

Improper handwashing practices among households in Malaysia during the COVID-19 pandemic

Mohd Ruhaizie R, Mohd Hatta AM, Zulkarnain R, Tuan Mohd Amin TL, Wan Shakira RH

Institutes for Public Health, Ministry of Health Malaysia

ABSTRACT

Introduction: Proper handwashing practices are encouraged as they are the best and low-cost preventive and control measures to protect people from virus that causes infectious diseases such as COVID-19. This study aimed to examine the prevalence and determinants of improper handwashing practice among households in Malaysia in the year 2020, during the COVID-19 pandemic. Any household that did not have soap or detergent for handwashing was considered to be practicing improper handwashing. **Materials and methods:** Data on Malaysian population aged 15 years and above were obtained from the National Health & Morbidity Survey (NHMS) 2020: Communicable Diseases, which was conducted between August and October 2020. This nationwide cross-sectional study employed a complex survey design with a two-stage stratified cluster random sampling. All household members from randomly selected living quarters were interviewed face-to-face. **Results and conclusion:** Respondents (N=4,205) from 1,876 living quarters were interviewed during this survey. Prevalence of households with improper handwashing practices was 5.0%, 95%CI: 3.5-6.9%. Rural area (aOR: 2.2, 95%CI: 1.7-2.8), divorcee (aOR: 4.9, 95%CI: 1.8-13.8), unhygienic toilet facilities (aOR: 5.4, 95%CI: 3.4-8.6) and sharing toilet with non-household members (aOR: 10.8, 95%CI: 7.0-16.7) were found to be significantly associated with improper handwashing practices. The remaining variables, house type and ownership status, age group, ethnicity, citizenship, educational background, occupation, monthly household income status and drinking water source were found to be insignificant. Unhygienic toilet facilities and sharing toilet with non-household members not only identified as determinants to improper handwashing practices, but also exacerbated the spread of infectious diseases. Health education interventions targeted at divorcees and rural residents are needed, emphasising the importance of using soap or detergent for proper handwashing, especially during the COVID-19 pandemic.

Keywords: improper handwashing practice, handwash, soap, detergent, COVID-19 pandemic