

## PRESCRIPTIONS AND DRUGS

**Botirova Guliza Rashid kizi**<sup>1</sup>

<sup>1</sup> *1st stage student of the Faculty of Pediatrics of the Samarkand State Medical University.*

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### ABSTRACT:

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*This article provides information about types of drugs, their mechanism of action in the body, methods of use, and storage conditions. Medications are classified into etioloical, pathogenetic, and symptomatic groups. Additionally, the article discusses painkillers (paracetamol, ibuprofen), their dosage, and administration rules. It is emphasized that incorrect dosing of drugs can harm the body or increase drug resistance.*

**INTRODUCTION.** A prescription is a written request from a doctor or a qualified medical professional to a pharmacy. It specifies the form in which the medication should be prepared, the dosage to be taken by the patient, and the method of administration. A prescription is not just a document written by a doctor, it is also a legal document. Therefore, every healthcare institution must have a responsible person who manages, records, dispenses, and ensures the proper handling of medications. The list of medicinal substances is written in a specific order; first, the most potent substances, followed by regular medications based on their therapeutic effect. The following order is observed:

BASIS-the main active ingredient.

ADJUVANS-auxiliary substances that enhance the effect of the main ingredient.

CORRIGENS-additives that improve the taste or smell of the medication.

CONSTITUENS-substances that provide the required consistency, density, or softness to the medication.

Substances and mixtures that are administered to be body in a specific amount to prevent diseases and have a therapeutic effect are **MEDICINAL SUBSTANCES**. Before applying

any drug to humans, it is first tested on animals and observed in clinical trials. Drugs are produced in chemical-pharmaceutical factories from synthetic substances, as well as from plant-based, animal-based, or microbiological sources.

**DOSEGE FORMS:**

- a)Solid dosage forms ( powder, tablet)
- b)Liquid dosage forms(infusion, decoction)
- c)Semi-solid dosage forms ( ointment, paste)

The therapeutic effect of drugs depends on the patient's age, condition ,and dosage. A high dose can poison the body, while a low dose may cause pathogens, to become resistant to the drug. Therefore, medication should only be taken in the dose prescribed by a doctor.

**TYPES OF DRUGS BASED ON THEIR MECHANISM OF ACTION:**

Etiological drugs- Eliminate the cause of the disease (e.g., antibiotics).

Pathogenetic drugs-Affect the mechanism of disease development (e.g., anti-inflammatory drugs).

Symptomatic drugs- Relieve symptoms of the disease (e.g., painkillers)

**PAINKILLERS (Analgesics)**

Examples:Paracetamon,Ibuprofen

These are recommended for:

Headaches

Pain associated with fever

Toothache

Muscle and joint pain

Dosage and Administration:

Paracetamol:500mg -1000mg (up to 3-4 times a day, every 6-8 hours).

Ibuprofen:200-400 mg (3-4 times a day).If the patient has stomach issues, it is recommended to take it after meals.

Proper storage of medications is essential to maintain their effectiveness and ensure safety. Drugs can degrade when exposed to excessive heat, cold, or humidity. Painkillers and anti-inflammatory drugs should be stored at room temperature. Eye and nasal drops, as well as insulin preparations, should be kept in a cool place.

Shelf life after opening:

Liquid antibiotic solutions-Usually usable for 7-14 days.

Eye drops -Must be used within 28 days after opening.

Syrups and suspensions-Should be consumed within 1-2 months.

Insulin preparations- Should be used within 4 weeks.

### **Conclusion**

The article highlights the importance of proper use and storage of medications. It states that the therapeutic effect of drugs depends on the patient's age, condition, and dosage. Incorrect dosing may lead to poisoning or drug resistance. Therefore, medications should only be used as prescribed by a doctor. Additionally, drugs must be stored in a controlled environment, protected from heat and humidity.

### **References:**

1. Goodman & Gilman's: The Pharmacological Basis of Therapeutics, 13<sup>th</sup> Edition.
2. B.Kh.Khodjayev, Sh.T.Rakhimov – Pharmacology (Textbook, Tashkent, 2019).
3. N.N.Tukhtaev, R.K.Rasulov -Medical Pharmacology (Study guide, Tashkent, 2021).
4. Sh. Yu.Solikhov, U.A.Makhmudov – Pharmaceutical Chemistry (Textbook, Tashkent, 2020).
5. State Register of Medicines of the Republic of Uzbekistan -Latest edition.
6. Regulatory documents and pharmacopoeia of the Ministry of Health of Uzbekiston.