

## MEDICATION ERROR: UNDERSTANDING THE CAUSES AND PREVENTIVE STRATEGIES

<sup>1\*</sup>Warude Chetan P., <sup>2</sup>Ganesh N. Deore, <sup>3</sup>Dr. Pankaj M. Chaudhari, <sup>4</sup>Amol R. Patil

<sup>1</sup>M. Pharm PQA, Mahatma Gandhi Vidyamandir's Pharmacy College, Panchavati Nashik, 422003.

<sup>2</sup>M. Pharm Pharmaceutics, Shri. Prakashchand Jain College of Pharmacy & Research college, Palaskheda, Maharashtra, 424206.

<sup>3</sup>Principal of Shatabdi Institute of Pharmacy, Nandurbar.

<sup>4</sup>Assit. Professor K.V.P.S. Institute of Pharmaceutical Education, Boradi.

Article Received on  
21 November 2023,

Revised on 11 Dec. 2023,  
Accepted on 31 Dec. 2023

DOI: 10.20959/wjpr20241-30724



**\*Corresponding Author**

**Warude Chetan P.**

M. Pharm QA, Mahatma

Gandhi Vidyamandir's

Pharmacy College,

Panchavati Nashik, 422003.

### ABSTRACT

Medication errors remain a critical concern in healthcare systems worldwide, posing significant risks to patient safety and well-being. These abstract aims to examine the multifaceted nature of medication errors, exploring their diverse causes, potential consequences, and strategies for prevention. The causes of medication errors are often rooted in system failures, human factors, communication breakdowns, and technological shortcomings. These errors can lead to adverse drug events, prolonged hospital stays, increased healthcare costs, and, in severe cases, patient harm or mortality. Addressing medication errors demands a comprehensive approach, incorporating robust medication reconciliation processes, improved communication among healthcare professionals, advanced technologies, patient education, and a culture that prioritizes safety. These abstract underscores the urgency of

concerted efforts from healthcare stakeholders to minimize medication errors, ultimately ensuring safer and more effective healthcare delivery.

### INTRODUCTION

Medication is a fundamental aspect of healthcare, playing a crucial role in treating illnesses and improving patients' quality of life. However, medication errors can occur at any stage of the medication process, leading to serious consequences for patients. In this article, we will

delve into the causes of medication errors and explore effective measures to prevent them, ensuring patient safety and optimal healthcare outcomes. Medication errors represent a critical issue within healthcare systems globally. These errors encompass a wide range of mistakes, including prescribing, dispensing, administering, or monitoring medications. Their significance lies in their potential to cause harm to patients, leading to adverse effects, hospitalizations, or even fatalities. Addressing medication errors is crucial not only for patient safety but also for reducing healthcare costs and improving overall healthcare quality.

### Medication Error: A Common Challenge

Medication errors refer to any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of a healthcare professional, patient, or consumer. While healthcare providers strive to offer optimal care, medication errors remain a significant challenge globally. But what are the common causes of these errors, and how can we prevent them?

### Causes of Medication Errors



#### 1. Communication breakdowns

Medication errors often occur due to inadequate communication among healthcare professionals, such as doctors, nurses, and pharmacists. Illegible handwriting, verbal miscommunication, and misinterpreted medication orders are all factors in this issue. Rephrase It is crucial to address these communication challenges comprehensively to minimize these type occurrence.

#### 2. Incorrect Drug Administration

Ensuring the patient's identity is verified before administering medication is crucial in order to prevent medication errors. This can be done by using reliable identification methods such as checking the patient's name, date of birth, and medical record number. It is essential to use the correct dosage forms and routes of administration when administering medication to

patients. This includes carefully following the prescribed instructions and double-checking the medication label to ensure accuracy.

Using the wrong dosage form or route of administration can result in ineffective treatment or potential harm to the patient. Paying close attention to the names of drugs is vital to avoid medication errors. Medications with similar names can easily be confused, leading to the administration of the wrong drug. Healthcare professionals should exercise caution and use additional verification methods, such as cross-referencing the medication name with the patient's medical records, to prevent such errors.

### 3. Lack of Knowledge and Training

A lack of knowledge about medications, dosage calculations, and proper administration techniques can lead to medication errors. This error can have serious consequence for patients' health safety and well-being. Additionally lack of awareness regarding potential drug interaction can further increases the risk of medication error, as certain medication may interact negatively with each other, resulting in harmful effects on patients.

### 4. Illegible Prescriptions

Handwriting that is difficult to read or understand can lead to administration of the wrong medication or incorrect dosage. Illegible prescriptions increase the risk of medication errors and it should be avoided.

### 5. Medication Storage and Labelling Issues

Improper storage of pharmaceuticals and misuse of medication labels, including neglecting suggested storage parameters such as temperature and humidity, can lead to medication errors.

### Preventive strategies for Medication Errors



**1. Effective Communication**

Healthcare professionals must utilize clear and concise communication methods when prescribing, dispensing, and administering medications. This includes using digital order entry, standardized prescribing formats, and avoiding abbreviations.

**2. Double-Checking and Verification**

Healthcare professionals should implement a double-check system that involves verifying the patient's identity, medication, dosage, and route of administration before administering any medication. This reduces the risk of errors caused by miscommunication or distractions.

**3. Continuous Education and Training**

Healthcare professionals should engage in regular education and training programs to stay updated with the latest medications, dosage calculations, and administration techniques. Such initiatives help enhance their expertise and reduce the likelihood of medication errors.

**4. Improved Prescription Legibility**

The use of electronic prescription systems or legible handwriting decreases the chances of misinterpretation and improves patient safety. Pharmacists should clarify any prescription ambiguities with the prescribing healthcare professional.

**5. Enhanced Medication Storage and Labelling**

Healthcare facilities should implement proper storage conditions for medications and ensure that medications are accurately labelled. This includes using clear and readable labels that provide vital information such as drug name, dosage, and expiration date.

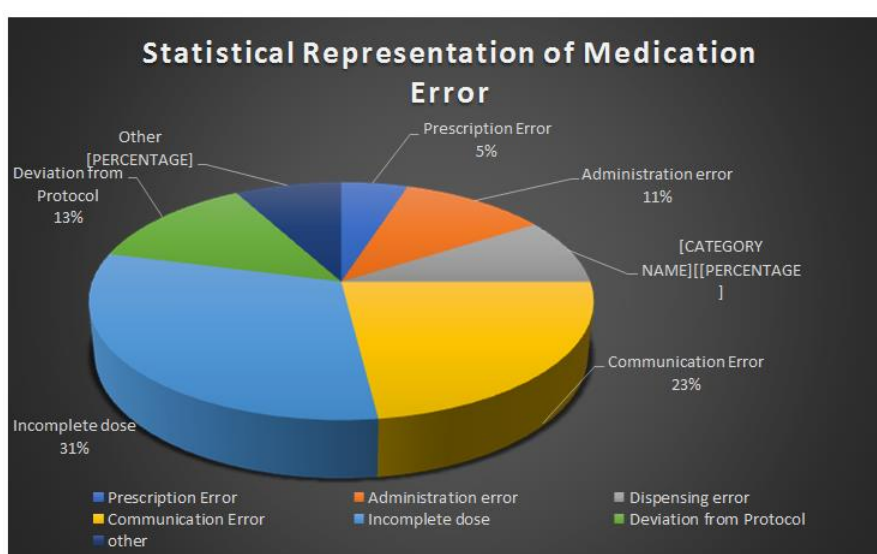
**Incident reporting**

In this literature, there has been much discussion over the importance of reporting pharmaceutical errors. Furthermore, reporting pharmaceutical errors is crucial for improving patient safety and preventing future incidents. By reporting errors, healthcare professionals can identify patterns and trends in medication errors, which can help to identify areas for improvement in the healthcare system. Additionally, reporting errors can help to identify individual training needs and improve the overall quality of care provided to patients.

However, despite the importance of reporting errors, there are still barriers that prevent healthcare professionals from doing so. These barriers include fear of retribution, lack of time, and lack of knowledge about the reporting process. To overcome these barriers,

healthcare organizations must create a culture of safety that encourages reporting and provides support to healthcare professionals who report errors.

In conclusion, reporting pharmaceutical errors is essential for improving patient safety and preventing future incidents. Healthcare organizations must work to overcome the barriers that prevent healthcare professionals from reporting errors and create a culture of safety that encourages reporting and provides support to those who report errors. By doing so, we can improve the quality of care provided to patients and ensure that medication errors are minimized.



## CONCLUSION

Medication errors pose a significant threat to patient safety and can have severe implications on healthcare outcomes. By understanding the causes of medication errors and implementing preventive measures, healthcare professionals can minimize errors and ensure the well-being of their patients. Effective communication, double-checking and verification, continuous education and training, improved prescription legibility, and enhanced medication storage and labelling are all vital in preventing medication errors. Let us strive for a healthcare system that prioritizes patient safety and ensures the proper use of medications.

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