

This review includes:

- Workplace factors and return to work
- Long COVID among highly vaccinated population
- Physiotherapy and Long COVID in Aotearoa New Zealand
- Irish tertiary Post-COVID Clinic
- Physical exercise-based rehabilitation



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.

[Visit our website.](#)

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.

Workplace factors that promote and hinder work ability and return to work among individuals with long-term effects of COVID-19: A qualitative study

(Gyllensten et al., 2023)]

[Find abstract here.](#)

SUMMARY:

This study explored workplace factors that promote and hinder work performance and return to work among 19 individuals with long-term effects of COVID-19. Five main themes and multiple subthemes emerged from the study. Of these themes, three highlighted factors promoting work ability and return to work, including (1) Communication and support from both management and colleagues; (2) Possibilities to adjust work, such as working from home, having flexible work hours and adjusted work tasks and; (3) Acceptance of new limitations and change. Two of the five themes highlighted hindering factors such as (4) Increased need for recovery from work as tasks cost more energy-wise compared to before COVID-19 infection, leaving little energy for other parts of life and (5) Lack of knowledge in the workplace and the broader society of the long-term effects of COVID-19. The study suggests further implications.

COMMENT:

Long COVID is a long-term debilitating illness likely to contribute to people's work abilities and performance. Employers must be empathetic, adaptable and supportive of those returning to work. This study suggests some ways that employers can facilitate employees experiencing the long-term effects of COVID-19 to safely return to work.

LONG COVID REVIEW

Long COVID in a highly vaccinated population infected during SARS-CoV-2 Omicron wave – Australia 2022

(Woldegiorgis et al., 2023)

[Find abstract here.](#)

SUMMARY:

This study describes Long COVID, its impacts on work and education and the demand for healthcare services among a highly vaccinated population (94% of whom had received greater than or equal to three COVID-19 vaccine doses) exclusively infected by Omicron. Approximately one in five persons first infected with the Omicron variant reported Long COVID 90 days post-diagnosis. Female sex, older age, pre-existing health issues and those residing in regional/remote areas were independently associated with a higher risk of developing Long COVID. Almost 40% of people with Long COVID reported using health services due to ongoing symptoms. Most services included general practitioner consultations, and females were more likely than males to use health services for symptoms. Most participants (65%) returned to work/study within a month after COVID-19 diagnosis. However, roughly 20% reported negative impacts extending beyond three months, resulting in either reduced hours or not returning to work. Females and persons with pre-existing health issues were also less likely to fully return to work 90 days after COVID-19 diagnosis.

COMMENT:

One of few studies to investigate Long COVID in those infected with the Omicron variant. This study found in a highly-vaccinated population; one-in-five experienced ongoing symptoms consistent with Long COVID. This study demonstrates the unwavering burden of Long COVID, and the crucial importance of enhancing our understanding of Long COVID as further variants of COVID-19 appear.

Awareness, knowledge and management of Long COVID among a small cohort of primary care-based physiotherapists in New Zealand

(Rhodes et al., 2023)

[Find abstract here.](#)

SUMMARY:

This study explores the current knowledge and awareness of Long COVID diagnoses, assessment and management among physiotherapists working in primary care in Aotearoa New Zealand. Forty-one physiotherapists completed the online survey, in which over half understood the multi-system impacts and secondary effects of Long COVID. Twenty-four per cent reported feeling fairly confident identifying patients with Long COVID, and 7% did not. Over half of primary care physiotherapists had had experience managing Long COVID patients, half of whom reported an improvement in patients in areas of breathlessness and exercise capacity, and 27% reported an improvement in cough and fatigue levels. There is limited support for physiotherapists in managing Long COVID; because of this, very few respondents were completely confident in handling a Long COVID patient's return to physical activity. Over a quarter (27%) of physiotherapists were provided with information for managing Long COVID, and nearly a fifth (19%) of physiotherapists took on the responsibility of educating co-workers. Respondents perceived a lack of recognition concerning the potential impact of physiotherapy in Long COVID management.

COMMENT:

Physiotherapists could play a key role in the management of Long COVID. However, in Aotearoa New Zealand, physiotherapists work predominantly in a private capacity, with patients paying for appointments. This raises the question of equity of access to care, as lower-income earners, such as Māori and Pasifika peoples, fail to afford such care. To realise the true potential of physiotherapists in Long COVID service management, we must make such services available to those who need it, not only those who can afford it.

LONG COVID REVIEW

Post-COVID care delivery: The experience from an Irish tertiary centre's post-COVID clinic

(Heeney et al., 2023)]

[Find abstract here.](#)

SUMMARY:

This study describes the operations and outcomes of a Post-COVID Clinic in a large tertiary referral hospital in Dublin. The clinic model consisted of a nurse-led telephone triage service followed by a physician-led face-to-face clinical assessment. The triage process consisted of categorising patient symptoms as 'Red' (chest pain, shortness of breath at rest or on minimal exertion), 'Amber' (all other symptoms including shortness of breath), or 'Green' (no symptoms). Those classified as 'Green' did not automatically receive an appointment and were accommodated according to service constraints. Multidisciplinary meetings were run in conjunction with the post-COVID clinic. Of the 311 patients that attended the Post-COVID Clinic, 37% had been triaged as 'Green', 54% as 'Amber' and 9% as 'Red'. No further follow-up or MDT discussion was required for most patients (74%) who were discharged from the clinic after one visit. Female sex was associated with increased odds of a higher triage category, as was being hospitalised whilst having COVID-19. Of interest, no participants categorised 'Red' had been admitted to critical care for COVID-19 infection, compared to eight and four per cent of participants in the 'Amber' and 'Green' categories, respectively.

COMMENT:

Interestingly, no participants triaged as 'Red' had required admission to critical care when infected with COVID-19. This demonstrates that the severity of patients experiencing ongoing symptoms does not (necessarily) correlate with the severity of their initial infection. This study highlights the importance of devising a system that can identify patients with ongoing symptoms instead of basing the need for follow-up care solely on the severity of initial COVID-19 illness.

Are you experiencing ongoing COVID-19-related symptoms for twelve weeks or longer?

OR

Are you interested in Long COVID research?

OR

Do you treat/support those with Long COVID?

Let's chat.

Help us identify important Long COVID research questions to inform the future development of research.

Join in on a one-hour Zoom to brainstorm ideas.

Key dates

- **Tuesday 24 October 2023**, 10–11am: People with lived experiences of Long COVID.
- **Tuesday 31 October 2023**, 10–11am: Researchers and health professionals interested in Long COVID.
- **Monday 13 November 2023**, 10–11am: Kids with Long COVID and parents.



LONG COVID REVIEW

Effect of physical exercise-based rehabilitation on Long COVID: A systematic review and meta-analysis

(Zheng et al., 2023)]

[Find abstract here.](#)

SUMMARY:

This systematic review aimed to synthesise published studies that focused on the effects of physical exercise-based rehabilitation on Long COVID. A meta-analysis assessed the effects of physical exercise-based rehabilitation on specific Long-COVID-related outcomes. Twenty-three articles were included in this review, of which 21 were included in the meta-analysis. In the included articles, rehabilitation was provided twice to five times weekly for two to 12 weeks. Most rehabilitation programmes employed a light-to-moderate intensity of exercises, primarily including aerobic or endurance training, resistance or strength training, stretching or flexibility training, and motor or balance training. The majority of included articles reported no adverse events during rehabilitation. Only a few studies reported minor adverse events, including muscle straining or dizziness, and one reported a major adverse event. Physical exercise-rehabilitation programmes demonstrated beneficial effects by alleviating dyspnoea, fatigue and depression, as well as improving scores on the six-minute walk test, pulmonary functioning, and quality of life. No significant effects were demonstrated in the handgrip strength tests, sit-to-stand tests and anxiety scores.

COMMENT:

This review and meta-analysis demonstrated physical exercise-based rehabilitation can be a potential therapeutic strategy in patients with Long COVID. However, most rehabilitation programmes included in this review were conducted in a clinical setting with face-to-face rehabilitation. Those with Long COVID should be careful returning to exercise, as potential adverse effects of physical exercise may be attributed to the unsupervised intensity and timing of activity, as well as post-exertional malaise. Therefore, those with Long COVID should discuss returning to physical exercise with a health professional before partaking in any activity.



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

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



Bailey Yee

Research Fellow
Health Services
Research Centre
Faculty of Health
bailey.yee@vuw.ac.nz



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