



Te Hikuwai Rangahau Hauora

LONG COVID REVIEW

Issue 01 May 2023

This review includes:

- Employment outcomes of people with Long COVID
- Vaccination and Long COVID
- Persistence and recovery in Canterbury, New Zealand
- Long-term outcomes of COVID-19 in children and young people
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Employment outcomes of people with Long COVID symptoms: Community-based cohort study

(Abyoubkhani et al., 2023)

Find abstract here.

SUMMARY:

A longitudinal observational study estimated the association between Long COVID and being able to work. People of working age with Long COVID were less likely to be working than those without, and this persisted up to a year after having COVID-19. Long COVID was also associated with an increased likelihood of long-term absence from work. The authors conclude that Long COVID has contributed to reduced participation in the United Kingdom labour market, but it is unlikely to be the only determinant of labour inactivity.

COMMENT:

Long COVID likely contributes to reduced labour market participation but is not the sole driver of labour inactivity. This finding highlights that we must look more broadly at people, their environments and the interactions between them rather than Long COVID in isolation.

Kia ora koutou katoa

Welcome to the first edition of the 'Long COVID Literature Review' by Te Hikuwai Rangahau Hauora | The Health Services Research Centre at Te Herenga Waka— Victoria University of Wellington. 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.

COVID-19 vaccination for the prevention and treatment of Long COVID: A systematic review and meta-analysis

(Ceban et al., 2023)

Find abstract here.

SUMMARY:

This systematic review and meta-analysis sought to determine the association between SARS-CoV-2 vaccination and the occurrence of Long COVID in breakthrough infections, and the symptom trajectory of pre-existing Long COVID following SARS-CoV-2 vaccination. In a meta-analysis of six studies, at least one vaccine dose was associated with a lower risk of Long COVID among COVID-19 vaccinated people who then got COVID-19 than those who did not receive a vaccination before infection. In a narrative synthesis, the protective effects of SARS-CoV-2 vaccination tended to vary by symptom category. Seven of nine articles reported that the majority of individuals with Long COVID did not experience changes in their symptoms following SARS-CoV-2 vaccination(s), and a greater number of people experienced improvement versus deterioration of symptoms after vaccination.

COMMENT:

The review identifies that at least one dose of the SARS-CoV-2 vaccination may be protective against the development of Long COVID and does not exacerbate pre-existing Long COVID symptoms. This is reassuring for people with Long COVID who are unsure whether to receive COVID-19 vaccines.

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Symptom persistence and recovery among COVID-19 survivors during a limited outbreak in Canterbury, New Zealand: A prospective cohort study (Cheung et al., 2023)

Find abstract here.

SUMMARY:

This cohort study aimed to measure symptoms and outcomes among people living in Canterbury, New Zealand, who tested positive for COVID-19 compared with a control group presenting with similar respiratory symptoms and tested negative for COVID-19. Seventy-six per cent of COVID-19-positive participants had persistent symptoms 251 days following infection compared to 18% in the control group. COVID-19 participants were significantly more likely to have not returned to normal activity levels than those without COVID-19 and took an average of seven days longer to recover to normal (21 days vs 14 days, p = 0.007). When adjusted for sociodemographic factors and the elapsed time between COVID-19 testing and completion of the questionnaire, the difference between COVID-19-positive and-negative participants dropped to two days. There were no differences between groups in generalised anxiety or health-related quality of life.

COMMENT:

Due to the epidemiology of COVID-19 during the study period, almost all participants self-identified as being of NZ European ethnicity. Ethnic minorities and indigenous peoples have been disproportionately affected by COVID-19, and it is most likely ongoing symptoms of COVID-19 will affect these population groups the greatest. Failure to capture these population groups in investigative samples leaves the ethnic-specific disease burden unexplained, allowing healthcare system inequities to persist.

Mātauranga Raranga Long COVID Registry Aotearoa New Zealand

https://www.lcregistry.auckland.ac.nz/

Long-term outcomes of COVID-19 infection in children and young people: A systematic review and meta-analysis

(Twohig et al., 2023)

Find abstract here.

SUMMARY:

This systematic literature review and meta-analysis aimed to synthesise available evidence concerning the effects of COVID-19 that lasts longer than fourweeks in children under 18 years. A total of 94 studies were included in the review, of which 66 articles were recruited from hospital settings, and eight were recruited solely from community settings. More than 100 COVID-19 symptoms affecting multiple bodily systems that continued for longer than four weeks were identified. Fatigue was most commonly reported (41% of participants in 23 studies), followed by headache (17% of participants in 18 studies) and cognitive symptoms (26% of participants in 15 studies). The meta-analyses reported the risk of prolonged symptoms were higher among hospital samples than in community samples (34%; [95%CI: 22% to 47%] vs 5.1% [95%CI: 4% to 7%]). Sequalae, including stroke, type-1 diabetes, Gullian-Barre syndrome, and persistent radiological or blood test abnormalities, have been reported among children following COVID-19. However, most studies reporting these findings are considered lowquality evidence.

COMMENT:

This systematic review and meta-analysis contributed significant evidence regarding long-term outcomes of COVID-19 in children and youth. The authors themselves indicate that more studies are needed to fill gaps in evidence, before treatment plans and services can benefit this population group.

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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.

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 **X** (@LongCovidPapers) for notifications of research papers from PubMed and MedRxiv

Beyond the case numbers: Social determinants and contextual factors in patient narratives of recovery from COVID-19.

(Hitch et al., 2023)

Find abstract here.

SUMMARY:

The investigation described the lived experiences of COVID-19 recovery for 37 adult patients. From analysis, three themes of COVID-19 recovery were identified (a) trajectories of recovery, including complete recovery, gradual improvement and cyclic and/or relapsing; (b) back to 'some sort of normal' and; (c) the importance of work. Of interest, 18 (49%) participants described alternating relapse and remission, in which periods of remission generally became longer over time. Returning to some kind of 'normal' looked different for each participant. In most narratives, this involved more than just the resolution of symptoms and included personal and domestic activities and participation in daily life. Returning to work was a key milestone for participants. However, many reported that return-to-work processes were demanding, and fears of reinfection made it challenging for them to move forward in recovery. The trajectories described by participants suggest that people with COVID-19 require multiple referral, assessment and care pathways in all areas of public health.

COMMENT:

This serves as a reminder regarding the importance of the need for continual involvement of those with lived experience expertise in policy development and health service delivery.

Glossary

95% Confidence Interval [95%CI]

The range of values we are certain the true value lies.

