

Self-administration of antibiotics and factors influencing on it among the patients with respiratory symptoms attending primary care hospitals in Nallur

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Background: Antimicrobials are agents which kill or inhibit the growth of microorganisms. Antimicrobial resistance is not a new issue. It is a longstanding and critical issue. One of the important causes of antimicrobial resistance is irrational use of antibiotics. The aim of the study is to assess the pattern of self-administration of antibiotics and factors influencing its use among patients with respiratory symptoms attending primary care hospitals in Nallur.

Methodology: An institutional based descriptive cross-sectional study was carried out among patients with respiratory symptoms attending primary care hospitals in Nallur. The study assessed 360 participants with respiratory symptoms attending the primary care hospitals in Nallur. Interviewer administered questionnaires were used to collect data and analyzed with the help of statistical package for social studies (SPSS, version 21). Chi-square test was done for analysis.

Results: Out of the 360 participants, 17(4.7%) self-administered antibiotics; 184 (51.1%) were females; 161 (44.7%) were below 30 years. Median age was 35 with the age range of one to 85 years. Most of the participants 104 (28.9%) had education from grade 6 to grade 10; according to the social status, more were employed, 136 (37.8%). Mostly the participant's family income was between Rs. 15000 to Rs.45000, 219(60.8%), The median of the monthly family income was Rs.20000. In the socio economic factors such as educational level ($p \leq 0.0001$), monthly family income ($p \leq 0.002$), and occupation ($p \leq 0.0001$) showed significant association with self-administration of antibiotics. Of the 17 participants self-administered antibiotics, 15 (88.2%) knew the name of the antibiotics. Most used antibiotic was Amoxicillin (73.3%). Those self-administered antibiotics mostly obtained it from pharmacist (52.9%). Based on the ability to access the health care services such as practicability of out-patient visiting time, mode of transport and distance were concerned. Practicability of out-patient visiting time showed significant correlation with self-administration of antibiotics ($p \leq 0.0001$).

Conclusion: Practice of self-administration of antibiotics was less in the current study compared to the previous studies in Jaffna (54%) and Colombo (29%). High educational level high family income, government employed, ability to access the health care service and practicability of OPD time influence on the self-administration of antibiotics

Key words: Self-administration of antibiotics, Primary health care, Antibiotic resistance, Socio economic factors.