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A cross-sectional study evaluating the knowledge and beliefs about, and the use of antibiotics amongst Malaysian university students

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Abstract

Background: The introduction of antibiotics into modern medicine has changed clinical care by saving millions of lives. However, misuse of antibiotics has led to their benefits being overshadowed by the development of antimicrobial resistance. Aims of Study: This study aimed to assess university students' knowledge and beliefs about and their use of antibiotics. Methods: This cross-sectional study was conducted among 674 medical and non-medical students of the National Defence University of Malaysia, using universal and convenience sampling methods. The data was collected using a validated questionnaire and analyzed using IBM SPSS 24, and the MANOVA test and Logistic Regression were used to explore the associated factors. Results: More than half of the respondents' knowledge was low and their health beliefs outdated. Age, race and program were significantly associated with up-to-date knowledge and beliefs about antibiotic use, factors associated with finishing a course of antibiotics were studying medicine, personal health, and ethnicity. The significant factors associated with antibiotic self-prescribing were beliefs having been prescribed antibiotics during the last one year, and trusting the doctors who did not prescribe antibiotics. Conclusion: This study has identified a concerning low knowledge about antibiotics amongst some Malaysian university students, reflected in use of un-prescribed antibiotics and a lack of adherence to treatment. There is a need for educational interventions for students regarding antibiotic usage and resistance issues.

Keywords

Author Keywords: Antibiotic; use; consumption; resistance; cross-sectional study; medical students; university student; non-medical students; Malaysia

KeyWords Plus: ANTIMICROBIAL RESISTANCE; MEDICAL-STUDENTS; SELF-MEDICATION; ATTITUDES; BEHAVIOR; COMMUNICATION; PATIENT; CARE; COMMUNITY

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