Abstract

Background: Drug therapy problem is a significant challenge to provide high quality health care service for the patients. It is associated with morbidity, mortality, increased hospital stay and reduced quality of life. Moreover, pediatric patients are quite susceptible to drug therapy problems.Thus this study aimed to assess drug therapy problem and its contributing factors among pediatric patients diagnosed with infectious disease admitted to pediatric ward of Jimma university medical center, from April 1 to June 30, 2018.

Methodology: Prospective observational study was conducted among pediatric patients with infectious disease admitted from April 01 to June 30, 2018. Drug therapy problems were identified by using Cipolle's and strand's drug related problem classification method. Patient's written informed consent was obtained after explaining the purpose of the study. Patient's specific data were collected using structured questionnaire. Data were entered into Epi data version 4.0.2 and then exported to statistical software package version 21.0 for analysis. To identify predictors of drug therapy problems occurrence, multiple stepwise backward logistic regression analysis were done. The 95% CI was used to show the accuracy of data analysis and statistical significance was considered at p-value <0.05.

Results: A total of 304 pediatric patients were included in the study. Of these, 226(74.3%) patients had at least one drug therapy problem during their hospital stay. A total of 356 drug therapy problems were identified among two hundred twenty six patients. Non-compliance (28.65%) and dose too low (27.53%) were the most common type of drug related problems while disease comorbidity [AOR=3.39, 95% CI= (1.89-6.08)], Polypharmacy [AOR=3.16, 95% CI= (1.61-6.20)] and more than six days stay in hospital [AOR=3.37, 95% CI= (1.71-6.64) were independent predictors of drug therapy problem occurrence.

Conclusion and recommendation: Drug therapy problems were common in pediatric patients with infectious disease in the study area. Presence of comorbidity, Polypharmacy and Prolonged hospital stay were the predictors of drug therapy problem in study area. Therefore, to overcome the significant gaps in pediatric pharmaceutical care, clinical pharmacists, Pediatricians and other health care professional have to work in collaboration.

Keywords: Drug therapy problem, Pediatric, infectious disease, Ethiopia