PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<u>see an example</u>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Evidence-Informed Recommendations in Rehabilitation for Older Adults Living with HIV: A Knowledge Synthesis
AUTHORS	O Brien, Kelly; Solomon, Patricia; Trentham, Barry; MacLachlan, Duncan; MacDermid, Joy; Tynan, Anne-Marie; Baxter, Larry; Casey, Alan; Chegwidden, William; Robinson, Gregory; Tran, Todd; Wu, Janet; Zack, Elisse

VERSION 1 - REVIEW

REVIEWER	David Vance, PhD, MGS
	University of Alabama at Birmingham
	United States of America
REVIEW RETURNED	17-Feb-2014

GENERAL COMMENTS	Actually, I have no real comments to make. I think these authors did a fine job with the recommendations from the literature as it wasalthough the literature has advanced beyond the 2011 time frame that they used, so in that sense it is a little out of date but to ask them to do it over at this point would be pointless. However, they may want to mention this in the discussion and perhaps mention some examples of how the literature has evolved. For example, there are now cognitive interventions for older adults with HIV using speed of processing training.
	Also, I think it is important to emphasize this more that these are non-pharmacological reviews and interventions. For example, metylyphenidate has been shown to improve cognition in adults with HIV but that is not mentioned. I think it is important to mention that there are some pharmacological interventions, even though the emphasis of this paper is on behavioral approaches. Again, that point of the paper should be emphasized more.

REVIEWER	Associate Professor Hellen Myezwa University of the Witwatersrand Physiotherapy Department School of Therapeutic sciences
REVIEW RETURNED	12-Mar-2014

GENERAL COMMENTS	This was an ambitious effort using innovative methods to review existing literature. It highlights possible potential rehabilitation
	approaches to older adults living with HIV. A clearer distinction of which interventions and recommendations came from non HIV
	literature would be useful for further research. The authors should also consider elaborating on the importance of including PLHIV in
	the research as this is not yet commonly practised. It would also be

useful to align some of the terminology used such as endorsement with more common terms such as validation. I would also recommend that the authors include in their discussion how the recommendations and concepts differ or align with approaches to older adults with other chronic conditions.
The paper outlines a complex process quite clearly. There are some minor spacing and editorial issues that need to be addressed.

VERSION 1 – AUTHOR RESPONSE

Reviewer #1

1) Actually, I have no real comments to make. I think these authors did a fine job with the recommendations from the literature as it was...although the literature has advanced beyond the 2011 time frame that they used, so in that sense it is a little out of date but to ask them to do it over at this point would be pointless. However, they may want to mention this in the discussion and perhaps mention some examples of how the literature has evolved. For example, there are now cognitive interventions for older adults with HIV using speed of processing training.

We thank the reviewer for these comments. We conducted an updated search for rehabilitation interventions among older adults living with HIV. We added a section in the discussion that highlights ways which the literature has evolved since the 2011 literature search. This evidence may be considered in context with the proposed recommendations. (Page 25)

2) Also, I think it is important to emphasize this more that these are non-pharmacological reviews and interventions. For example, methylphenidate has been shown to improve cognition in adults with HIV but that is not mentioned. I think it is important to mention that there are some pharmacological interventions, even though the emphasis of this paper is on behavioral approaches. Again, that point of the paper should be emphasized more.

We agree with the reviewer and added a statement in the discussion to emphasize the focus of the rehabilitation recommendations is non-pharmacological in nature (Page 24). We specifically highlighted evidence among people with HIV-associated neurocognitive impairments: 'While evidence describes potential benefits of supplements used in osteoarthritis, or central nervous stimulants to alleviate HIV-associated cognitive impairments and fatigue, the focus of these rehabilitation recommendations were non-pharmacological in nature."

Reviewer #2

3) This was an ambitious effort using innovative methods to review existing literature. It highlights possible potential rehabilitation approaches to older adults living with HIV. A clearer distinction of which interventions and recommendations came from non HIV literature would be useful for further research.

We thank the reviewer for these comments. We present the recommendations specifically derived from the HIV-specific literature on HIV, rehabilitation and aging and those derived from literature on common conditions experienced by older adults with HIV as Stream A and B, respectively. In the summary of 'Strengths and Recommendations' (page 5), we state that 36 recommendations were derived from 108 articles on comorbidities and 16 recommendations were derived from articles specific to rehabilitation for older adults with HIV. In the recommendations document (Supplement Data File 2) we similarly present the recommendations using the Stream A (HIV-specific literature)

and Stream B (common condition literature). The specific body of literature from which the recommendations were derived is indicated by the category in which the recommendation is located. For example, with Category D – Cancer, all recommendations in this section were specifically derived from literature among people with cancer. We also revised the table of contents of the recommendations to better reflect this distinction.

4) The authors should also consider elaborating on the importance of including PLHIV in the research as this is not yet commonly practised.

We agree with the reviewer and further detail of the importance of incorporating the viewpoints of people living with HIV in the development of these recommendations in the Discussion (Page 22).

5) It would also be useful to align some of the terminology used such as endorsement with more common terms such as validation.

We thank the reviewer for this suggestion. We chose to retain 'endorsement' throughout as this term is consistent with terminology used in the standards for developing clinical practice guidelines. Endorsement specifically refers to the process in which clinicians and PLHIV were asked to closely review the recommendation and were asked whether they endorse or do not endorse the recommendation. Recommendations that are endorsed are more likely to be taken up by the HIV and clinical community.

6) I would also recommend that the authors include in their discussion how the recommendations and concepts differ or align with approaches to older adults with other chronic conditions.

Many of the Stream B recommendations were derived from evidence not specific to older adults. Hence, these recommendations would similarly apply to adults with these chronic conditions without HIV. The wording of our recommendations depended on how well, or to what extent we could make the 'leap' from the condition-specific evidence to a recommendation for rehabilitation specific to older adults living with HIV and these comorbidities. The supportive notes that augment the recommendations were derived to help to situate the recommendation into the context of older adults with HIV (see Page 20-21).

7) The paper outlines a complex process quite clearly. There are some minor spacing and editorial issues that need to be addressed.

Thank you. We reviewed and revised the manuscript and supplemental files for grammatical and formatting issues.