

## **APPLICATION OF LOGISTIC REGRESSION TO ASSESS THE FACTORS ASSOCIATED WITH HIV-RELATED KNOWLEDGE AMONG UNIVERSITY STUDENTS**

(Penggunaan Regresi Logistik untuk Menilai Faktor Berkaitan dengan Pengetahuan HIV dalam Kalangan Pelajar Universiti)

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### *ABSTRACT*

Human Immunodeficiency Virus (HIV) has become a serious world's health challenge and burden. The majority of young people lack knowledge on how HIV is transmitted and how to prevent themselves from being infected. Therefore, this study was conducted to determine the knowledge level of HIV/AIDS and identify significant demographic factors that affect the knowledge level using selected statistical analysis. This cross-sectional study involved young adult university students from UiTM Cawangan Kelantan, Kampus Kota Bharu. A questionnaire that consists of demographic characteristics and HIV Knowledge Questionnaire 18 (HIV-KQ-18) was distributed to 280 respondents with a response rate of 79%. The demographic predictors examined in this study are age, gender, mother's and father's education level, monthly household income, residence area, family history of HIV and health insurance status. The dependent variable in this study is the knowledge level of HIV/AIDS that is categorised into 0 and 1; 0 denoting the low level of knowledge (score < 7) and 1 indicating a high level of knowledge (score  $\geq$  7). The results revealed that 68% of the respondents have high knowledge of HIV/AIDS infection. However, misconceptions about HIV transmission and its prevention still exist among the respondents. The findings from logistic regression analysis indicated that younger students (OR = 0.732) and those who lived in urban areas (OR = 1.973) were more likely to have high knowledge of HIV. The results also revealed that students who were covered with health insurance (OR = 2.913) were more likely to have high knowledge of HIV than those who are not. Thus, it is suggested that the concerned parties should aggressively educate the public through awareness-raising campaign and use the mass media to deliver information about HIV/AIDS targeting youngsters from specific age group and socio-economic status, and those who lived in rural areas.

*Keywords:* HIV; AIDS; knowledge

### *ABSTRAK*

Virus Kurang Imun Manusia (HIV) telah menjadi cabaran dan beban kesihatan dunia yang serius. Sebilangan besar orang muda tidak mempunyai pengetahuan tentang bagaimana HIV disebarkan dan bagaimana mencegah diri daripada dijangkiti. Oleh itu, kajian ini dijalankan untuk menentukan tahap pengetahuan mengenai HIV/AIDS dan untuk mengenal pasti faktor demografi yang bererti dalam mempengaruhi tahap pengetahuan menggunakan analisis statistik terpilih. Kajian keratan rentas ini melibatkan pelajar universiti dewasa muda dari UiTM Cawangan Kelantan, Kampus Kota Bharu. Satu soal selidik yang terdiri daripada ciri-ciri demografi dan 18 Soal Selidik Pengetahuan HIV (SSP-HIV-18) diedarkan kepada 280 responden dengan kadar maklum balas sebanyak 79%. Peramal demografi yang dikaji dalam kajian ini adalah umur, jantina, tahap pendidikan ibu dan ayah, pendapatan bulanan isi rumah, kawasan tempat tinggal, sejarah keluarga HIV dan status insurans kesihatan. Pemboleh ubah bersandar dalam kajian ini adalah tahap pengetahuan HIV/AIDS yang dikategorikan kepada 0 dan 1; 0 menunjukkan tahap pengetahuan yang rendah (skor < 7) dan 1 menunjukkan tahap pengetahuan yang tinggi (skor  $\geq$  7). Hasil kajian menunjukkan bahawa 68% responden mempunyai pengetahuan tinggi tentang jangkitan HIV/AIDS. Walau bagaimanapun, tanggapan

yang salah mengenai penularan HIV dan pencegahannya masih wujud dalam kalangan responden. Dapatan daripada analisis regresi logistik menunjukkan pelajar yang lebih muda (OR= 0.732) dan mereka yang tinggal di kawasan bandar (OR=1.973) lebih cenderung untuk mempunyai pengetahuan lebih tinggi mengenai HIV. Hasil kajian juga menunjukkan bahawa pelajar yang dilindungi insurans kesihatan (OR=2.913) lebih cenderung mempunyai pengetahuan yang lebih tinggi mengenai HIV berbanding dengan mereka yang tiada. Oleh itu, disarankan agar pihak-pihak yang berkenaan harus mendidik masyarakat secara lebih agresif melalui kempen kesedaran dan memanfaatkan media massa untuk menyampaikan maklumat mengenai HIV/AIDS dengan mensasarkan golongan muda daripada kumpulan umur dan sosio-ekonomi tertentu serta mereka yang tinggal di luar bandar.

**Kata kunci:** HIV; AIDS; pengetahuan

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