

Anonymous Reviewer #1

General Comments: I read with great interest the article "Barriers and facilitators to participating in cardiac rehabilitation and physical activity; a cross-sectional survey (qualitative analysis)". It is a successful research that analyzes barriers to better implementation of CR and offers some principled answers on how to improve it. I do not find significant weaknesses in the article that should be amended or improved. As someone who has been dealing with this topic in my daily work for years, I think that the article is valuable and provides several suggestions for increasing attendance of CR.

Thank you very much for reviewing our manuscript. Your comments and suggestions are greatly appreciated.

Anonymous Reviewer #2

General Comments: The study provides unique qualitative research in the CR field on an important topic. The article is written in high quality. The introduction section justifies the purpose of the study. I congratulate the authors for the preparation of the manuscript. However, I enclose below the main issue that should be clarified before the article is considered for acceptance to the World Journal of Cardiology.

The followings are our point-by-point responses:

Reviewer: The main issue of the article is the absence of characteristics and descriptions of the participants. Please add the sample characteristics concerning the typical characteristics (personal characteristics, age, sex, weight, cardiovascular treatment, possible risk factors if available and/or risk group). This is an important point to create a more detailed picture of research and other impacts in CR. The following minor comments suggest broadening the impact and deepening the perspective of the article's topic, which can be addressed; however, it is up to the authors' consideration.

Response: Participant characteristics have been added to the document under the RESULTS section, (Pages 7-8 line 147-153). Characteristics around cardiovascular condition, comorbidities, smoking status, and physical activity levels have been added. Age and sex had been added previously. (Please note that line numbers start from the abstract title (1)).

Reviewer: Sentence: "Developing new methods to increase attendance at exCR is deemed paramount" Consider a short extension of what specific new methods are involved (e.g., telehealth CR, remote CR monitoring, hybrid CR ...)

Response: The following text "Such methods could include telehealth, remote monitoring, or a hybrid approach, to increase accessibility and participation [6]" has been added to the manuscript.

Reviewer: A brief identification of the referral barrier to CR programs on the side of medical specialists, GP, cardiologists (if any)

Response: Sentence on medical staff referral barriers added to INTRODUCTION (page 5, second paragraph, line 78-80).

Reviewer: Consider a brief inclusion of information on the integration of CR in the cardio-oncology population. This topic has recently been of significant importance (support from large professional societies AHA, ESC) because many cancer patients suffer from cardiovascular risk factors or are at risk of cardiotoxicity after treatment (eg: AHA statement: Cardio-Oncology Rehabilitation to Manage Cardiovascular Outcomes in Cancer Patients and Survivors: A Scientific Statement From the American Heart Association. Circulation. 2019;139(21):e997-e1012. doi:10.1161/CIR.0000000000000679)

Response: Thank you for your suggestion, after giving it some thought we decided not to include mention of this as we feel it reflects an important but quite distinct sub-population of patients that were not the focus of this research.

Reviewer: Statement: "Frohmader, Lin and Chaboyer (2018)²⁴ who found that following interviews, patients increased confidence to develop lifestyle changes as a result of viewing their own success and positive reinforcement by mentors. Focusing on methods to increase patient confidence could increase adherence to CR programmes." Clarify, this statement could be elaborated as a perspective for telecoaching / teleconsultations as a possible form of remotely managed CR (eg: Remotely monitored telerehabilitation for cardiac patients: A review of the current situation. World J Clin Cases. 2020;8(10):1818-1831. doi:10.12998/wjcc.v8.i10.1818)

Response: Sentence added in DISCUSSION section (Page 15, paragraph 3, line 364-365) around the suggested topic, new reference has also been added (Batalik, Filakova, Batalikova, Dosbaba, 2020).

Reviewer: Previous research has investigated such methods of delivery and found that online home-based exercise is at least equally as effective as centre-based rehabilitation and provides increased access and participation³⁰ Consider a change, not only online but also post-exercise telemonitoring. Minor typos check:

Response: Post-exercise telemonitoring has been added to sentence, sentence has been restructured and split into 2. DISCUSSION section (Page 15, paragraph 6, line 399-402 and new reference added (Batalik et al., 2020).

Reviewer: The abbreviation for the first use is not explained in the text: PA, GP, DIY. Please correct this and check the other abbreviations throughout the text.

Response: All abbreviations have been added at first mention INTRODUCTION (pages 5, line 61 (UK), page 5, line 80 (GP), page 6, line 92 (PA)).

Reviewer: **Sentence:** "Additionally, participant responses cited exercising with people with a similar condition made them more likely to attend the sessions,

improved support and enjoyment.” Sentence may be unclear or hard to follow. Consider rephrasing.

Response: Sentence rephrased (DISCUSSION, page 15, paragraph 4, line 369-371).

Reviewer: Moreover, many respondents reflected on their life and the future, expressing they conducted PA to maintain their health, feel better and external reasons such as to see their grandchildren grow up as seen with the sub-theme ‘reasons for staying physically active’ and thus there is a myriad of reasons individuals will select to adopt new behaviours.” Hard-to read sentence. Consider removing any unnecessary words or splitting it into two sentences.

Response: Sentence split into two and edited (DISCUSSION, page 18, paragraph 11, line 449-453).

Science editor

General comments: The manuscript is well written and can be helpful for the readers to ameliorate the diagnostic and therapeutic approach for this scenario. Nevertheless, there are a number of points that may deserve some revisions.

Comment: The baseline character of 567 participants.

Response: As per reviewer 2, the characteristics have been added of the participants RESULTS section, Pages 7-8 line 147-153.

Comment: The article needs a great deal of language polishing, also, please avoid long sentences

Response: Article has been re-read by all authors, changes to sentence structure has been addressed.

Company editor-in-chief

Comment: Author(s) must provide the Institutional Review Board Approval Form.

Response: Institutional Review Board Approval Form has been included.

Comment: Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.

Response: PowerPoint documents have been added.

Comment: Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden.

Response: Documents including table specifications have been added.

Thank you for your response and your time.

Yours Sincerely,

Matthew Fraser.