

Editor

We would like to thank the editor for the time taken to review our work, and for the assessment made. We believe that the reviewer's comments were insightful, and that these have allowed the article to become more comprehensive and informative, thus substantially improving in its final form.

Please find below the answers for the specific comments made and attached a revised version of the manuscript.

Reviewer 1

We would like to thank the reviewer for the time taken to assess our work, as well as for the expert comments made. We agree with the suggestions made and believe that the comments have allowed the article to become more focused and integrative.

Please find below the answers for the specific queries raised:

1 - *"CHALLENGES TO CR - As described in point challenges to CR's present section, please expand on the subtopic "Home-based program". Also, please strongly reconsider discussing more the information on the recent AACVPR/AHA/ACC scientific statement on this topic that is referred to no. [83]."*

Author's reply: We would like to thank the reviewer for this interesting comment. We agree that expanding this section would be of importance, as to provide the reader with additional information on this topic. As such, this section has been expanded, while some of the data present in Thomas RJ *et al.* J Am Coll Cardiol. 2019;74:133-153 has also been discussed.

2 - *"FUTURE PERSPECTIVE - The topic of telemedicine has progressively expanded the spotlight, which is even more reinforced in the current epidemiological setting(i.e. in the face of the coronavirus pandemic) as the subsection for telerehabilitation can be reflective of one of the cornerstones of the possible future horizon for many approaches within the scope of CR. Therefore, though highly attractive, there are some points which should be discussed. Firstly, to provide a broader view and given the subject matter concerning the COVID-19 and CR. Consider discussing (and referencing) the recent data related to COVID-19 in point of telerehabilitation approach such as Two Hundred-Meter Fast-Walk Test to give readers a brief overview on possible prescription methods."*

Author's reply: We would like to thank the reviewer for this comment. Indeed, as telemedicine progressively expands (as mentioned in the current article), we concur that further discussing this topic could be of interest. As such, we have expanded this section, taking into consideration the potential application of different methodologies in terms of exercise prescription and progression monitoring. Furthermore, we have also further highlighted some of the current concepts concerning the potential of HBCR in the setting of the COVID-19 pandemic (namely by incorporating some of the data in van Iterson EH *et al.* J Cardiopulm Rehabil Prev. 2021;41:88-92).

3 - *"Secondly, the sentence (...) "Interestingly, some studies highlight the potential in the use of digital applications (often included in the broader concept of mHealth, as the use of wireless technologies with the aim of improving patient outcomes) in CR [100].." (...) This is an essential point, which could be of growing significance. Please further explore the benefits and caveats of this model and the data to support its use (– if available)."*

Author's reply: We would like to thank the reviewer for this expert comment. This section has been expanded, as to further discuss some of the potential benefits and caveats of this model.

4 - *"Thirdly, please consider reviewing the data relating some of the surrogates mentioned (such as "heart rate by using a watch and a chest strap" or "wrist heart rate monitor as a telerehabilitation device") with established models of peak VO₂consumption (cardiopulmonary*

exercise test). Please also describe if these surrogates have been validated among populations with ischaemic heart disease and any ongoing studies on this topic. Finally, data should be presented to illustrate the relationship between variations in these parameters (and the use of remotely monitored telerehabilitation for cardiac patients in current situation) and safety and mortality (if available). If evidence is not present for this following point, please consider describing this hindrance. Please also consider addressing some of the data present in the article The future is now: a call for action for cardiac telerehabilitation in the COVID-19 pandemic from the secondary prevention and rehabilitation section of the European Association of Preventive Cardiology. As this is a recent call to action from the European Association of Preventive Cardiology, its inclusion would improve the present article and provide the reader with additional references for the topic in question.”

Author's reply: We would like to thank the reviewer for this particularly insightful comment. Indeed, the use of novel monitoring devices (assessing parameters such as heart rate, peripheral saturation, arrhythmia monitoring, etc.) will potentially have an ever-increasing role in contemporary cardiovascular medicine, namely in cardiac rehabilitation. In this background, we agree with the reviewer that further expanding some of the data concerning these methodologies would be of interest, as to provide additional information for the reader. As such, we have expanded this section (namely by including and exploring some of the data in Batalik L *et al.* *Medicine* (Baltimore). 2020;99:e19556, Maddison R *et al.* *Heart*. 2019;105:122-129 and Bayoumy K *et al.* *Nat Rev Cardiol*. 2021;18:581-599). Moreover, some of the data present in Scherrenberg M *et al.* *Eur J Prev Cardiol*. 2020 In press (reference 90) has also been discussed and referenced in this section.

Science Editor

We would like to thank the science editor for the time taken to review our work, as well as for the assessment made.

Please find below the answers for the specific queries raised:

1 - *"Summary of the Peer-Review Report: The present article provides a review of the current role and future perspectives of cardiac rehabilitation. The authors should be commended for the scope of the paper and the balanced style used, which could be an essential addition to the present literature on the topic. The questions raised by the reviewers should be answered"*

Author's reply: The questions raised by the reviewer have been answered (please see above).

2 - *"(3) Format: There are no tables and no figures"*

Author's reply: A figure and a table have been included, in accordance with this comment (also mentioned by the editor-in-chief).

3 - *"(5) Self-cited references: There are 6 self-cited references. The self-referencing rates should be less than 10%. Please keep the reasonable self-citations (i.e. those that are most closely related to the topic of the manuscript) and remove all other improper self-citations. If the authors fail to address the critical issue of self-citation, the editing process of this manuscript will be terminated"*

Author's reply: The revised version of the manuscript includes 130 references, six of which are by the corresponding author (five as lead author, one as co-author; 4.6% of the total). All self-references have been reviewed, being related to the topic under study.

4 - *"5 Issues raised: (1) The "Author Contributions" section is missing. Please provide the author contributions; and (2) Please add table/figure to this review."*

Author's reply: We would like to thank the science editor for this comment. In accordance with the editor's request, the author contributions section has been included. In addition, both a figure (Figure 1) and table (Table 1) have also been included.

Company Editor-In-Chief

We would like to thank the editor for the time taken to review our work, as well as for the assessment made.

Please find below the answers for the specific queries raised:

1 – *“I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Cardiology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, the author(s) must add a table/figure (medical imaging) to the manuscript. There are no restrictions on the figures (color, B/W).”*

Author’s reply: We would like to thank the Editor for these comments. In accordance with the Editor’s assessment, we have revised the article according to the peer-review report (while addressing the different queries made by the reviewer) and the Editorial Office’s comments. In addition, both a figure and a table have been added to the manuscript.