

This review includes

- Multidisciplinary post-COVID-clinic
- The effectiveness of digital physiotherapy practice
- Quality of life and Long COVID
- Work ability in Post-COVID-19 condition
- Rehabilitation disparities during COVID-19
- Impacts of COVID-19 in Aotearoa New Zealand

Kia ora koutou katoa.

Welcome to the 'Long COVID Literature Review' by Te Hikuwai Rangahau Hauora | The Health Services Research Centre. We aim to bring you monthly summaries of interesting literature concerning Long COVID. We prioritise Aotearoa New Zealand and Indigenous research and publications determined to be high-quality, evidence-based research.

Implementing a multidisciplinary post-COVID clinic in a small community environment

(Price et al., 2023)]

[Find abstract here.](#)

SUMMARY:

This paper describes the establishment of a multidisciplinary Long COVID clinic in Mesa County (Western Colorado, United States) and the clinic's experience in treating Long COVID patients. The Long COVID clinic accepts self-referrals via an online form on the hospital website. Once the self-referral is completed, the clinic calls to schedule an initial evaluation for the patient. The clinic implements a multidisciplinary approach to rehabilitation, forming an individualised treatment plan that may include fatigue management, breathing retraining, pool exercise transitioning to land, dysautonomia and psychological/ behavioural support. A physician or nurse practitioner leads the multidisciplinary team and the points of initial contact. Therapy services include physical, occupational, speech, respiratory and behavioural, with specialists available.

COMMENT:

The paper emphasises the importance of developing these support clinics and networks now, as the need for such a service is apparent. These services present a gateway for underserved communities to seek specialised care, particularly important for illnesses like Long COVID that require long-term management and healthcare access.



Long COVID Collective

A platform for collaboration between researchers, professionals and those with lived experiences of Long COVID to drive the future direction of optimal health delivery.

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LONG COVID REVIEW



Long Covid Support

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Effectiveness of digital physiotherapy practice compared to usual care in Long COVID patients: A systematic review

(Estebanez-Pérez et al., 2023)

[Find abstract here.](#)

SUMMARY:

This systematic review explored the effectiveness of digital physiotherapy interventions compared to usual care among adult populations with Long COVID. Digital interventions included tele-supervised home-based exercise training, group-guided sessions with semi-structured discussions and an unsupervised programme with a weekly teleconsultation. Control groups received short educational instructions at baseline, usual physiotherapy care or online supervised respiratory muscle training. The effectiveness of digital physiotherapy could be an effective alternative, as results demonstrated to be no less inferior in clinical outcome measures and satisfaction with care than those who received usual care for Long COVID.

COMMENT:

Digital physiotherapy interventions could be an effective intervention for Long COVID. This evidence provides an accessible method to reach those in rural communities needing Long COVID services. Health practitioners and physiotherapists should ensure patients are best suited for digital physiotherapy and have the tools to do so (i.e., internet coverage, digital devices and the knowledge to operate devices).

Influence of clinical and sociodemographic variables on health-related quality of life in the adult population with Long COVID

(Rodríguez-Pérez et al., 2023)

[Find abstract here.](#)

SUMMARY:

This study analysed the impact of Long COVID among those aged 30-to-50 years and determined the effect of clinical and sociodemographic variables on health-related quality of life. Study participants had confirmed COVID-19 and did not require hospitalisation. Long COVID was diagnosed by a health professional as persistent COVID-19-related symptoms for three months or longer that were not attributable to another cause. Study participants reported low health-related quality of life scores, with worse results in the physical component (Score: 25, Standard deviation [Std]: 4.45) than in the mental component (Score: 46, Std: 8.65); a score of 50 or over indicates adequate/good health status. Women had lower health-related quality of life scores than men, particularly in physical functioning, bodily pain and health transitions. A longer time between initial COVID-19 infection and Long COVID diagnosis was associated with worse self-perceived general health. Those with Long COVID demonstrated a decline in their ability to balance work demands and life activities, directly impacting their health-related quality of life.

COMMENT:

Among people with mild experiences of acute COVID-19, those with Long COVID have a reduced quality of life. Interestingly, this article highlights the importance of occupational balance, which includes the integration of life activities and work demands. It is essential to consider work/life balance in rehabilitation strategies to support those with Long COVID.

Abbreviations: Mean [M]; Standard deviation [Std].
See [Glossary](#)

LONG COVID REVIEW

Post-COVID-19 condition, work ability and occupational changes in a population-based cohort

(Kerksieck et al., 2023)

[Find abstract here.](#)

SUMMARY:

This population-based cohort study evaluated the association between Long COVID, work ability and occupation changes among those diagnosed with SARS-CoV-2 between August 2020 and January 2021, aged 18 to 64 years in the Canton of Zurich, Switzerland. Eighteen per cent of participants reported having COVID-19-related symptoms at 12 months, and 14% reported not recovering. The presence of COVID-19 symptoms was strongly associated with a reduction in work ability, including physical and mental demands at 12 months. Nearly six per cent of those with Long COVID reported direct effects on their occupational situation; some stories included being on permanent sick leave, being unable to re-enter the job market or, adjusting positions within current work and facing reductions in pay. Nearly two per cent of those with Long COVID completely dropped out of the workforce.

COMMENT:

Kerksieck et al. (2023) highlighted sickness presenteeism (i.e., working while sick) has been largely overlooked in research and is most likely more common given the push for working from home introduced by COVID-19. Given the reduced work ability of a sick employee, their cost to remain at work is estimated to be similar to, or even higher than, an employee's absence. Therefore, rehabilitation back-to-work strategies for all those reporting prolonged COVID-19-related symptoms are desperately needed.



Navigating ME/CFS and Long COVID

[ME Support](#)

Addressing rehabilitation healthcare disparities during the COVID-19 pandemic and beyond.

(Katz et al., 2023)

[Find abstract here.](#)

SUMMARY:

Structurally marginalised groups in the United States are disproportionately represented in higher rates of COVID-19 infection, hospitalisation, readmission and mortality. These inequities in COVID-19 have translated to the proportion of those impacted by Long COVID and the need for specialised rehabilitation. The study reports that older people, pregnant women and those with a disability are more likely to experience Long COVID symptoms. Notably, Latino/Hispanic individuals have higher rates of dyspnoea, fatigue and dementia than non-Latino/Hispanic people. This report recommends implementing appropriate cultural and community modalities, including telemedicine, to mitigate financial limitations to healthcare services and increase accessibility to rehabilitation.

COMMENT:

Telehealth can reduce barriers to care. However, a widespread implementation of telehealth may also, subsequently, increase health disparities. In Aotearoa New Zealand, Māori, Pasifika groups and octogenarian age cohorts (80-to-90 years) have less access to digital technology than other population groups. Moreover, removing in-person care by advancing telehealth services leaves some concern for Māori and Pasifika peoples, who greatly emphasise relationships. Because of these factors, it is uncertain whether a nationwide push for telehealth services is the best approach to reduce health inequities in Aotearoa New Zealand's health and disability system.

LONG COVID REVIEW

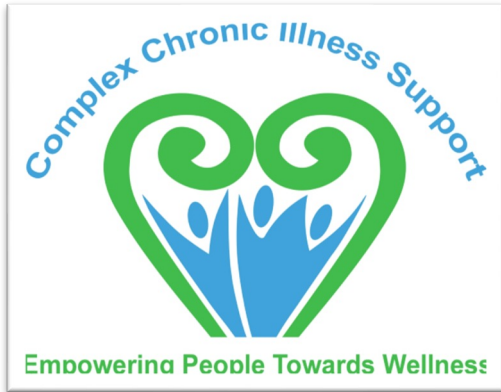
Glossary

Mean [M]

The average value in a collection of numbers. Calculated by adding all the values together and then dividing the total by the number of numbers.

Standard deviation [Std]

A measure of dispersion. It tells us, on average, how far each value lies from the mean.



[Complex Chronic Illness Support](#)

For more literature concerning Long COVID, you can visit '[Lit COVID](#)', a website library for tracking up-to-date scientific information about COVID-19 and Long COVID.

Similarly, you can follow 'LongCovidPapers' on **Twitter** (@LongCovidPapers) for notifications of research papers from PubMed and MedRxiv

Cohort profile: Ngā Kawekawe o Mate Korona | Impacts of COVID-19 in Aotearoa – A prospective, national cohort study of people with COVID-19 in New Zealand.

(Russell et al., 2023)

[Find abstract here.](#)

SUMMARY:

This national cohort study investigated the immediate and long-term physical, psychological and economic impacts of COVID-19 in Aotearoa New Zealand. Adults who had COVID-19 before December 2021 were invited to participate. In this study, Long COVID was defined as having symptoms that lasted for three months or longer and was reported by one-in-five (20%) of the 990 participants. As a consequence of how people were invited to participate, this prevalence figure may be higher than we would expect to see in the general population. The risk of Long COVID was higher in those with obesity or heart disease. Participants reported high levels of anxiety or depression. There was little understanding of Long COVID, among both health professionals and study participants. Only half of the participants with Long COVID symptoms received support from a General Practitioner [GP]. Of those who did, many went back frequently; one in six people had seen their GP at least four times. One in 10 participants did not see a general practitioner when they needed to because of cost.

COMMENT:

The first and only nationwide study investigating the impacts of COVID-19 in Aotearoa New Zealand. Uniquely, the study was underpinned by a Tiriti o Waitangi framework, which recognised the relationship between Māori and non-Māori as fundamental to research outcomes. The study reports plans for follow-up investigations for people with Long COVID and plans to investigate longitudinal changes to wellbeing impacts, including mental health, workplace, and education.

If you or your family member has Long COVID and are interested in being involved in future Long COVID research, please contact **Bailey Yee**.



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