



## Evaluation of Antibiotics Use and Prescribing Error among Hospitalized Pediatric Patients in Nekemte Referral Hospital, Ethiopia

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### ABSTRACT

*Pediatrics population is the most vulnerable groups to irrational use of antibiotics and prescribing error. Inappropriate use of antibiotics is global problems which curtail health care costs, potential adverse effects, increased resistance and poor health outcomes. Evaluation of antibiotic use and prescribing error is critical approach to improve antibiotics use and prescribing in pediatrics. The study was aimed to evaluate the use and prescribing error of antibiotics among hospitalized pediatrics in Nekemte Referral Hospital. The prospective cross-sectional study was conducted on 124 patients admitted to pediatric ward of Nekemte Referral Hospital; from March to April 2013. The antibiotic use and prescribing error were done according to Ethiopian pediatric drug formulary and WHO antibiotics pediatrics dosing guideline. The finding showed that 225(85%), 23(7.67%) and 22(7.33%) of antibiotics were prescribed empirically, kinetically and prophylactically respectively. Gentamycin was the widely, 76 (25.33%), prescribed antibiotics. Penicillins, 103(34.33%), were the most extensively prescribed classes of antibiotics. The study found average number of antibiotic per patient 2.48 and duration of treatment 5.77 days. Majority, 72(58.1%), of patients were stayed in hospital for 4-7 days. Only 262(56.34%) of the prescribed antibiotics were prescribed with indication and appropriate dosage regimen while slightly less than half of them were not. The use of antibiotics on empirical basis was routine prescribing practices are far greater number of antibiotics per patient and parenteral administration of antibiotics. Overwhelmingly, antibiotics are prescribed with no indication and inappropriate dosage regimen. Significant death and referral were occurred due to treatment failure.*

**Keywords:** Antibiotics, Pediatrics, Use, Evaluation, prescribing error.