Reviewer's report

Title: Factors associated with patients self-reported adherence to prescribed physical activity in routine primary health care

Version: 1 Date: 10 March 2010

Reviewer: Sally Rose

Reviewer's report:

This paper addresses an important area aspect of public health – identifying effective ways to increase individual and population physical activity levels for health benefit. It is generally a well written paper, but the argument for focusing on adherence to a prescribed activity (as opposed to adherence to physical activity itself) is not well made. The current submission would be more informative if adherence data were presented alongside PA levels at 3- and 12-mths. Those data have been previously published by the authors (but are not referred to in detail here). Data collection took place in 2004, which suggests the present analysis was an afterthought rather than pre-planned to answer an important question?

The paper does not currently add enough new, important information (on top of the author's two related previous papers) to warrant publication.

1. Is the question posed by the authors well defined?

Major Compulsory Revisions

• The authors do not present a strong case for the value of adherence to a particular prescribed form of activity. The group reporting “I’m active but in another activity than the prescribed activity”, were removed from the regression analysis (Table 2) but are a group of interest as they have become physically active. Surely it is more important from an individual and public health perspective to know whether someone has become physically active (by participating in any form of physical activity), rather than to know whether or not they are undertaking the activity prescribed by a health professional 3 or 12-months earlier? The rationale for this paper needs to be strengthened.

2. Are the methods appropriate and well described?

Major Compulsory Revisions

a) More detail on the PAR is needed. For example, do prescriptions include recommendations on the frequency, duration and intensity of activity?

b) Clarification is needed as to why patients already doing 5-7 days of activity at baseline would be prescribed physical activity. This group (n=475) makes up nearly 20% of the sample justification is therefore needed to explain the inclusion of an ‘already active’ group in the analysis.

c) It would have been more informative if the study was designed to collect
information on adherence to physical activity in general at 3 and 12-months, in addition to adherence to the prescription. Having delved further into the literature I see the authors have indeed collected this information but have published it separately and not therefore provided details on PA levels at 3 and 12-months but have referred to this data in very general terms (page 10 and 14).

Minor Essential Revisions
d) Reference 8 is in Swedish and not accessible by general audience so should be replaced by another reference or the key content described in the text.

3. Are the data sound?
• Good participation and follow-up rates achieved

Major Compulsory Revisions
• Data on physical activity levels (days/week) at 3 and 12-months would assist in interpretation of the adherence results.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?

Major Compulsory Revisions
a) The discussion should expand on the previously published PA rates at 3- and 12-months (page 14)
b) Comment could be made on why adherence to a different activity to that prescribed is a good/bad outcome of PAR. It is not clear to me why adherence to a prescribed activity is key in determining the success of a PAR programme.
c) The discussion should include some reference to recent intervention studies that use exercise referral with measurement of adherence to PA to place the present study findings in the context of other approaches to assessing PAR in routine care.

6. Are limitations of the work clearly stated?
The authors acknowledge some limitations, such as the use of self-reported measures.

Major Compulsory Revisions
• The lack of detailed data on actual physical activity levels to accompany adherence measure is an important limitation of these present study.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Major Compulsory Revisions
a) The authors have published 2 previous papers that appear to relate to the
same dataset, one of which is referenced. (Ref 1: Leijon et al 2009, Scand J Med Sci) is cited on page 8 stating that PA levels are reported elsewhere. A second paper: Leijon et al 2008 BMC Health Services Rsh 8:201 is not cited but appears to provides some of the background detail that the present paper has omitted. If this is the same study data collection, a reference should be provided by the authors.

b) The authors have cited review papers to support their arguments but have not presented data from more recent primary publications. In one example the authors state “there is a paucity of pragmatic PAR studies conducted in routine practice that involve more heterogeneous populations” (ref 14: Eakin et al 2004 review). A quick literature search returns a number of studies that meet this criteria that could be cited, for example:


8. Do the title and abstract accurately convey what has been found?

Major Compulsory Revisions

a) Abstract: Methods. It would be useful to have more detail about study population (male/female, age range, whether general population or disease specific)

Minor Essential Revisions

b) Abstract: Conclusions. Is there a word missing in this sentence? Should it be “The results suggest that [measurement or assessment] of self-reported…is feasible”

c) Fullstop missing at end of sentence

9. Is the writing acceptable?

The paper is well written overall.

Editing

• Page 13 – reference 6 needs to be in square brackets not (6)
Level of interest: An article of limited interest

Quality of written English: Acceptable

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'