

# Major Types of Medication Errors, their Causes and Cansequences

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# DESCRIPTION

Medication errors are a significant concern in healthcare settings, posing risks to patient safety and well-being. These errors occur due to various factors and can lead to adverse effects, prolonged hospital stays, increased healthcare costs, and even loss of life. Understanding the causes, consequences, and preventive measures associated with medication errors is crucial for healthcare providers, policymakers, and patients alike.

#### Definition and types of medication errors

Medication errors encompass a wide range of mistakes that occur during the prescribing, dispensing, administering, and monitoring of medications. They can occur in various healthcare settings, including hospitals, nursing homes, pharmacies, and even in patients' homes. Common types of medication errors include prescribing errors, transcription errors, dispensing errors, administration errors, and monitoring errors.

#### Causes of medication errors

Medication errors can stem from a combination of factors, including human error, system failures, and communication breakdowns.

**Human factors:** Healthcare professionals may make mistakes due to fatigue, workload, lack of knowledge, distractions, or inexperience. Poor communication among healthcare team members can also contribute to errors.

**System factors:** Flawed medication systems, such as inadequate drug information, illegible handwriting, and inadequate labeling, can contribute to errors. Technology-related issues, such as malfunctioning automated dispensing systems or Electronic Health Record (EHR) errors, can also play a role.

**Patient factors:** Patients' own actions or lack of understanding about their medications can contribute to errors. This includes non-adherence to prescribed regimens, failure to disclose allergies or other medications being taken, or inability to read and understand medication instructions.

### Consequences of medication errors

Medication errors can have severe consequences for patients, healthcare providers, and healthcare systems as a whole. These consequences can range from minor discomfort to lifethreatening situations.

Adverse effects: Medication errors can lead to adverse drug reactions, drug toxicity, allergic reactions, or other harmful effects on patients' health.

**Prolonged hospital stays:** Errors may result in extended hospital stays, leading to increased healthcare costs and burden on healthcare resources.

**Increased healthcare costs:** Treating medication-related complications adds financial strain to patients and healthcare systems.

**Litigation and legal consequences:** Medication errors can result in malpractice lawsuits, damaging the reputation of healthcare institutions and impacting healthcare providers' professional careers.

Loss of trust: Patients and their families may lose trust in the healthcare system, affecting patient satisfaction and engagement.

#### **Preventive measures**

Preventing medication errors requires a multi-faceted approach involving healthcare professionals, policymakers, and patients.

**Standardized protocols:** Developing and implementing standardized protocols for medication prescribing, dispensing, and administration can help reduce errors. These protocols should include clear guidelines, standardized drug orders, and dosage calculation tools.

**Medication reconciliation:** Conducting medication reconciliation during transitions of care, such as admission, transfer, and discharge, helps identify discrepancies and reduce errors. This involves comparing the patient's current medications with newly prescribed medications.

Correspondence to: Cheng Kui, Department of Pharmaceutics, University of Florida, Florida, USA. E-mail: elfar.jo@gmail.com Received: 10-May-2023, Manuscript No. PDS-23-21743; Editor assigned: 15-May-2023, Pre QC No. PDS-23-21743 (PQ); Reviewed: 29-May-2023, QC No. PDS-23-21743; Revised: 06-Jun-2023, Manuscript No PDS-23-21743 (R); Published: 13-Jun-2023, DOI: 10.35248/2167-1052.23.12.313 Citation: Kui C (2023) Major Types of Medication Errors, their Causes and Cansequences. Adv Pharmacoepidemiol Drug Saf. 12:313. Copyright: © 2023 Kui C. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. **Improved communication:** Enhancing communication among healthcare professionals is crucial for reducing medication errors. Using standardized communication tools, and promoting interdisciplinary teamwork can foster a culture of safety.

**Technology integration:** Utilizing technology, such as Computerized Physician Order Entry (CPOE), barcode scanning, and Electronic Medication Administration Records (eMARs), can minimize errors and enhance medication safety.