

# Knowledge, Attitude and Practice of Malaysians in maintaining immunity during COVID-19 endemic

Rara Merinda Puspitasari, Nur Farisya Qirana Binti Mohd Hisham, Syarifah Syamimi Putri Adiba Syed Putera

Faculty of Pharmacy and Health Sciences, Royal College of Medicine Perak, Universiti Kuala Lumpur, Ipoh, Malaysia

## ABSTRACT

**Introduction:** The Coronavirus (SARS-CoV-2) that causes COVID-19 compromises immunity and primarily affects the human respiratory system. Although the disease has been declared endemic in Malaysia (as of April 1, 2022), it can still be easily transmitted if people's immunity is not maintained. A variety of nutritional, cognitive, and physical aspects are required to optimise the immune system. **Objectives:** To investigate the knowledge, attitude, and practice of Malaysians in maintaining immunity during COVID-19 endemic. **Materials and methods:** This cross-sectional survey-based study targeted Malaysian adult aged 18 to 65. A validated questionnaire was distributed via online platforms using Google Form. It consists of questions to assess knowledge, attitude, and practice of Malaysians in maintaining immunity during the COVID-19 endemic. All data analysis was performed using SPSS 23.0. Descriptive analysis was used for categorical data and Spearman correlation test were used to assess the correlation between study parameters. **Results and conclusion:** Out of 398 respondents, 66.8% were female and the majority were Malay (97.0%) aged 18-24 years (70.4%). The majority of respondents (99.5%) have adequate knowledge, a positive attitude (99.2%) and good practice (88.2%) towards some measures to maintain immunity during the COVID-19 endemic. Although the correlation is weak, significant and positive linear relationships were found between the attitude and practice ( $r= 0.148$ ,  $p< 0.01$ ). The participant's characteristics that significantly associated with their mean KAP were gender with knowledge, occupation with attitude, and residence status (living alone or with family) with practice ( $p<0.05$ ). The positive linear correlation between attitude and practice demonstrates that Malaysians are aware of the importance of maintaining immunity during the COVID-19 endemic. However, in order to improve their practice, health educational campaigns on immunity maintenance should constantly be carried out.

**Keywords:** knowledge, attitude, practice, immunity, COVID-19