ABSTRACT

Introduction

Outpatient departments provide comprehensive non urgent, ambulatory care to the community in Sri Lanka. Socio-demographic variations elicit variations of disease pattern, expectations and needs of the attendees. Presenting complaint of patient is crucial in investigating, diagnosis and drug prescription. Rational drug prescription is a decisive factor, which means the usage of correct drug in appropriate dose, for adequate time period at the lowest cost. Throughout the world 50% of prescribed drugs in OPDs are irrational. Poly pharmacy, misuse of antibiotics and poor adherence to treatment guidelines are some forms of irrational drug uses.

Objectives

To describe the Presenting Complaint, Prescribed Antibiotic, Cost of antibiotic and Investigations of Outpatient Department attendees at the Teaching Hospital, Kandy, Sri Lanka.

Methodology

An institutional based descriptive cross sectional study was carried out in Teaching Hospital Kandy. Sample of 1173 OPD attendees were selected for the study. Within the study period, every 5th patients above 18yrs of age were selected until sample size was obtained. There were three steps in data collection procedure. Self administered questionnaire was used in step-1 and interviewer administered questionnaire was use in step-2. Data related to socio-demographic characteristics and presenting complaint was obtained in step-1 and data related to

prescribed antibiotics and investigations obtained in step-2. Cost of antibiotics in step-3 was calculated using gathered data in step-2. Data analysis was carried out using the appropriate statistical methods in the Statistical Package for Social Sciences (SPSS) version 17.0 and Microsoft excel 2007.

Results

The response rate was 100%. Most of the respondents were female 63.1 % (n = 740) and mean age was 46.18 years (SD=15.693). About one fourth of the OPD visits were subsequent (24%). Main Presenting complaint of the OPD attendees was musculoskeletal complaints (26%). Respiratory complaints accounted for about 1/5 of the total (19.4%). Most of the attendees came for treatments within one week (68.1%) and considerable amount came to for complaint existing more than one month (11.6%). Out of all attendees 26% (n=304) had previous history of chronic illness.

Antibiotics were prescribed for 34% of (n=399) OPD attendees and Maximum number was 2 per prescription. Only one antibiotic was prescribed for 97% (n=387) of total antibiotic prescriptions. Out of all antibiotic prescriptions 99% were empirical use. Most commonly prescribed antibiotic class was penicillin (n=300, 74.9) and antibiotic was amoxicillin (40.2%) (n=165). Of antibiotic prescriptions, 35.8% (n=143) were accounted for respiratory complaints. Antibiotics recommended for 23 (58.9%) out of 39 patients who had common cold only. Average duration of antibiotic prescription was 3.26days.

Total cost for all antibiotic prescription was 22,040.00 SLR. Average cost per antibiotic prescription was 53.63 SLR. Average cost of antibiotic in the total sample was 18.79 SLR.

Total numbers of 87 investigations were done for 7.1% of (n=84) of OPD attendees. Most frequently done investigation was FBC (62.1%, n=54). Out of all investigations, 58% (49) were done for the patients who were prescribed antibiotics. Out of antibiotic prescribed patients 13% were investigated.

An association of 95% confident level existed between investigation done and number of OPD attendance for same reason in level. Highly significant association existed between antibiotic prescription and ordering investigations (P=0.000).

Conclusions and Recommendations

Most of the OPD attendees were coming to treatments for musculoskeletal complaints, trauma and skin conditions, and respiratory complaints. Antibiotics were prescribed for 1/3 of those OPD attendees. All most all the antibiotic prescriptions were empirical. Irrational antibiotic prescriptions could be identified in OPD. Although the cost of antibiotics for a prescription was low, it can be minimized further. Investigations were not frequently done in the OPD. Continuous monitoring and evaluating the antibiotic prescriptions and feedback are needed. Improving ordering and availability of investigations is necessary for having more definitive treatment. Continuous professional development is important in improving rational clinical practice in OPDs.

Key words; Presenting complaint, antibiotics, cost, Investigations