

# Public's Willingness to Perform COVID-19 Self-Testing During the Transition to the Endemic Phase in Malaysia – A Population-Based Cross-Sectional Study

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**Introduction:** Malaysia entered the transition to the endemic phase of Coronavirus 2019 (COVID-19) on 1st April 2022. This study aims to determine the public's willingness to perform COVID-19 self-testing. Factors that influenced their willingness were also assessed.

**Methods:** A nationwide, cross-sectional, and population-based study was conducted online in Malaysia from 28th April 2023 to 4th June 2023. Individuals aged 18 years and above were enrolled through the snowball sampling method. Data were analyzed by using the Chi-Square test, independent *t*-test, and binary logistic regression.

**Results:** One thousand four hundred fifty-three responses were included in the analysis. Of these respondents, 89.3% were willing, 4.1% were reluctant, and 6.6% remained hesitant to perform COVID-19 self-testing. The common reasons given by those willing to perform COVID-19 self-testing included being able to self-isolate (99.0%) and seek treatment (96.3%) earlier if tested positive. The common reasons against COVID-19 self-testing included the belief that COVID-19 is equivalent to the common flu (91.7%) and having received the COVID-19 vaccine (78.3%). The isolation policy for COVID-19 was the most significant consideration for those who were still hesitant (85.4%). Women [adjusted odds ratios (OR): 2.1, 95% confidence intervals (95% CI): 1.44–3.00,  $p < 0.001$ ], individuals with tertiary education (OR: 2.1, 95% CI: 1.32–3.26,  $p = 0.002$ ), those vaccinated against COVID-19 (OR: 8.1, 95% CI: 2.63–24.82,  $p < 0.001$ ), and individuals with prior experience of COVID-19 self-testing (OR: 4.2, 95% CI: 2.84–6.12,  $p < 0.001$ ) showed a significantly higher willingness to engage in COVID-19 self-testing.

**Conclusion:** The public exhibited a high willingness to perform COVID-19 self-testing during the transition to the endemic phase in Malaysia. Future strategies to promote COVID-19 self-testing uptake in Malaysia should focus on vulnerable groups, address the common concerns among those hesitant and reluctant, and highlight the advantages of COVID-19 self-testing.

**Keywords:** COVID-19, self-testing, endemic, willingness, hesitant, Malaysia

## Introduction

The Coronavirus 2019 (COVID-19) pandemic is the worst-ever global health emergency, leading to a catastrophic loss of human lives and economic recession.<sup>1</sup> As of 2nd September 2023, COVID-19 has infected 695 million people worldwide, leading to 6.9 million deaths.<sup>2</sup> The aggressive global immunization rollout for COVID-19 since 2021 has finally revealed light at the end of the pandemic tunnel.<sup>3</sup> On 5th May 2023, the World Health Organization declared that COVID-19 was no longer a public health emergency of international concern.<sup>4</sup>