Abstract

Objectives: To characterise the prescription of nonformulary drugs to children and neonates at a Brazilian teaching hospital and identify adverse drug reactions (ADRs), drug interactions, and prescription of potentially hazardous medicines. Methods: A prospective exploratory study was carried out between January and May 2011 at the general paediatric wards and paediatric oncology, paediatric intensive care, and neonatal care units of the study hospital. Non-formulary drugs were categorised as approved, off-label, or not approved for use in children according to Brazilian compendia. Electronic health records were actively searched for ADRs and the possibility of moderate to severe interactions between non-formulary drugs and other medicines was determined with the Micromedex® database. Results: Overall, 109 children or neonates received non-formulary drugs. Of these drugs, 54% were approved for use in children, 12.2% were used offlabel, and 33.8% were not approved for use in children. Non-formulary drugs accounted for 13.4% of total prescriptions; 5.3% of drugs had a potential for interactions and five were possibly associated with ADRs. Conclusion: Prescription of non-formulary drugs not approved for use in children was common at the study hospital. Studies such as this provide information on the use of medicines for special indications and permit assessment of the relevance of hospital formularies for the paediatric population.

Keywords

Drug Utilization Review, Off-Label Use, Inpatients, Child, Brazil