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# PATTERN OF HIV STIGMATIZING ATTITUDES ACROSS AGE GROUPS AMONG GENERAL POPULATION IN MALAYSIA: DOMAIN "FEAR OF HIV

INFECTION"



INSTITUTE FOR PUBLIC HEALTH

# Introduction

Stigmatizing and discriminatory attitudes toward people living with HIV/AIDS (PLWHA) consisted of six domains. One of the domains is fear of HIV infection which facilitates the development of HIV stigma among the general population (1). This topic is considered as a sensitive issue in Malaysia, however the prevalence of fear of HIV infection may differs across the age groups. A targeted group for any health intervention may minimise the resources and maximise the general outcome.

# Objective

This study aimed to determine the prevalence of fear of HIV infection across the age groups and to determine factors associated with fear of HIV infection across different age categories in Malaysia.

## Materials and Methods

Data on fear of HIV infection were extracted from the National Health and Morbidity Survey 2020. A cross sectional study with a national representative sample was conducted. A two stage stratified random cluster sampling strategy was undertaken. The survey was conducted via multiple approaches such as face-to-face interview, clinical blood sampling, telephone interview and self-administered questionnaire. The Malay version HIV stigma questionnaire consisted of six domains was used. It is a self-administered questionnaire and eligible for consented respondents age 13 years and above. A Parental consent was obtained for those aged less than 18 years. In this study, the domain fear of HIV infection was targeted for data analysis across the age group. The question was "Do you fear that you could contact HIV if you come into contact with the saliva of a person living with HIV?" with a dichotomous respons of "Yes" and "No". Descriptive statistics were used to summarise characteristics of the study population. The Chi Square test was used to determine the bivariate relationships between the studied variables and HIV stigma. Univariable and multivariable logistic regression analysis were carried out to investigate the association between fear of HIV infection, sociodemographic and all other selected independent variables. All analysis were carried out using IBM SPSS Statistics version 25.0, taking into consideration the sample weighting and complex sampling design.

### Results and Discussion

A total of 4421 respondents aged 13 years and above were eligible in this study. However only 3729 respondents answered this e question, yielding a response rate of 84.3%. The prevalence of fear of HIV infection in this study was 65.8%; (95% CI: 62.1, 69.4). A similar study conducted in Thailand showed a lower prevalence of fear of HIV infection of 57% (3). There was no specific pattern on the prevalence of fear of HIV infection across the age groups, but showed peak at the age group of 13-19 years and 50-59 years. The lowest prevalence was observed among those aged group of 40-49 years (Figure 1) which was similar to a study conducted in Thailand (3). When adjusted for the other covariates, respondents aged 50-59 years and 30-39 years were more likely to have higher odds of fear of HIV infection. Although age 13-19 years had the highest prevalence of fear of HIV infection, but it was not significant in the final model (Table) 1). The overall prevalence of fear of HIV infection differed between Malaysia and Thailand but the trends were similar across the age groups (3). The study in Thailand revealed that 57% of Thai adults aged 20-39 and aged 50-59 still had misconception about HIV transmission that led to fear of acquiring HIV through casual contact with people living with HIV (3). This issue need to be addressed in an education campaign to reduce stigmatising attitudes among the population.

### Conclusion

The prevalence of fear of infection across age groups in Malaysia's general population was high, but no specific pattern was found across the age groups. HIV awareness campaign should be strengthened and promoted via popular media platforms to reduce the stigma towards PLWHA.



Figure 1: Fear of HIV infection across age groups in Malaysia's from the NHMS 2020.

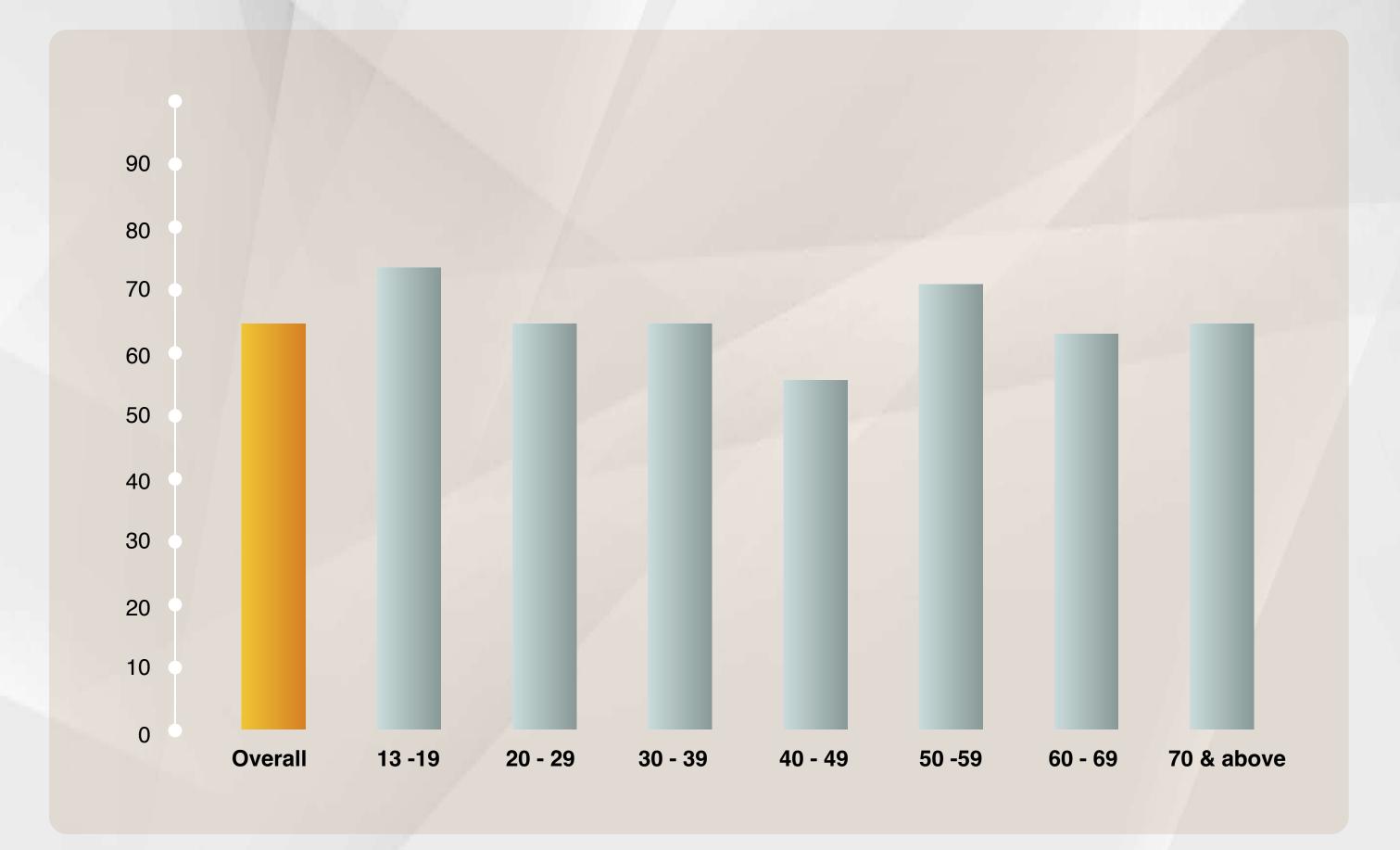


Table 1: The association between age groups and fear of HIV infection among general population in Malaysia via logistic regression analysis.

| Variable          | Crude OR | 95% CI |       | #Adjusted | 95% CI |       | p-value |
|-------------------|----------|--------|-------|-----------|--------|-------|---------|
|                   |          | lower  | upper | OR        | lower  | upper |         |
| Age group (years) |          |        |       |           |        |       |         |
| 13-19             | 2.29     | 1.63   | 3.24  | 1.64      | 0.89   | 3.04  | 0.112   |
| 20-29             | 1.51     | 1.08   | 2.10  | 1.38      | 0.95   | 2.00  | 0.094   |
| 30-39             | 1.39     | 1.08   | 1.80  | 1.52      | 1.16   | 1.98  | 0.002   |
| 50-59             | 1.98     | 1.40   | 2.80  | 2.03      | 1.37   | 3.01  | < 0.001 |
| 60-69             | 1.38     | 0.81   | 2.32  | 1.31      | 0.78   | 2.18  | 0.307   |
| 70 & above        | 1.49     | 0.74   | 3.02  | 1.42      | 0.68   | 2.96  | 0.345   |
| 40-49 (reference) | 1.00     | -      | -     | -         | -      | -     | -/      |

#The final model adjusted with geographical zone in Malaysia, strata, gender, educational level, ethnicity, marital status, occupation. The model fitness was 68.6%. Group 40-49 with the lowest prevalence was the reference category in the analysis.

Complex sample analysis method use entered,% classification=68.6%

Hosmer-Lemeshow test P -value =0.214, classification table and receiver operating characteristic curve were accepted to check model fitness

accepted to check model fitness.

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