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A RETROSPECTIVE ANALYSIS OF MEDICATION ERRORS AT A TERTIARY HOSPITAL IN A NORTHERN STATE OF MALAYSIA

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ABSTRACT

Medication errors (MEs) have been recognised as a global issue. The occurrence of MEs can lead to serious clinical outcomes and represents a significant concern for healthcare providers and policymakers. This study aims to analyse the characteristics and pattern of MEs reported at Hospital Raja Permaisuri Bainun (HRPB), Ipoh in 2019. This study was conducted by reviewing ME reports at the HRPB from 1 January 2019 to 31 December 2019. A total of 1,066 ME reports were received by the Drug Information Centre (DIC) of the HRPB in 2019. However, only 1,045 reports that fulfilled the inclusion and exclusion criteria were reviewed. From these reports, 97.5% of errors were classified as near-misses. The actual error rate is only 2.5%. More than four-fifth of the overall reports originated from the wards (91.1%). The mean age of the patients exposed to MEs was 47.64 ± 24.32 years. Collectively, the geriatrics patients were the largest identified group that encountered MEs (n = 387, 37.1%). The prescribing stage accounted (97.4%) for almost all the MEs. Cases of wrong dose (52.3%) contributed to more than half of the overall error. About 99.4% of the errors had no harmful effect on the patient's health conditions. The cardiovascular system (25.0%) was the most common drug class involved in ME. Staff factor was believed to be the principal contributing factors that lead to MEs. Majority of the MEs were detected and reported by the pharmacist. Effective implementation of proper guidelines and existing preventive strategies would help in reducing and eliminating MEs, thus improving clinical practices and ensure patients' safety.

*Keywords***:** Medication errors, Near misses, Actual errors, Drugs, Outcomes

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