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## Assessment of Prescribing Pattern of Antimicrobials Among Paediatric Inpatients of Tertiary Care Teaching hospital

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### **Abstract**

Systemic antibiotics account for more than one-third of all prescriptions for children, while data regarding rational antibiotic use in children is very limited. Hence, it is essential to evaluate the antibiotic prescribing pattern periodically to determine the rationality of its use. The objective of the study is to assess the prescribing pattern of antimicrobials among paediatric patients admitted to a tertiary care teaching hospital. A prospective observational study was carried out among 114 paediatric patients admitted from October 2018 to March 2019 following a pilot study which was conducted for the first three months to set the sample size of 108. A total of 286 prescriptions from 114 cases were analysed against World Health Organization (WHO) prescribing core indicators. The average duration of antimicrobial therapy was found to be 3.6 (±1.4) days and the average number of drugs per encounter was found to be 4.8. The percentage of drugs prescribed by generic name was found to be 12.45% whereas 28.48% of encounters were with antibiotic prescription, which were below the safe standard limit of ≤30. The percentage of injections prescribed was found to be much higher (50.76%), and the percentage of drugs prescribed from an essential drug list was found to be 81%. Ceftriaxone was the most commonly prescribed antimicrobial, followed by amikacin, piperacillin/tazobactam, amoxicillin/clavulanic acid, azithromycin, ampicillin, acyclovir, etc. Prescribing trends in paediatric inpatient department deviates from the WHO standard requirements, suggesting the need for implementation of guidelines and measures to promote rational prescribing.

Key words: Antibiotics, Antimicrobials, Paediatrics, Prescribing pattern, WHO prescribing core indicators

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