

PRESCRIPTIONS AND DRUGS: TYPES, FUNCTIONS, AND SAFE USAGE

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ABSTRACT:

Prescriptions and drugs are an essential part of modern healthcare, playing a vital role in the prevention, treatment, and management of diseases. This paper provides an overview of prescription types, the classification of drugs, and their mechanisms of action. It also emphasizes the importance of correct drug administration, dosage accuracy, and patient safety. Understanding how prescriptions are written and how drugs interact with the human body is crucial for effective and safe medical practice. The study highlights the growing issue of drug misuse and antibiotic resistance, emphasizing the need for rational drug use and patient education

KEYWORDS:

prescriptions, drugs, dosage, pharmacology, patient safety, antibiotic resistance

Introduction

Drugs and prescriptions form the foundation of pharmacological treatment in medicine. A prescription is a written order by a qualified healthcare professional that authorizes a patient to receive a specific medication. Every prescription includes the name of the drug, dosage, method of administration, and duration of use. Proper prescriptions ensure that patients receive the correct medicine in the right amount and at the right time.

Drugs can be classified according to their effects, chemical structure, or therapeutic use. They may act locally (on a specific part of the body) or systemically (throughout the body). Pharmacology, the science that studies drugs and their effects, helps medical professionals understand how different medications work and how to use them safely.

Main Part

There are two main categories of drugs: prescription drugs and over-the-counter (OTC) drugs. Prescription drugs require a doctor's written order and are used to treat serious or specific medical conditions, while OTC drugs can be purchased without a prescription for minor health issues like headaches or colds.

Prescriptions must be written clearly and accurately to avoid medication errors. Common elements of a prescription include:

1. Patient's name and age
2. Date of prescription
3. Drug name (generic or brand)
4. Dosage form and strength
5. Frequency and duration of administration
6. Doctor's signature

Improper use of drugs — such as self-medication, incorrect dosages, or mixing incompatible drugs — can lead to serious health problems. Drug interactions, allergic reactions, and side effects must always be monitored carefully.

Another important issue in modern medicine is antibiotic resistance. Overuse or misuse of antibiotics causes bacteria to adapt, making infections harder to treat. Therefore, both doctors and patients must follow prescription guidelines strictly.

Conclusion

In conclusion, prescriptions and drugs are indispensable components of healthcare. They save lives when used correctly, but misuse can cause harm. Understanding the principles of prescription writing, correct dosage, and drug safety is essential for all healthcare professionals. Proper education, patient awareness, and responsible prescribing can ensure effective treatment and prevent drug-related complications.

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