

OTC MEDICATIONS



Dr. Ayesha Fatima
Pharm D
Assistant Professor
Dept of Pharmacy Practice

Medicines are categorized in to

1. Prescription Medicines, which are to be dispensed on a valid prescription,
2. Pharmacist only Medicines, which may be dispensed by the pharmacists depending upon the clinical judgment made by the pharmacist to treat minor ailments and
3. OTC medicines are the medicines available in pharmacy groceries, and other shopping places to dispense for simple minor ailment such as headache and fever.

Over The Counter (OTC) medicines are defined as "the medicine, or a pharmaceutical product, or drug, which is considered to be safe and effective in controlling the symptoms of minor ailments and can be sold to the customers by pharmacist without a valid prescription".

- Self-medication is the selection and use of medicines by individuals to treat self recognized minor ailment or symptoms.
- Self medication is an age old practice all over the world.
- The World Health Organization (WHO) promotes practice of self-medication for effective and quick relief of symptoms where medical services are inaccessible in rural and remote areas.
- Self medication with OTC medicines is sometimes referred as 'responsible' use of medicines.
- Self medication is widely practiced in both developed and developing countries.
- Over The Counter (OTC) medicines may be approved as being safe for self-medication by the national drug regulatory authority for prevention or treatment of minor ailments such as common cold, diarrhea, period pains, or symptoms which do not require immediate medical consultation.

OTC Medications: Reasons for Prevailing

1. **Shortage of time and comfort :** Usually people in cities and towns, due to their hectic routines, do not get proper time for visiting physician and for getting proper medications. But OTC medications are very less time consuming and easily available.
2. **Cheaper in price:** In country like India, where more than 55% of the total population is just near the poverty line, people majority are weak to visit physicians for small health problems and hence prefer for non - prescribed drugs which are comparatively cheaper.
3. **Availability:** Most of the NPDs are very easily available and at all places. Due to their good availability, they are easily preferred by common people for daily health problems.
4. **Level of literacy and awareness :** Many of people have either very low level of awareness due to which they do not prefer to visit a physician. Even such people on counseling a chemist may opt for NPDs.
5. **Self-care:** Now a day people with high literacy and awareness prefer the use of OTC medications. This is because of increase of self-care in people that they can take care of their own health.
6. **Advertisements:** Most of the OTC medications producing industry gives attractive to previous experiences or due to the experiences of other people normally opt advertisement for increasing the purchase of the medication. Also people due for OTC medications.

OTC Medications: Significance

- OTC medications are comparatively cheaper and because of poverty prevailing in India, people favor NPDs.
- An increased trend for self-care and increased tendency of patients to maintain their own health, force them to pay more attention towards NPDs.
- The chemist himself may prescribe NPDs. This practice is commonly seen in India.
- NPDs are considered as time saving medications. Some patient's do not want to spend much time at physician's clinic.
- NPDs have generally lesser number of side effects as compared to prescription medications.

Advantages and disadvantages of OTC Medications

Advantages

- Increased access.
- Decreased frequency of visits to physicians, leading to lower healthcare costs.
- Improved education of consumers.
- Increased autonomy of patients.
- Decreased cost to third party players.

Disadvantages

- Inaccurate diagnosis.
- Delay in obtaining needed therapy.
- Use of suboptimal therapy.
- Drug resistance.
- Increased costs to patients due to side effects, adverse effects and drug interactions.
- Failure to follow label instructions.
- Perceived loss of control by physicians

OTC Medications: Rational Drug Use

1. Rational drug use involves using drugs that are appropriate, effective, safe, and cost-efficient.
2. The medicine should be given for the right indication, in the correct dose, formulation, interval, and duration.
3. OTC drugs are useful where access to prescription medicines is limited.
4. Pharmacists must avoid recommending OTC drugs if the diagnosis is uncertain or if potent drugs are required.
5. Irrational practices include selling vitamins, tonics, and cough mixtures based on patient demand rather than actual medical need.
6. Vitamins are often misused for conditions like stress, menopause, or anxiety, which are not related to vitamin deficiency.

7. Rational use of OTC drugs requires the same systematic and evidence-based approach as prescribed medicines.
8. Pharmacists should check for contraindications before recommending any OTC product.
9. OTC medicines should be used only as long as needed and not for prolonged periods without supervision.
10. Pharmacists must educate and counsel patients on correct use, dosage, side effects, and when to seek medical help.
11. Patient safety and appropriate self-medication should always be the primary concern.
12. Rational use of OTC drugs ensures effective therapy, prevention of misuse, and better health outcomes.

Role of Community Pharmacist In Dispensing OTC Medicines

1. Pharmacists have a key responsibility in educating patients about the safe and effective use of medicines.
2. They play an important role in monitoring patients' health to ensure better therapeutic outcomes and improved quality of life.
3. Patients often visit pharmacies for help with minor ailments such as: Headache, Sore throat, Stuffy nose and cough, Diarrhea, Period pain, Body aches
4. When dispensing OTC medicines, pharmacist counseling is essential because these drugs may interact with existing diseases or prescribed medicines.
5. The pharmacist should ask about the patient's clinical condition before suggesting an OTC medicine.
6. The pharmacist should also inquire about all other prescription medicines the patient is currently taking.

7. Example : A patient with a *stuffy nose* who also has *hypertension* and is on antihypertensive drugs should not be given anticold preparations containing phenylpropanolamine, as it can elevate blood pressure.

A patient using *ciprofloxacin* asks for an *antacid* for acidity the pharmacist should advise maintaining a 2-hour gap between both medicines to prevent absorption interactions.

7. By providing such advice, the pharmacist helps avoid drug–drug or drug–disease interactions.
8. Proper pharmacist intervention ensures safe OTC drug use and improves therapeutic outcomes.
9. The community pharmacist serves as an accessible healthcare professional, guiding rational self-medication and promoting patient safety.

OTC Medications: Patient Counselling and Role of Pharmacist

1. Growing Importance of OTC Medicines

1. Increasing use of Over-the-Counter (OTC) medicines impacts both healthcare professionals and patients.
2. Better patient education enhances safety and rational use of OTC medicines.
3. There is a need for stronger systems to report adverse drug reactions (ADRs) associated with OTC products.
4. Collaborative care among pharmacists, doctors, and patients is vital for safe self-medication.
5. Pharmacists should be trained and motivated to provide appropriate guidance on OTC use.

2. Implications for Pharmacists

1. Pharmacists must work in coordination with doctors to ensure patients receive the best advice diagnosis from doctors and medication guidance from pharmacists.
2. Barriers to collaboration include separate workplaces and restrictive regulations.
3. Pharmacists should be included in medical teaching, clinical training, and professional development programs.
4. Communication between doctors and pharmacists is essential for both patient care and healthcare policy-making.
5. Consistent prescribing and OTC recommendation policies should be maintained to avoid confusion for patients.
6. Development of OTC formularies can guide safe and standardized drug recommendations.

3. Family Pharmacist Concept

1. The idea of a “Family Pharmacist” is gaining importance in developing countries.
2. A family pharmacist provides reliable drug information for children, the elderly, and breastfeeding mothers.
3. Pharmacists must ensure safe OTC medication use in special populations.
4. It is the ethical duty of pharmacists to inform patients about adverse effects and side effects of OTC drugs.
5. Public awareness programs through seminars, advertisements, and exhibitions promote safe OTC use.
6. Pharmacists should collaborate with physicians and retailers to ensure rational OTC practices.
7. Community and hospital pharmacists play a key role in promoting safety and preventing misuse.

4. Patient Counselling and Professional Role

1. The expansion of self-medication presents both opportunities and challenges for pharmacists.
2. Pharmacists' professional advice should be valued, not just the sale of medicines.
3. If doctors do not address self-medication, patients may rely more on pharmacists for primary care advice.
4. Cooperation rather than competition between pharmacists and doctors benefits patients.
5. Effective communication ensures consistent and accurate information delivery to consumers.

5. Subject Knowledge and Application

1. Pharmacists must possess strong knowledge of dosage, administration, adverse effects, and interactions.
2. They should be able to apply this knowledge effectively for safe and rational therapy.
3. Continuous learning through seminars and workshops enhances pharmacists' professional competence.

6. Helping Attitude and Communication Skills

1. Pharmacists should cultivate a helpful, patient, and compassionate attitude.
2. A sympathetic and understanding approach builds trust and rapport with patients.
3. Good communication helps in effective counselling and long-term pharmacist–patient relationships.

7. Pharmacist–Doctor–Patient Relationship

1. Strong collaboration among pharmacists, doctors, and nurses ensures optimal patient care.
2. Doctors handle diagnosis, while pharmacists ensure safe and effective drug therapy.
3. Joint initiatives and inter-professional communication improve patient outcomes.
4. Continuous teamwork and cooperation should be encouraged for patient-centered healthcare.

Specific Counseling Points for various Classes of OTC Medicines

1. Non Steroidal Anti-inflammatory Drugs (NSAIDs)

1. Non steroidal anti-inflammatory drugs (NSAIDs) such as Paracetamol, ibuprofen, Diclofenac sodium are commonly used as OTC to treat fever, headache, muscle spasm body and joint pains.
2. These medicines are more potential to cause gastric irritation and continuous usage may precipitate as acid pepsin disease.
3. These drugs also have the prope to cause renal damage.
4. Do not combine two different NSAIDs
5. Take the medicine along with food and drink plenty of water.
6. If intended relief is not felt with few doses, it is advisable to consult the doctor for further evaluation.

7. If you are an asthmatic it is better to take such medicines under the supervision of a medical doctor.
8. If you are using Aspirin, please consult the doctor for further use of Ibuprofen or Diclofenac.
9. Avoid NSAIDs if taking blood thinners (like warfarin), antiplatelets, steroids, diuretics, or other NSAIDs.
10. Tell your doctor if you have any allergies to your medicine.
11. Store your medicines in a suitable box and keep it away from the children.
12. If certain side effects such as confusion, swelling of face, feet or lower leg or sudden decrease in urine output is observed, contact the doctor immediately.
13. You also inform your doctor about using these medicines as OTC. As these drugs have life threatening interactions with other drugs, your doctor may avoid them while prescribing.
14. Pregnant women should avoid NSAIDs, especially in the last trimester.

2. Antibiotics

1. Antibiotics are the drugs that are used to treat infections caused by bacteria.
2. These drugs are supposed to be taken for full course of time that is 5-7 days to cure the infection completely.
3. Thus these drugs are to be taken under the medical supervision.
4. Your doctor may choose the correct antibiotic based on your clinical condition.
5. Take them as advised in right timings.
6. Store them in suitable containers at appropriate temperature.
7. Keep the medicines out of the reach to the children.
8. If any adverse effects are seen, please contact your doctor immediately.
9. If you have missed a dose, please take as soon as possible but do not double the dose which may be toxic.
10. To know the potential drug interactions and adverse effects, please consult your pharmacist for suitable advice.

3. Anti Cold and Cough Suppressants

1. Cold and cough suppressants are the agents used to give relief of symptoms associated with cold and flu such as sneezing, stuffy nose, itchy cough etc.
2. These medicines may cause drowsiness, patients should be advised not to drive any vehicle or operate any heavy machinery.
3. These medicines may cause dryness of mouth, nose and throat.
4. For temporary relief use sugar less candy or gum or melt bits of ice cubes in the mouth.
5. The decongestant medicines may cause restlessness or trouble in sleeping. Such people should be advised to take last dose of this medicine few hours before the bed time.
6. As these medicines may pass through breast milk, nursing mothers should be advised to stop feeding the baby and give dairy milk.
7. If you are taking any of these medicines such as CNS depressants, or MAO inhibitors please discuss with your doctor.

S. No.	Category	Common Examples / Drugs	Typical Indications / Uses
1	Analgesics and Antipyretics	Paracetamol, Ibuprofen, Aspirin (low dose), Diclofenac gel	Fever, headache, mild–moderate pain, musculoskeletal pain
2	Antacids and Anti-ulcer Agents	Aluminum hydroxide, Magnesium hydroxide, Calcium carbonate, Famotidine, Ranitidine, Omeprazole (short-term)	Heartburn, hyperacidity, gastritis
3	Cough and Cold Preparations	Dextromethorphan, Guaifenesin, Ambroxol, Chlorpheniramine, Phenylephrine, Cetirizine	Common cold, nasal congestion, cough, sore throat
4	Antihistamines / Antiallergics	Cetirizine, Loratadine, Chlorpheniramine maleate, Diphenhydramine	Allergic rhinitis, urticaria, itching
5	Antidiarrheals and ORS	Oral rehydration salts (ORS), Loperamide (short-term use)	Acute diarrhea, dehydration prevention
6	Laxatives and Stool Softeners	Lactulose, Isabgol husk, Bisacodyl, Glycerin suppositories	Constipation relief

S. No.	Category	Common Examples / Drugs	Typical Indications / Uses
7	Vitamins and Mineral Supplements	Multivitamin–multimineral preparations, Vitamin C, Calcium + Vitamin D3, Iron + Folic acid	Nutritional deficiencies, fatigue
8	Antifungal and Antiseptic Preparations (Topical)	Clotrimazole cream, Miconazole, Povidone-iodine, Ketoconazole shampoo	Fungal skin infections, athlete's foot, minor wounds
9	Dermatological Preparations	Calamine lotion, Hydrocortisone 1% cream, Aloe vera gel	Minor skin irritation, insect bites, sunburn
10	Topical Antibiotics (OTC)	Neomycin + Bacitracin + Polymyxin B (Neosporin), Mupirocin (in some regions), Framycetin cream, Povidone-iodine ointment	Minor cuts, abrasions, infected wounds, prevention of local skin infection
11	Oral and Dental Preparations	Chlorhexidine mouthwash, Benzocaine gel, Toothpaste with fluoride	Mouth ulcers, gingivitis, dental sensitivity
12	Eye and Ear Preparations (OTC)	Artificial tears, Sodium chloride nasal drops, Carbamide peroxide ear drops	Dry eyes, nasal dryness, earwax removal

S. No.	Category	Common Examples / Drugs	Typical Indications / Uses
13	Smoking Cessation Products	Nicotine gum, Nicotine patches	Smoking cessation aid
14	Motion Sickness / Antiemetics	Dimenhydrinate, Meclizine	Motion sickness, nausea prevention
15	Topical Analgesics and Rubs	Menthol, Methyl salicylate, Capsaicin cream, Diclofenac gel	Muscle pain, sprains, backache
16	Antiseptics and Disinfectants	Chloroxylonol (Dettol), Cetrimide + Chlorhexidine (Savlon), Hydrogen peroxide	Wound cleansing, disinfection
17	Contraceptives and Reproductive Health Products	Levonorgestrel (ECP), Condoms, Vaginal lubricants	Family planning, safe sex, vaginal dryness
18	Skin Care and First Aid Products	Bandages, Antiseptic creams, Burn ointments, Adhesive plasters	First aid for burns, cuts, wounds
19	Nasal and Throat Preparations	Xylometazoline nasal drops, Throat lozenges, Saline sprays	Nasal congestion, sore throat