Abstract

Background: To prevent medication errors in prescribing, one needs to know their types and relative occurrence. Such errors are a great cause of concern as they have the potential to cause patient harm. The aim of this study was to determine the nature and types of medication prescribing errors in an Indian setting.

Methods: The medication errors were analyzed in a prospective observational study conducted in 3 medical wards of a public teaching hospital in India. The medication errors were analyzed by means of Micromedex Drug-Reax database.

Results: Out of 312 patients, only 304 were included in the study. Of the 304 cases, 103 (34%) cases had at least one error. The total number of errors found was 157. The drug-drug interactions were the most frequently (68.2%) occurring type of error, which was followed by incorrect dosing interval (12%) and dosing errors (9.5%). The medication classes involved most were antimicrobial agents (29.4%), cardiovascular agents (15.4%), GI agents (8.6%) and CNS agents (8.2%). The moderate errors contributed maximum (61.8%) to the total errors when compared to the major (25.5%) and minor (12.7%) errors. The results showed that the number of errors increases with age and number of medicines prescribed.

Conclusion: The results point to the establishment of medication error reporting at each hospital and to share the data with other hospitals. The role of clinical pharmacist in this situation appears to be a strong intervention; and the clinical pharmacist, initially, could confine to identification of the medication errors.

Keywords