

## **Influence of sociodemographic factors on parental knowledge on usage of antibiotics and prescription pattern of antibiotics among OPD pediatric patients at Teaching Hospital Jaffna**

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**Introduction and Objectives:** Children are most susceptible to infectious diseases, and antibiotics are frequently prescribed drugs in the pediatric population. Study about the prescription pattern of antibiotics and improved parental knowledge of antibiotics ensure their safe usage. This study aimed to determine the parental knowledge on antibiotic usage and association of socio-demographic factors on it and prescription pattern of antibiotics among pediatric patients at Out Patient Department (OPD), Teaching Hospital Jaffna.

**Methods:** A hospital-based descriptive cross-sectional study was conducted among parents of pediatric patients under 12 years attending the general OPD at Teaching Hospital Jaffna from August 2021 to September 2021. An interviewer-administered questionnaire was used to collect information about Socio-demographic factors of participants and knowledge regarding antibiotic usage. Prescriptions that contained at least one antibiotic were analyzed to collect data about the prescription pattern of antibiotics. Ethical clearance was obtained by the Ethics Review Committee of the Faculty of Medicine. Collected data was analyzed by using SPSS. A Chi-squared test was used to determine the association between parental knowledge and socio-demographic factors of participants.

**Results:** Three hundred and seventy-five parents out of 406 responded to the study. (Response rate 92%). The mean age of the parents was 34.4 years (SD± 6.689). The mean age of children was 5.08 years (SD± 3.63). The majority of the participants were females (70.4%, n=264). Only 176 (46.9%) parents had adequate knowledge about antibiotic usage. A significant association was found between educational level and knowledge (p=0.02). Two hundred and eighty-five prescriptions were analyzed. The average number of antibiotics per prescription was 1.07. More than half of the antibiotics 184 (64.6%) were prescribed in generic name, while all the antibiotics were prescribed from the Essential Medicine List. Respiratory tract symptoms (54.7%) were treated with most antibiotics. The most prescribed antibiotic group was penicillin (n=203, 66.6%). The most prescribed antibiotics was amoxicillin (n=73, 23.9%) followed by Co-amoxiclav (n=69, 22.6%). Syrup (n=184, 60.3%) was the major dosage form in the prescribed antibiotics. Results of the prescription analysis showed most of the prescribed indicators followed WHO recommendations.

**Conclusion:** Parental knowledge regarding antibiotics usage was inadequate. Even though prescribing indicators for antibiotics followed WHO recommendations, the prescription pattern of antibiotics needs further improvement.

**Keywords:** Prescription pattern, Antibiotics, Parental knowledge, Pediatric patients