

Medication error and intervention at the Machang District Health Office from 2021-2023

Siti Suzilawani Zahari¹, Nur Izzati Abdullah²

¹Pharmacy Unit, Machang Health Clinic, Machang, Kelantan, Malaysia, ²Pharmacy Unit, Pulau Chondong Health Clinic, Machang, Kelantan, Malaysia

ABSTRACT

Introduction: Medication errors continue to pose a significant challenge in healthcare settings worldwide, compromising patient safety and leading to adverse outcomes. This study provides an overview of medication errors and interventions implemented at the Machang District Health Office during the period of 2021-2023. As a healthcare facility, the need to address medication errors and prioritize the implementation of interventions to enhance patient care is crucial. **Materials and Methods:** A retrospective record review of medication errors and interventions was conducted at Machang District Health Office from January- March for three consecutive years from 2021 to 2023. Data regarding medication errors, causes and associated factors were collected from monthly report statistics. The interventions implemented during the study period were documented, including educational programs, technological solutions and rearranged daily working areas. **Results:** The analysis of medication errors revealed a range of types, including prescribing errors and dispensing errors. Of 99439 prescriptions screened, 21.0% (54/257) reduction in prescribing errors seen from 2021 to 2023. Meanwhile, dispensing error shows 33.3% (6/18) decreasing in errors. Contributing factors identified included knowledge, distractions, and system-related issues. The interventions implemented at Machang District Health Office aimed to address these factors and improve medication safety. Intervention strategies at Machang District Health Office focused on enhancing healthcare professionals' knowledge and skills through education programs and meetings, technological solutions, such as computerized systems at certain facilities which were implemented to minimize errors in medication prescribing. Additionally, counter checking before dispensing stations was introduced in pharmacies contributed to reducing medication errors. **Conclusion:** The interventions implemented at the Machang District Health Office during the period of 2021-2023 resulted in a significant reduction in medication errors and improvement in patient safety. The study highlights the importance of comprehensive strategies that combine education, awareness, and technology. These findings emphasize the need for proactive measures to enhance medication safety and reduce adverse events associated with medication errors in healthcare settings.