

OTC Medication



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DEFINITION :

OTC drugs are those drugs which are safe and effective for use by the general public without a doctor's prescription.

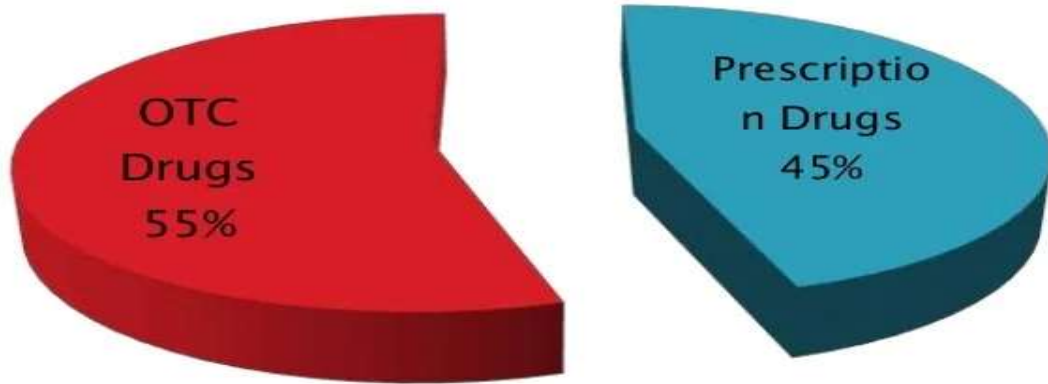
- It is also called **prescription de controlled drugs**.
- These drugs are the non prescription or over-the-counter drugs.
- These have little significant pharmacological activity and therefore the physician need not to be very much concerned about their use by the patients themselves.
- It is used primarily for symptomatic relief and not as substitutes for prescription drugs.

SIGNIFACANCE

- Comparatively cheaper
- An increased trend for self-care and increased tendency of patients to maintain their own health
- Chemist himself may prescribe OTC
- OTC considered as time saving medications. Some patients do not want to spend much time at physicians clinic.
- Lesser number of side effect compared to prescription medications.


MARKET ANALYSIS

Drugs Used by Indians



“Over-the-counter drug products account for 55 percent of drugs used by Indians.”

TYPES OF OTC MEDICATIONS

- ▶ ANALGESICS
 - ▶ ANTIBIOTICS
 - ▶ COUGH SUPPRESSANTS
 - ▶ ANTI ACNE DRUGS
 - ▶ NSAIDS
 - ▶ ANTISEPTICS
 - ▶ DECONGESTANTS
 - ▶ ANTACIDS
 - ▶ ANTIFUNGALS
 - ▶ ANTI HISTAMINES
 - ▶ SMOKING CESSATION DRUGS
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1. Topical Antibiotic

Topical Antibiotics are medicines applied to the skin to kill bacteria. They are used to treat or prevent infections that occur on minor cuts, scrapes, and burns due to presence of bacteria.

2. Cough Suppressants

Cough Suppressants are medicines that prevent or stop coughing. A cough suppressant is used for treating dry coughs (antitussives). It helps to suppress the body's urge to cough. Cough suppressants are different from cough expectorants. Cough expectorants help in treating productive coughs (coughs that produce phlegm).

3. Anti Acne Drugs

Anti-acne drugs are medicines used in the treatment of various acne problems like pimples, whiteheads, blackheads, and other serious forms of acne.

4. Nonsteroidal Anti-Inflammatory Drugs

Nonsteroidal anti-inflammatory drugs (NSAIDs or NAIDs) are medicines that are used to treat inflammation, mild to moderate pain, and fever. They are basically drugs with analgesic and antipyretic effects and with higher doses, they have anti-inflammatory effects

5. Antiseptics Medicine

Antiseptics in the form of lotions, creams, ointment are medicines that slow or stop the growth of germs and help prevent infections in cuts, scrapes, and burns.

6. Analgesics Drugs

Analgesics are medicines that relieve pain.

7. Decongestant

Decongestants are the drugs or medicines used to relieve nasal congestion, which in common terms, refer to stuffy nose.

8. Antacids

Antacids are the medicines or drugs that neutralizes the stomach acids.

10. Antihistamines

Anti-Histamines are medicines that relieve or prevent the symptoms of allergy like Hay Fever, itchy eyes, sneezing, runny nose and other kinds of allergy .



11. Anti Fungal Drug

Anti-Fungal Drugs are used to treat infections caused by a fungus.

12. Smoking Cessation Drug

Smoking-cessation Drugs are medicines that are used to help people stop smoking cigarettes or using other forms of tobacco .



Pain Relievers

Three types of pain relievers are used in OTC products

- **salicylates** (of which aspirin is the most widely used)
- **propionic acid derivatives** (ibuprofen [Advil, Menadol, Motrin], naproxen sodium [Aleve], ketoprofen [Orudis KT]), and aminophenols (of which only acetaminophen [Panadol, Tempra, Tylenol] is widely used as a pain reliever)?
- **NSAIDS**
The therapeutic effects of aspirin and the propionic acid derivatives, also known as the nonsteroidal anti-inflammatory drugs (NSAIDs), result from the inhibition of prostaglandin synthesis. Prostaglandins, which regulate many homeostatic processes, are produced locally at sites of tissue injury, where they sensitize nerve endings to painful stimuli and also promote inflammation.

ANTIHISTAMINES

Histamine is an inflammatory mediator that is associated with fatigue , itching, irritation of the nasal passages, sneezing and the production of nasal mucous. They acts by binding to and stimulating histamine H1 receptors found on nerve endings.

Antihistamines blocks the H1 receptors and preventing them from stimulating histamines, first generation antihistamines exert anticholinergic or serotonin effects as well as local anesthetic and sedative effects.

Commonly used OTC antihistamines include

- Diphenhydramine
- Bromophenaramine
- Chlorphenaramine

DECONGESTANTS

There is only one FDA approved QTC decongestant – pseudoephedrine. Pseudoephedrine is an alpha adrenergic agonist. It acts on adrenergic receptors in the blood vessels of the nasal mucosa to produce vasoconstriction, resulting in decreased blood flow and shrinkage of tissue in nasal passages.

COUGH MEDICATIONS

These are classified as

- ANTITUSSIVES
- EXPECTORANTS

ANTITUSSIVES– it directly affects the CNS sites that regulate the cough reflex.

Eg;–Dextromethorphan,Codein

EXPECTORANT– these thin bronchial secretions and makes coughing more productive.


Eg;– Guaifenesin




SPECIAL PATIENT GROUPS

Many patient groups may be particularly susceptible to adverse events that are caused by OTC products.

They include:

- ❑ Children
 - ❑ Women who are pregnant or breast feeding
 - ❑ Geriatric patients
 - ❑ People taking prescription drugs & people having health problems
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MISUSE AND ABUSE OF OTC DRUGS

- ▶ Recent Survey have reported that :
 - i. In one survey it has been found that only 16% reads the entire product label.
 - ii. If they read them they do not follow the directions on the label.
 - iii. Abuse is most common in adolescents aged 10–17 years.
 - iv. Adolescents are 18% times more likely to dies from an OTC overdose than from a illicit drug dose overdose.
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Overdosing has occurred with non prescription medicines, particularly those that contain paracetamol. Adverse reactions can also occur but rare. Pharmacist should therefore ensure that advice and information are available on the safe and effective use of medicines.

Product type	examples
Solvents	methylated and surgical spirit
Propellants	pain relieving sprays
Chemicals	citric acid
Opioids	codeine, morphine
Laxatives	senna


OTC Medications Are Safe But Not Risk-Free

As with all medications, there can be risks with use.

The risks of OTC use include:

- Delay in seeking medical advice for a serious illness.
 - Risk of drug-drug/herbal/dietary supplement interactions.
 - Risk of adverse events.
 - Potential for dependence, misuse and abuse.
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In what way the OTC drugs can be Harmful.

- OTC drugs can change the effect of prescription medications.
 - OTC drugs can mask symptoms of disease.
 - OTC drugs can lead to overdose.
 - If misused even common over-the-counter drugs, such as aspirin, vitamins, or cold remedies can be harmful.
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OTC COUNSELING QUESTIONS

Counseling patients about self-care and nonprescription drugs is not the same and cannot follow the same procedure as for prescription drugs. That is why OTC counseling requires much more exploratory open or close-ended questions on the part of the pharmacist which are especially useful to clarify information gathered about the patient's condition. It allows gathering the most abundant amount of information.

These questions usually start with who, what, how, why or where. For example:

- ▶ “Which of the prescription medications do you take on regular basis?”
- ▶ “Which of the nonprescription and herbal medications do you use?”
- ▶ “What types of conditions do you routinely see your doctor for?”
- ▶ Some other questions are also possible:
- ▶ “Have you ever experienced any side effects after taking the OTC medication?”
- ▶ “Have you taken this OTC medication before?”

PATIENT COUNCELLING

▶ Step 1

Every pharmacist should begin the OTC counseling session by introducing himself/herself by name which identifies him/her as the pharmacist. He/she should try to relax the patient by beginning the session with a friendly smile and a handshake. The pharmacist should also explain that he/she can provide assistance with OTC product selection and explain how to use such medication.

▶ Step 2

In order to elicit key information the pharmacist should first and foremost try to obtain relevant information about patient's demographic (e.g. sex, age, pregnant, nursing, weight, allergies, social history etc), disease (e.g. history of present illness, current symptoms, course of illness, past history, other underlying medical conditions) and drug (e.g. current medication, medication taking history, OTC history etc.) Moreover, by using suitable verbal and written communication techniques, the pharmacist should inform, educate, and counsel patients about the following:

- ▶ Drug name (generic and/or brand name)
- ▶ route, dosage form, dosage and administration schedule;
- ▶ special directions for preparation and administration as well as precautions to be taken during the process;
- ▶ techniques for self-monitoring of drug therapy;
- ▶ storage;
- ▶ potential drug-drug or drug-food interactions or other therapeutic contraindications ; and
- ▶ accordingly other Information "peculiar to the specific patient or drug etc.

In addition, it is of vital importance to demonstrate to patient's- how to use medications in various forms such as inhalers, patches, drops, ointments, lozenges, gargles etc.

And

Ask them to demonstrate making sure that patients understand which route of Administration should be used thus ensuring that patients have all the necessary instructions in writing and that they understand how to schedule their medications in accordance with meals and other medications.

THANK YOU