

RESEARCH ARTICLE

Antimicrobial utilization pattern among pediatric inpatients of a tertiary care hospital in Central Gujarat

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ABSTRACT

Background: Drug utilization studies may help to measure various aspects such as disease pattern, medicine use, and prescribing patterns. **Aim and Objective:** The aim of the study was to evaluate the drug utilization pattern of antimicrobials prescribed to the pediatric inpatients at a tertiary care hospital. **Materials and Methods:** The study was prospective and observational based involving 200 pediatric inpatients of Parul Sevashram Hospital, Vadodara, Gujarat. Relevant information was obtained from the interview as well the hospital case record. Structured and pre-tested formats were prepared for compiling the data. **Results:** The majority of the patients (43.5%) were in the age group between 2 and 12 years. The most common indications for antimicrobial use included gastrointestinal diseases (22%), respiratory diseases (17.5%), and genitourinary diseases (13.5%). Cephalosporins (65.5%) were most frequently prescribed antimicrobials followed by aminoglycosides (40%). 73.3% of antimicrobials were prescribed by branded names. The average number of antimicrobials prescribed per patient was 2.21. 93.4% of antimicrobials have been included in the World Health Organization Model List of Essential Medicines. A total of 13 adverse drug reactions were reported from prescribed antimicrobials. **Conclusions:** Medicine utilization assessment can facilitate rational use of medicines in pediatric patients.

KEY WORDS: Pediatric Patients; Antimicrobial Utilization Pattern; Rational