The prevalence and factors associated with E-cigarette users among Malaysian students

Hasmah Binti Mohamed Han1, Wan Shakira Rodzlan Hasani1, Jane Ling Mlow Yn1, Mohd Hatta Bin Abdul Mutalib1, Eida Nurhadzira Binti Muhammad1, Muhammad Faiq Bin Mohd Hisham1, Abzairiz Bin Ahmad1, Muhammad Fahdli Bin Mohd Yusoff2

1 Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia.

INTRODUCTION

Electronic cigarettes (e-cigarettes) is growing a public health concern because its present threats to tobacco control and undo the success achieved. E-cigarettes and vaping are seems to be in trend nowadays especially among adults regardless of the negative health impacts. This study aimed to investigate the current prevalence of e-cigarette users and its associated factors among adults aged 15 years and above in Malaysia.

MATERIALS AND METHODS

• Data from the National Health & Morbidity Survey (NHMS) 2019 conducted by Institute for Public Health, Ministry of Health was analyzed.
• It is a cross sectional, population-based survey which employed a two-stage stratified cluster random sampling design to ensure national representativeness.
• Sample consisted of 11,111 respondents aged 15 years and above responded to the smoking module. Respondents were given structured questionnaires via face to face interview. Descriptive and multivariate analyses were used for analysis.

RESULTS & DISCUSSION

• There was almost equal representation of male and female respondents from 11,111 respondents aged 15 years and older.
• The prevalence was significantly highest among Malay and others ethnicity (5.8%), younger age group 15-24 years (11.2%) ,private employee (7.3%) and among current smoker (15.5%).
• Current e-cigarette users were associated with male (aOR= 26.71; 95% CI= 14.79, 48.23), 18 to 24 years old (aOR= 10.80; 95% CI= 7.22, 15.50) and current tobacco smoker (aOR=2.51, 95% CI=1.98, 3.17).
• From other study among university in students in Malaysia done by Sharifa et al, it showed that 74.9% of the students smoke and 40.3% were cigarrette smokers too.
• In 2011, a Global Adult Tobacco Survey was done in Malaysia and the current e-cigarette users among adults at that time was 0.8%.
• The prevalence of smokeless tobacco products including e-cigarette use among adult in Malaysia was 10.9% but that was including other types of smokeless tobacco products.
• Current e-cigarette users were associated with male (aOR= 26.71; 95% CI= 14.79, 48.23), 18 to 24 years old (aOR= 10.80; 95% CI= 7.22, 15.50) and among current smoker (15.5%).
• This study showed that current using e-cigarettes are more frequently among younger adults and adolescent from this harmful exposure.

CONCLUSION

This study showed that current using e-cigarettes are more frequently among smokers. Hence e-cigarette intervention strategies and policies should target at this high-prevalence group and urgent need in preventive strategies to protect younger adults and adolescent from this harmful exposure.