

Knowledge on antibiotic resistance and influencing factors among pharmacists and nurses in Teaching Hospital Jaffna

D.M.L.D. Bandara¹, S. Thuvaragan², K. Sanchayan³, R. Surenthirakumaran⁴

¹*Faculty of Allied Health Sciences, University of Jaffna*

²*Department of Pharmacy, Faculty of Allied Health Sciences, University of Jaffna*

³*Department of Pharmacology, Faculty of Medicine, University of Jaffna*

⁴*Department of Community and Family medicine, Faculty of Medicine, University of Jaffna*

Background and objective: Antibiotic resistance (ABR) is a major threat to the quality of healthcare in the 21st century. Pharmacists and nurses play an important role in giving drug information to patients. Thus, their knowledge towards ABR has the potential to impact patterns of antibiotic use in community and hospital settings. This study aimed to assess knowledge on ABR and its associated sociodemographic and work-related factors among pharmacists and nursing officers at Teaching Hospital Jaffna.

Methods: It was a hospital-based descriptive cross-sectional study conducted among all pharmacists and 191 randomly selected nursing officers at Teaching Hospital Jaffna. A self-administered questionnaire was used to elicit data on knowledge on antibiotic usage/indications, consequences, and reasons of ABR. A score of above or equal to 70% was determined as good knowledge.

Results: The response rate was 90.8% (n= 227). Mean age of the sample was 33.76 (\pm 7.6) years. Most participants were nursing officers (84.1%, n=191). With respect to knowledge on ABR, 61.2% (n=139) had good knowledge. However, only 17.2% responded correctly regarding the diseases that can be treated with antibiotics. Although the majority (76.2%) were knowledgeable about the consequences of ABR, only 33.9% were aware of the reasons for ABR. Highest educational qualification ($p<0.001$) and participation in workshops or conferences ($p<0.001$) were statistically significantly associated with knowledge on ABR.

Conclusion: Levels of knowledge are unsatisfactory among pharmacists and nursing officers at Teaching Hospital Jaffna. Conducting periodic workshops and continuous professional development programmes for healthcare workers could improve their knowledge in ABR and, in turn, encourage rational use of antibiotics.

Keywords: Antibiotic Resistance, Knowledge, Pharmacists, Nurses