The question regarding active targeted support was a follow up question to the question immediately before. The activity for which support would be welcome was implied and inferred from the respondents' own replies, and the sentence, in Swedish, would be construed to mean, Would you welcome active support for the specific activity you just mentioned? It is quite unlikely that respondents would have not understood that they were commenting on support for activities of their own selection. We also included the question and response items in an appendix to give higher transparency of the study.

2. Was there any existing PA support available in this community before the survey?

***Yes, and this kind of intervention and support is now well established in Sweden, and we don’t believe that this information affects this study’s results. A follow-up study concerning Physical activity prescriptions in Primary care made by our group reached approximately less than one percent of the population in 2004 and 2005.

**Minor Essential Revisions**

**Abstract:**
It would be good to indicate how the questionnaire was administrated already in the abstract (by posted mail).
***We agree with these comments and have now included this information in the abstract.

**Methods:**
Line 6, add years as unit.
***The wording is now changed.

Line 7, Was there any reminding letters sent out to non-responders?
***Yes, two reminders were sent including a new survey. This information is now included in line 7.

Line 14, how was the second question formulated, did it require an open or
closed answer? Was it based on time and type of exercise the last year? I cannot clearly identify any results from this question, please add.

*** We have clarified this in the revised manuscript as this information now is included in the new appendix.

Sentence 2 in conclusions is repeated, should be eliminated.

*** The sentence is now excluded.

*** Reviewer 1 Comments for Author

General
This descriptive paper uses data from a population survey in Östergötland County, Sweden, to provide information on the proportions physically active, intentions to change levels of activity and to assess demand for interventions by the health care sector. The paper is potentially of interest given the importance attached to promoting physical activity and the availability of large scale survey data. However, I have some reservations about the paper in its current form, in particular: the limited detail provided on the survey methods; the strength of the conclusions drawn from the data presented; and the limited recognition in the discussion of approaches to promoting population level physical activity outside of the health care sector.

Major Compulsory Revisions

1. The paper requires further detail on the survey methods, in particular the survey items used, whether embedded within the body of the paper or as an annex. Without this information, it is difficult to comment on the data presented and their interpretation and this may be reflected in some of the comments found below. Information on the source of the items or their development would be helpful, as would a clear description of the categorisations used in the analysis. For example, how are ‘somewhat’ and ‘moderately’ active defined, how should ‘good’ self-reported economy be interpreted, did the item on the importance of behaviour change refer specifically to the respondent or the population in general and so on? I’d also like to know whether the support questions were specifically related to the separate health behaviours (i.e. activity, nutrition, weight etc.) or were generic questions relating to behaviour change. A summary of other forms of support mentioned by respondents in the free text option would also be helpful. I’d be particularly interested to find out if broader population approaches to improving activity levels were mentioned anywhere?

*** We agree with these comments. Detailed information regarding both question and response items are now included in the revised method section and in a new appendix.
The broader population aspects of physical activity promotion have been included in the revised discussion on page 13.

Is there any reason why the data on responsibility (reported on page 8 and noted in the discussion) are not tabulated?
*** We included a fourth table, including this information, in a previous version of the manuscript. However, informal peer review by colleagues led us to believe our result section was too large, and we opted to reduce some of the information, including that related to responsibility. We will be happy to supply this information as an additional table, after the editors approve.

2. Were the chi-squared tests presented in Tables 1-3 adjusted for survey design (i.e. stratification and weighting)? If yes, I’d suggest confirming this and stating which statistical software was used to perform the analyses. If not, the impact of survey design should be considered.

*** We agree with these comments and have now included this information in end of the method section, page 8.

The authors should also comment on the drop in sample size for Table 2 (6569) when compared with Tables 1 and 3 (6966 and 6862, respectively) and the overall sample size of 7238 noted on page 7. This suggests fairly high levels of non-response and associated issues of bias. Is it possible to look at whether the patterning of non-response in Table 2 is associated with reported activity level e.g. are those reporting to be active more likely to have a missing response to the question on need for change?

*** We agree with these comments and this is now included as a limitation in the revised discussion section on page 14.

3. Interpretation of some of the data presented is problematic. For example, in Table 2, how meaningful is a population level estimate of intention to increase activity levels, when this is probably largely determined by current activity levels or BMI i.e. some simply don’t feel the need to change? This should be recognised in the results section (or discussion).

***We agree with this comment. In this revised version of the manuscript, we discuss this issue in the discussion section to a much larger extent than previously. See page 10. We also added more information in the result section of the abstract.

Also, how did intention to change physical activity levels compare with the other health behaviours included in the study?
***This information is now included in the result section on page 9.
4. The authors should consider the strength of their conclusion that support from health care providers is welcome. If I am interpreting the data presented in Table 3 correctly, 28% of all respondents report that being more active is important, 15% of this group would like support and 50% of these identify the role of the health care sector. A similar picture emerges when the analysis is restricted to, for example, inactive respondents or those with higher levels of reported BMI. These are reasonably small numbers of people at population level. This is not to suggest that support from health care providers is not welcome or valuable, rather that the strength of evidence from the data presented doesn’t necessarily support the overall conclusion and that different approaches are likely to be required to promote higher activity levels among the majority of the population.

***The reviewer raises excellent points. We have incorporated some of his or her thinking in our revised discussion section to a much larger extent than previously and also have attempted to make a more balanced statement in the conclusion.

5. Whilst recognising that the focus of the paper is on the health care sector, the discussion should at least touch on the importance of engaging the wider public health community in tackling levels of physical inactivity in the population, whether this is schools/workplaces, environmental/transport planners, leisure service providers, those working in the voluntary sector and so on. At present, the focus and conclusions are a little too narrow. I’d also like to see some discussion on the potential for different approaches with population sub-groups.

For example, two-thirds of inactive respondents wanting support report a preference for the health care sector, compared with less than half of those who are moderately active and a fifth of those currently meeting activity guidelines. There are some potentially interesting policy messages here that could be acknowledged.

***We agree with this comment in principle. However, our study is limited to a health care setting, which does result in a necessarily narrower focus and set of conclusions. The reviewer’s identification of interesting policy messages is one we allude to in our revised discussion.
Minor Essential Revisions

1. P4 Should read ‘Individuals feel largely responsible…’.
2. P4 In the conclusions paragraph, it would be more accurate to state that support from health care providers is welcome, particularly among those most in need.
3. P5 Need full stop at end of first sentence of background section.
   ***We agree with all three comments and have changed the wordings on page 4 and included the full stop on page 5.

4. P5 Need to note that the support offered as part of referral schemes differs, from written prescription to the provision of more formal/structured activity sessions with monitoring built in.
   ***We agree on this comment and have now included this information on page 5.

   The authors might also want to note that the evidence base for effectiveness is still rather limited and focused primarily on short-term outcomes.
   ***We agree with this statement, and have included a revision in our introduction.

5. P9 Replace ‘reported’ with ‘reporting’ in penultimate line of first paragraph.
   ***We agree on this and changed the wording to “reporting”.

6. P9 Seeking support from health care providers shouldn’t be confused with confidence in them. A more accurate description would be something like ‘The highest proportions reporting that they would seek support from health care providers were found among the elderly…’.
   ***We have revised our article to incorporate this suggestion.

7. P10 The methods critique should also recognise the small size of the sub-samples in Table 3.
   ***We have revised our article to incorporate this suggestion.

8. P11 Should read ‘Individuals feel largely responsible…’. The same sentence is repeated below so should be removed.
   *** The sentence is now excluded.

9. P18 In Table 3, the proportions reporting ‘health care’ v ‘other’ for males do not total 100% (47% and 35%).
   ***We are grateful to the sharp-eyed reviewer in finding the “number switch”, as we had transposed 53 to 35%. The correct numbers are 47% and 53%, and we have corrected this error.

Discretionary Revisions
1. The authors might consider the use of confidence intervals in the tables to demonstrate the level of precision of the survey estimates. This may be particularly useful where the proportions presented are based on small sub-samples, as is the case in Table 3.

2. Whilst recognising the limitations of the survey items, the authors might consider modelling some of the key outcomes, such as intention to change, rather than the series of bivariate cross-tabulations.

***The reviewer raises some interesting ideas in this section, which have been discussed by the authors. Including confidence intervals is possible, if requested by the editors. We are uncertain that the CIs would provide much more information, however. We do not feel that we could adequately defend any data that resulted from modelling key outcomes, precisely because the survey itself is limited. We feel that we do a fair job of discussing survey limitations, and would prefer not to 'over-analyse' the results of our study. We are hopeful that follow up studies will incorporate the suggestions provided by the reviewer.***