

# The long-term psychological consequences of COVID-19 infection in an observational cohort study

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on behalf of the Deakin Barwon Health COVID-19 Research Taskforce

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## BACKGROUND

The second wave of COVID-19 hit the Barwon South-West (BSW) region in June 2020. We aimed to investigate the long-term effects of COVID-19 and recovery in a regional setting before vaccination. Participants were first assessed 6 months after their initial COVID-19 infection and followed up 6 months later (12-months post COVID-19).

## METHODS

62 COVID recovered patients from the BSW region were recruited and consented to evaluate their ongoing health post-recovery and quality of life (QoL) surveys to assess their COVID-19 experience. The survey consisted of validated scores: Hospital Anxiety and Depression scale (HADS), Functional Assessment of Chronic Illness Therapy Fatigue Scale (FACIT-F), and Perceived Stress Scale (PSS). 49 participants completed both the 6-month and 12-month survey.

## DEMOGRAPHICS

**Female (53%, n = 26)**  
Median age 50 (24 – 72)  
1 current smoker  
10 former smokers

**Male (47%, n = 23)**  
Median age 53 (19 – 72)  
2 current smokers  
10 former smokers

Having asthma was reported by 10 participants (20.4%)

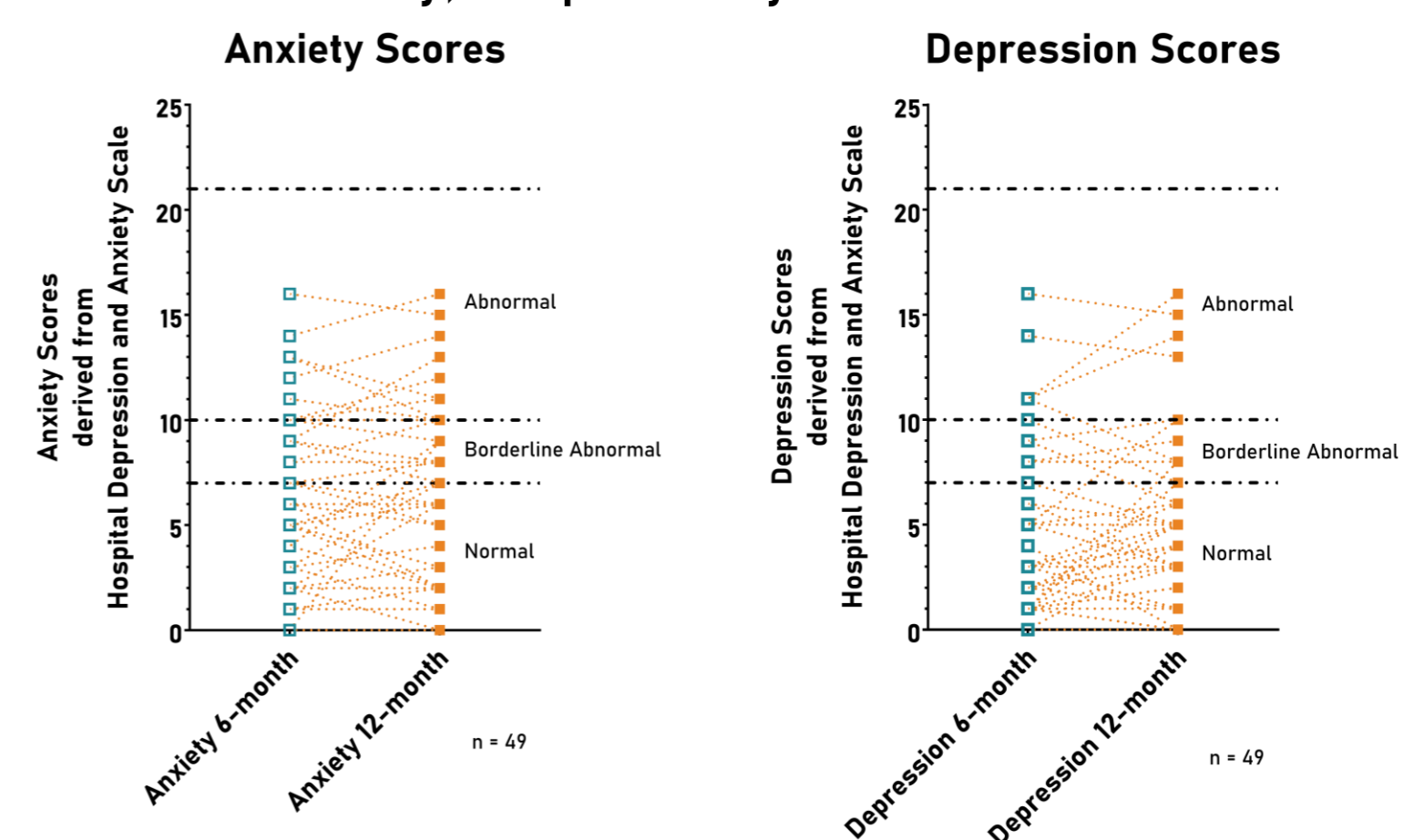
The majority of the cohort (n=46, 93.9%) self-isolated at home for 14 days during their COVID-19 infection

Fatigue was the most reported symptom at time of testing (n= 37, 75.5%).

25 participants (51%) reported symptoms at Day 10. The most common being a cough (n= 15, 30.6%)

## ANXIETY & DEPRESSION

Measured by the Hospital Anxiety and Depression Scale (HADS). A score of 11 and over indicates an abnormal level of anxiety and depression<sup>1</sup>. 12 months post COVID-19 infection, 4 participants (8.1%) and 7 participants (14.3%) indicated abnormal levels of depression and anxiety, respectively.



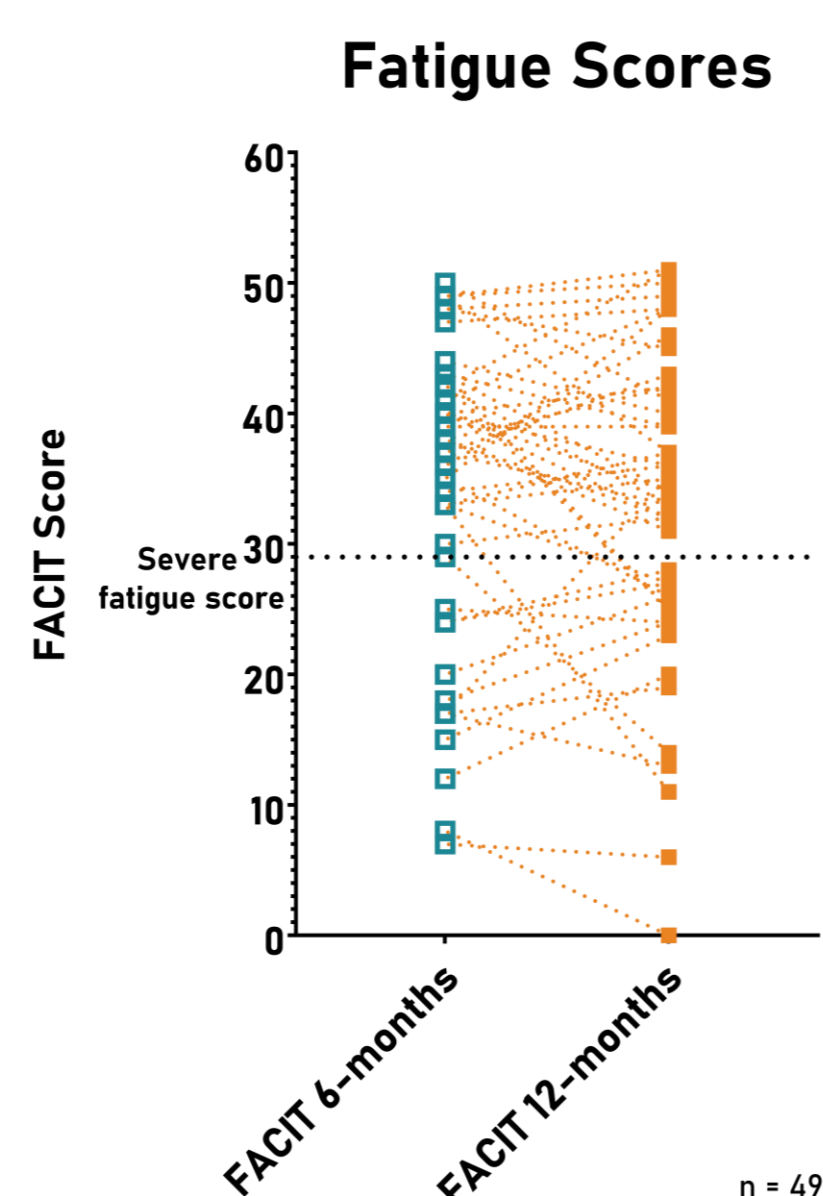
## FATIGUE

Measured by the Functional Assessment of Chronic Illness Therapy (FACIT) Fatigue Scale. A score of less than 30 indicated a severe level of fatigue<sup>2</sup>.

Proportion of the cohort under this level are:

- 13 participants (26.5%) at the 6-month post COVID survey
- 17 participants (34.7%) at the 12-month post COVID survey

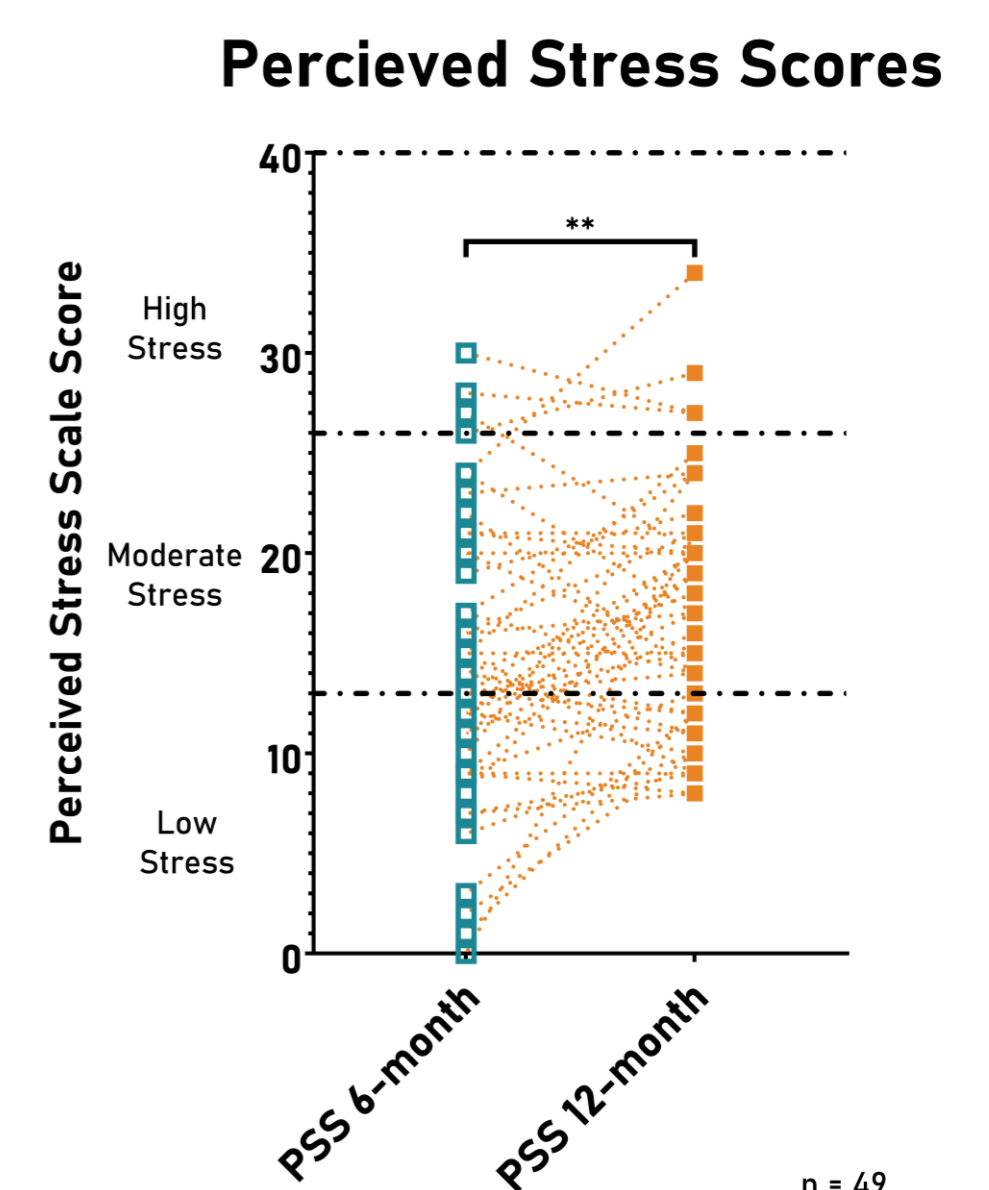
12 participants' (24.5%) scores remained <30 after 6 months



## STRESS

Measured by the Perceived Stress Scale (PSS). Scores between 14 – 26 indicated moderate levels of perceived stress, and scores between 27 – 40 indicated high levels of perceived stress<sup>3</sup>.

The difference between the 6- and 12-month PSS scores are statistically significant (p= 0.0012, paired t test).



## CONCLUSIONS

- Fatigue scores for 24.5% of the cohort remained at severe levels, 12 months after their initial COVID-19 infection
- A further follow up of participants to determine if the increase in perceived stress is caused by life events, or their COVID-19 recovery experience is warranted
- The consistency in abnormal depression and anxiety scores indicates that those participants may have a predisposition to either mental health condition
- A larger sample size is required to allow for a broader representation of the Barwon South West region