

FROM INFECTION TO RECOVERY: HEALTH-RELATED QUALITY OF LIFE TRAJECTORIES AMONG COVID-19 PATIENTS IN SELANGOR

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INTRODUCTION

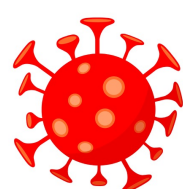


777.4 million confirmed cases of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2) reported worldwide as of 31st December 2024.



1 in 7 Malaysians are infected with COVID-19 at the height of the pandemic.

COVID-19



As the world transitions into the **endemic phase of COVID-19**, a new challenge emerges: the long-term burden of illness among survivors.



Health-related quality of life (HRQoL) outcomes remains poorly understood in low- and middle-income countries, where post-pandemic policy decisions lack localized evidence.

OBJECTIVE

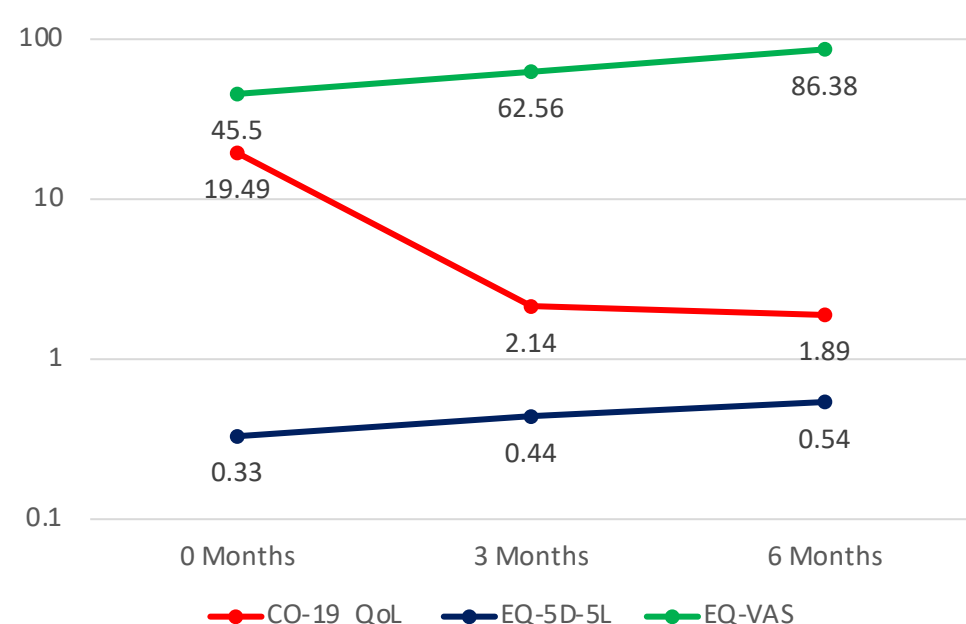
This study aimed to map the trajectory of HRQoL recovery in a large cohort of Malaysian COVID-19 survivors and identify key sociodemographic and clinical predictors which are critical inputs for value-based post-COVID care and pandemic preparedness.

METHODOLOGY

- A prospective cohort study involving **2,000 recovered COVID-19 patients** was conducted in Selangor, Malaysia. Data was collected between 1st November 2021 to 31st December 2022.
- HRQoL was assessed at three intervals; **during infection, 3 months, and 6 months post-infection.**
- Generic HRQoL** was assessed using EQ-5D-5L (utility values) and **disease-specific HRQoL** was assessed using COVID-19-Quality of Life (CO-19_QoL) questionnaire (CO-19_QoL was adapted and validated in earlier phase of the study).
- General Linear Models (GLM) and repeated measures ANOVA were used to examine HRQoL changes and associated factors.

RESULTS

- EQ-5D utility scores improved from 0.33 ± 0.19 (baseline) to 0.54 ± 0.20 (6 months; $p < 0.001$). EQ-VAS scores rose from 45.50 to 86.38. CO-19-QoL scores declined from 19.49 to 1.89.



† For EQ-5D-5L and EQ-VAS, higher values correlate with better quality of life
For CO-19_QoL, higher values indicate poorer outcomes

Figure 1. HRQoL Mean Scores Across Time

- The highest reported problems across all time points was the **Anxiety & Depression** domain.

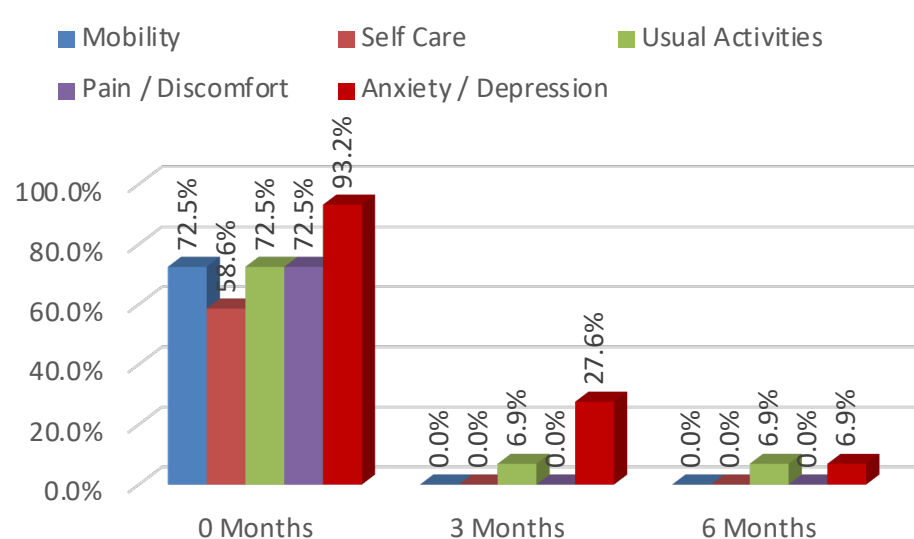


Figure 2. Distribution of EQ-5D-5L Domains Across Time

CONCLUSION

- While overall HRQoL improved, vulnerable groups faced persistent deficits, highlighting the need for targeted post-COVID rehabilitation and equity-driven policies.
- EQ-5D-derived utility values lay the groundwork for cost-utility analyses and health technology assessments in Malaysia.
- These findings provide critical evidence for post-pandemic planning and reinforce the importance of integrating HRQoL into future emergency preparedness frameworks.

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