

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

Experiences of physiotherapists working with adults living with Long COVID in Canada: a qualitative study

Authors

Kim, Caleb; Lin, Chantal; Wong, Michelle; Al Hamour Al Jarad, Shahd; Gao, Amy; Kaufman, Nicole; McDuff, Kiera; Brown, Darren; Cobbing, Saul; Minor, Alyssa; Chan Carusone, Soo; O'Brien, Kelly K

VERSION 1 - REVIEW

Reviewer	1
Name	Heine, Peter
Affiliation	Warwick Medical School, CTU
Date	15-Apr-2024
COI	co-author and member of research team engaged in research of rehabilitation in people with Long COVID

An interesting perspective on physiotherapists experience dealing with people suffering from Long COVID and the differences encountered from typical practice.

As an aside, various comments are made throughout the text as to the potential damage of prescribing exercise in this clinical population. This is clearly true if undertaken without proper evaluation and constant monitoring, something you could say about the use of any treatment for any condition. Although possibly not appropriate for everyone with Long COVID, I would like to point out that there are instances where exercise, as part of a comprehensive rehabilitation programme, may be of benefit for some people as evidenced by the REGAIN study (<https://www.bmj.com/content/bmj/384/bmj-2023-076506.full.pdf>). Of particular interest to the authors of the paper under review is the qualitative paper related to the REGAIN study which is currently being reviewed by BMJ Open for publication. This details the experiences of both participants with Long COVID and the clinicians who provided the physical and mental health rehabilitation programme (which included exercise) as part of the REGAIN study, and would complement some of the experiences described in this paper of Canadian physiotherapists, albeit in a different country and healthcare setting.

In light of this information, I wonder if the authors might find it appropriate to acknowledge that exercise is not always associated with a negative outcome in the treatment of Long COVID and that, in the right circumstances, it's inclusion as one part of a comprehensive rehabilitation programme can be of benefit.

Reviewer	2
Name	Preston, Jenny
Affiliation	NHS Ayrshire and Arran, Occupational Therapy
Date	17-Apr-2024
COI	No competing interests

Manuscript ID: bmjopen-2024-086357

Thank you for inviting me to review this manuscript. This is a contemporary topic of enquiry and while specific to physiotherapy could have relevance to a wider group of professional disciplines. I particularly welcome the open and honest responses which help evidence the challenges that this group of professionals have encountered as they navigate the management of Long Covid in the absence of prior knowledge and an established evidence base.

Overall the study is well designed and executed. Particular strengths include the co-produced design of the study with the inclusion of participants with lived experience. The manuscript is clear and logical and adheres to the COREQ Checklist. The research aims are clear and the outcomes are presented logically reflecting the research question. The authors reflect on the limitations of the study particularly in relation to methodology, population size and generalisability of their findings. References are current and up-to-date.

It is genuinely hard to be critical of this manuscript however I note that member checking was not included in the design. While this may be acceptable the authors are encouraged to articulate and justify this decision within the context of the methodology and study design.

It has been a pleasure to review such a considered and well prepared manuscript and I would like to extend my personal thanks to the authors. I therefore recommend this manuscript for publication.

Reviewer	3
Name	Humphreys, Helen
Affiliation	Sheffield Hallam University, Advanced Wellbeing Research Centre
Date	23-Apr-2024

COI

n/a

This is a well written manuscript reporting interesting findings. I have made a few comments on the attached document.

Methods

- Data analysis – please provide a reference for the “qualitative descriptive analysis” approach that was used in this context.
- The group-based approach to analysis is really interesting but could you say a little more about who led this? Also a bit about the backgrounds/potential biases of those involved in analysis.

Results

- Pg 9, line 218 – can more information be provided about why so many physiotherapists were deemed “ineligible”? 54 down to 13 means a lot of potential participants were excluded and you need to be transparent about why to avoid implications of recruitment bias
- The theme “encountering a new patient population”, strays a little too far into a descriptive account of patients’ lived experiences of Long Covid, which is well documented elsewhere and not the primary aim of this study. It would be useful to see more quotes here that represent the physiotherapists’ perspective more explicitly i.e. how they felt or experienced the process of encountering those new patients/symptoms
- I find the layout of the findings difficult to follow with too many uses of a), b) and i), ii) etc. Could this be edited for readability by simply using subheadings rather than numbering them?

Discussion

- Given the themes highlighted in your findings, it would be great to see a little more written about how healthcare systems might foster continuous professional education more effectively in future, to enable a more adaptive healthcare workforce who can respond to changing patient populations with increasingly complex emerging and evolving conditions and needs.
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VERSION 1 - AUTHOR RESPONSE

Comments from Reviewers to Author:

Reviewer: 1.

Comments to the Author:

2. Comment: An interesting perspective on physiotherapists experience dealing with people suffering from Long COVID and the differences encountered from typical practice.

Response: Thank you.

Comment: As an aside, various comments are made throughout the text as to the potential damage of prescribing exercise in this clinical population. This is clearly true if undertaken without proper evaluation and constant monitoring, something you could say about the use of any treatment for any condition. Although possibly not appropriate for everyone with Long COVID, I would like to point out that there are instances where exercise, as part of a comprehensive rehabilitation programme, may be of benefit for some people as evidenced by the REGAIN study (<https://www.bmj.com/content/bmj/384/bmj-2023-076506.full.pdf>). Of particular interest to the authors of the paper under review is the qualitative paper related to the REGAIN study which is currently being reviewed by BMJ Open for publication. This details the experiences of both participants with Long COVID and the clinicians who provided the physical and mental health rehabilitation programme (which included exercise) as part of the REGAIN study, and would complement some of the experiences described in this paper of Canadian physiotherapists, albeit in a different country and healthcare setting. In light of this information, I wonder if the authors might find it appropriate to acknowledge that exercise is not always associated with a negative outcome in the treatment of Long COVID and that, in the right circumstances, its inclusion as one part of a comprehensive rehabilitation programme can be of benefit.

Response: Thank you for the comment. Our paper describes experiences of physiotherapists working with persons living with Long COVID, rather than outcomes of PT interventions of persons with Long COVID. While we did not capture the characteristics of patients of the PT participants, the interview data in this study reflect experiences of PTs working with persons living with Long COVID many of who were experiencing post exertional symptom exacerbation / post exertional malaise (PESE/PEM). In the REGAIN study, the participants appeared primarily to be hospitalized patients without PESE/PEM, and thus do not reflect the patient population reflected in the manuscript as described by the PT participants. We specify in our discussion that traditional exercise programming is harmful for those living with Long COVID with PESE/PEM (Line 589-616). By focusing on this underrepresented group who are at heightened risk of harm, we aim to highlight the importance of consideration of PESE/PEM in safe rehabilitation.

Reviewer: 2.

3. Comment: Thank you for inviting me to review this manuscript. This is a contemporary topic of enquiry and while specific to physiotherapy could have relevance to a wider group of professional disciplines. I particularly welcome the open and honest responses which help evidence the challenges that this group of professionals have encountered as they navigate the management of Long Covid in the absence of prior knowledge and an established evidence base.

Overall the study is well designed and executed. Particular strengths include the co-produced design of the study with the inclusion of participants with lived experience. The manuscript is clear and logical and adheres to the COREQ Checklist. The research aims are clear and the outcomes are presented logically reflecting the research question. The authors reflect on the limitations of the study particularly in relation to methodology, population size and generalisability of their findings. References are current and up-to-date.

Response: Thank you. We updated sentences in the introduction to reflect recent global estimates of Long COVID, with more up-to-date references since our original submission. (Line 92-94)

4. Comment: It is genuinely hard to be critical of this manuscript however I note that member checking was not included in the design. While this may be acceptable the authors are encouraged to articulate and justify this decision within the context of the methodology and study design.

Response: Thank you. We did not perform member checking as part of our approach as our comprehensive and systematic group-based analytical approach with multiple team meetings discussing our coding scheme and interpretations served to ensure the findings accurately and comprehensively reflected the perspectives of the PT participants. We added this statement to the Methods – Data analysis section (Line 200-203).

5. Comment: It has been a pleasure to review such a considered and well prepared manuscript and I would like to extend my personal thanks to the authors. I therefore recommend this manuscript for publication.

Response: Thank you for the comment and for reviewing our manuscript.

Reviewer: 3.

6. Comment: This is a well written manuscript reporting interesting findings. I have made a few comments on the attached document.

Response: Thank you.

Methods

7. Comment: Data analysis – please provide a reference for the “qualitative descriptive analysis” approach that was used in this context.

Response: We added references to support our group-based qualitative descriptive analytical approach (Flicker et al, 2015) (Line 190-191).

8. Comment: The group-based approach to analysis is really interesting but could you say a little more about who led this? Also a bit about the backgrounds/potential biases of those involved in analysis.

Response: We added a reference for the group-based method we used to guide our approach, which was the “DEPICT model for participatory health promotion research”. In the methods, we indicated our team included current and future physiotherapists, researchers, and two persons with lived or living experiences of Long COVID. We consulted two physiotherapists living with Long COVID for their guidance when developing and refining the interview guide and the demographic questionnaire (Line 139-142). We added a statement specifying that the interviews were conducted by MScPT students to provide further context on the team members involved in data collection and analysis (Line 162).

Results

9. Comment: Pg 9, line 218 – can more information be provided about why so many physiotherapists were deemed “ineligible”? 54 down to 13 means a lot of potential participants were excluded and you need to be transparent about why to avoid implications of recruitment bias

Response: Our inclusion criteria included physiotherapists in Canada who self identified as having clinical experiences working with adults living with Long COVID in the past year. We defined clinical experiences as practicing in a Long COVID-designated setting and/or engaging in assessment and treatment of one or more adults living with Long COVID in the past year as part of a mixed caseload. Reasons for ineligibility were attributed to PT not having worked clinically in the past year with one or more adults living with Long COVID. We added a sentence specifying reasons for ineligibility in the results (Line 219-221).

10. Comment: The theme “encountering a new patient population”, strays a little too far into a descriptive account of patients’ lived experiences of Long Covid, which is well documented elsewhere and not the primary aim of this study. It would be useful to see more quotes here that represent the physiotherapists’ perspective more explicitly i.e. how they felt or experienced the process of encountering those new patients/symptoms

Response: Thank you for this comment. We rated an additional quote from a participant who more described their experiences encountering a patient who presented with cognitive challenges living with Long COVID who were unable to recall their treatment plan. The PT participant this was a ‘wake up call’ for them as a PT, resulting in them adapting the PT session accordingly. (Line 287-295)

11. Comment: I find the layout of the findings difficult to follow with too many uses of a), b) and i), ii) etc. Could this be edited for readability by simply using subheadings rather than numbering them?

Response: We revised the subheadings accordingly removing references to a), b), and i), ii) throughout.

Discussion

12. Comment: Given the themes highlighted in your findings, it would be great to see a little more written about how healthcare systems might foster continuous professional education more effectively in future, to enable a more adaptive healthcare workforce who can respond to changing patient populations with increasingly complex emerging and evolving conditions and needs

Response: Thank you for this comment. We added a statement in the Discussion about the need for enhanced education in Long COVID and other post-viral conditions such as ME/CFS

and Postural orthostatic tachycardia syndrome (POTS) within physiotherapy entry-to-practice curricula and continuing education for physiotherapists to foster evidence-informed, safe, and effective rehabilitation. (Line 609-612).

VERSION 2 - REVIEW

Reviewer	3
Name	Humphreys, Helen
Affiliation Centre	Sheffield Hallam University, Advanced Wellbeing Research
Date	16-Sep-2024
COI	

This was already a thoughtful and interesting manuscript but the additional work undertaken by the authors to respond to reviewer's comments are greatly appreciated and I believe have improved the readability of the paper. I have no further comments or requests.