

Knowledge, Practice, and Attitudes of Self-medication of Antibiotics among Medical and Nursing Undergraduates of University of Colombo, Sri Lanka

Chathurika J. N², Darshika P. G. K², Kajipan B², Lakrandi P. P. M², Prabhani S.D. D², Sanjayath K², Thanuraj T², Wijayananda P. T. A², Nayanamali M. A. A², Menike W. A. R. P¹

¹ *Department of Fundamentals Nursing, Faculty of Nursing, University of Colombo*

² *Faculty of Nursing, University of Colombo*

Background: Antibiotic resistance is a worldwide emergency with a substantial healthcare and economic burden resulting in multi-drug resistant infections. Knowledge, attitude and practices of healthcare undergraduates can significantly influence antibiotic use as future healthcare professionals.

Objective: To study Knowledge, Attitude, and Practices (KAP) of Self-Medication of Antibiotics (SMA) among medical and nursing undergraduates of the University of Colombo, Sri Lanka.

Methods: A descriptive cross-sectional study was conducted from March 2022 to January 2023 among 401 nursing and medical undergraduates. Data was collected using a pre-designed self-administered questionnaire and was analyzed using SPSS version 26. A significant level was set as $p < 0.05$ and results were presented in terms of descriptive statistics. Associations between demographics and KAP were defined in terms of Pearson's chi-squared test. Mean comparisons of KAP between two faculties were performed using an independent sample t-test.

Results: The study participants have a female majority (62.30%) aged 23-26 years (63.10%). Among the study subjects, only 19.10% of medical undergraduates and 23.30% of nursing undergraduates have good knowledge of SMA with a mean score of 9.79 (SD =2.10). Most participants (64.80%) have positive attitudes with a mean score of 7.71 (SD=1.69) and 64.58% have good practices toward SMA with a mean score of 8.45 (SD=2.28). Statistically significant associations were found between knowledge and the academic year ($p=0.001$) and age groups ($p < 0.001$). Moreover, 46.1% have self-medicated themselves within the last year whereas Amoxicillin (15%) has the highest frequency. A significant association was identified between knowledge and practice of SMA ($p < 0.001$) and between attitude and practice of SMA ($p < 0.001$).

Conclusion: Results showed that participants with good knowledge have significantly good practices of SMA. Participants with positive attitudes tend to follow good practices related to SMA. Despite having a good knowledge of antibiotics, the majority of the undergraduates have an average attitude regarding SMA which is not satisfactory in a healthcare-related undergraduate population.

Keywords: *antibiotic use, attitude, knowledge, practice*