

INTRODUCTION TO OTC MEDICATION

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

INTRODUCTION TO

OTC drugs are those drugs which are safe to use by the general public without a doctor's

SIGNIFICANCE OF OTC MEDICATION

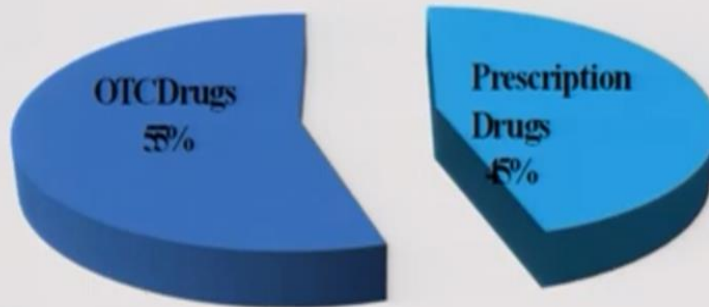
- Comparatively cheaper
- Chemist himself may prescribe OTC
- Consumers are able to
 - Self diagnose
 - Self treat
 - Self manage
- OTC considered as time saving medications. Some patients do not want to spend much time at physicians clinic.
- Lesser number of side effect compared to prescription medications.

SIGNIFICANCE OF OTC MEI

• Comparatively cheaper
• Chemist himself may prescribe OTC

MARKET ANALYSIS OF OTC MEDICATION

Drugs Used by Indians



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

OTC MEDICATIONS

- ANALGESICS
- ANTIBIOTICS
- COUGH SUPPRESSANTS
- ANTI ACNE DRUGS
- NSAIDS
- ANTISEPTICS
- DECONGESTANTS
- ANTACIDS
- ANTIFUNGALS
- ANTI HISTAMINES
- SMOKING CESSATION DRUGS

OTC MEDICATIONS

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.

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.

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.

OTC MEDICATIONS

Nonsteroidal Anti-Inflammatory Drugs: Nonsteroidal anti-inflammatory drugs 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.

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.

Analgesics Drugs: Analgesics are medicines that relieve pain.

Decongestant: Decongestants are the drugs or medicines to relieve nasal congestion, which in common terms, is a stuffy nose.

OTC
Nonsteroidal Anti-Inflammatory drugs are anti-inflammatory, mild to moderate pain, and fever. They are basically drugs with analgesic and antipyretic effects and with higher doses, they have anti-inflammatory effects.
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.

OTC MEDICATIONS

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

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.

Anti Fungal Drug: Anti-fungal drugs are used to treat infections caused by a fungus.

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

RATIONAL USE OF COMMON OTC MEDICATIONS:

Rational Use of Drugs (RUD) is at the core of pharmaceutical best practice. Rational use of medicines refers to the correct, proper and appropriate use of medicines. Rational use requires that patients receive the appropriate medicine, in the proper dose, for an adequate period of time and at the lowest cost in addition to this use of an appropriate, efficacious, safe and cost effective drug given for the right indication in the right dose and formulation, at right intervals and for the right duration of time.

Irrationality is:

- Ineffective and unsafe drug treatment.
- Inappropriate self-medication.
- Worsening or prolonging of illness,

Incorrect use of medicine occurs in all countries, causing harm to people and wasting resources. Consequences include:

- **Antimicrobial resistance:** Overuse of antibiotics increases antimicrobial resistance and the number of medicines that are no longer effective against infectious disease.
- **Adverse drug reactions and medication errors:** Harmful reactions to medicine caused by wrong use or allergic reactions to medicine can lead to increased illness, suffering and death.

- **Lost resources:** Most of national budget are spent on medicines. Out of pocket purchase of medicines can cause severe financial hardship to individuals and their families. If medicines are not prescribed and used properly, billions of dollars of public and personal funds are wasted.
- **Eroded patient confidence:** Exacerbated by the overuse of limited medicine, drugs may be often out of stock or at unaffordable prices and as result erode patient confidence. Poor or negative health outcomes due to inappropriate use of medicine may also reduce confidence.

Factor Contribute to Incorrect Use of Medicines

- Lack of skills and knowledge.
- Inappropriate unethical promotion of medicines by pharmaceutical companies
- Profit from selling medicine.
- Unrestricted availability of medicines.

RATIONAL USE OF OTC MEDICATIONS

Pain relief medicines are regulated by the Food and Drug Administration. These relieve the minor aches and pains associated with conditions such as headaches, fever, colds, flu, arthritis, toothaches, and menstrual cramps.

There are basically two types of OTC pain relievers:

- Acetaminophen
- Non-Steroidal Anti-inflammatory Drugs (NSAIDs)

RATIONAL USE OF OTC MEDICATIONS

With acetaminophen:

- Taking a higher dose than recommended will not provide more relief and can be dangerous.
- Too much can lead to liver damage and death.
- Risk for liver damage may be increased in people who drink three or more alcoholic beverages a day while using acetaminophen-containing medicines.
- Be cautious when giving acetaminophen to children.
- Infant drop medications can be significantly stronger than regular children's medications.
- Read and follow the directions on the label every time you use a medicine.

RATIONAL USE OF OTC MEDICATIONS

With acetaminophen:

- Taking a higher dose than recommended will not provide more relief and can be dangerous.
- Too much can lead to liver damage and death.
- Risk for liver damage may be increased in people who drink three or more alcoholic beverages a day while using acetaminophen-containing medicines.

RATIONAL USE OF OTC MEDICATIONS

With NSAIDs:

- Too much can cause stomach bleeding.
- This risk increases in people who are over 60 years of age, are taking prescription blood thinners, are taking steroids, have a history of stomach bleeding or ulcers, and have other bleeding problems.
- Use of NSAIDs can also cause kidney damage.
- This risk may increase in people who are over 60 years of age, are taking a diuretic have high blood pressure, heart disease, or pre-existing kidney disease.

RATIONAL USE OF OTC MEDICATIONS: ANTITUSSIVES

- Look at the ingredients.
- Check the label. Is it a suppressant or an expectorant? Is it both?
- Make sure you're getting what you need.
- Don't use medicine for more than 7 days.
- Always measure the correct dose.
- Because even safe medicines in high doses can be very dangerous.
- High doses of cough medicine can cause serious problems, including brain damage, seizure, or death.

RATIONAL USE OF OTC MEDICATIONS: ANTITUSSIVES

- Be careful with combination medicines. Many OTC cough medicines have multiple ingredients - expectorants and suppressants along with decongestants, antihistamines, or painkillers.
- Select products with only the medicines that treat your symptoms.
- Don't take two medicines that have the same ingredients.
- Keep away from young children. Make sure to choose the right medicine based on your child's age.
- And always make sure to follow the dosing directions on the label.

RATIONAL USE OF OTC MEDICATIONS: ANTITUSSIVES

- Be careful with combination medicines. Many OTC cough medicines have multiple ingredients - expectorants and suppressants along with decongestants, antihistamines, or painkillers.
- Select products with only the medicines that treat

REASONS OF OTC MEDICATIONS

1. Overall risk & potential abuse or dependency.
2. Availability for a larger population early in a disease.
E.g. Hyperacidity & ulceration.
3. The company's way of extending the life of their drug
4. By creating reduced strength & reduced price product.
5. Rx drug cost has increase by 15% per year
6. Financial relief.

ADVANTAGES OF OTC MEDICATIONS

- Reduced opportunities to receive counseling about possible lifestyle therapies (e.g. exercise & diet)
- Poorer compliance
- Misdiagnosis, patients won't benefit from the drug but will be exposed to its risks
- More difficult to study a drug's effects.

ADVANTAGES OF OTC

- Benefits outweigh risks
- Low misuse & abuse potential
- consumers are able to
- Self diagnose
- Self treat
- Self manage
- Adequately labeled
- Health practitioners are not needed.

DISADVANTAGES OF OTC MEDICATIONS

- Reduced opportunities to receive counseling about possible lifestyle therapies (e.g. exercise & diet)
- Poorer compliance
- Misdiagnosis, patients won't benefit from the drug but will be exposed to its risks
- More difficult to study a drug's effects.

OVER THE COUNTER (OTC) SALES

INTRODUCTION:

According to the Food and Drug Administration (FDA) regulations, a drug must be safe and effective to be sold over the counter. An OTC drug is safe when it has low incidence of adverse reactions and side effects under conditions of widespread availability. An OTC drug is effective, if there is a reasonable expectation that when used under adequate direction for use, which warnings will provide significant relief for the ailment for which it is being taken to a significant portion of the targeted population.

SIGNIFICANCE OF OTC COUNTERS

For most consumers, information on non-prescription drugs comes from the label put on the product. FDA requires that OTC labels should be more detailed as compared to prescription drug labels. The label on which non-prescription medicine should include the following information:

- Product name.
- Active ingredients.
- Inactive ingredients.
- Name and address of the manufacturer.
- Net quantity of ingredients.
- Description of tamper resistant features.

Examples of OTC Drugs:

1. **Topical anti-bacterial, anti-fungal OTC drugs:** Bacitracin, Clotrimazole (vaginal, topical use), Miconazole 2% ointment, etc.
2. **Pain OTC drugs:** Acetaminophen, Aspirin, NSAIDs, Ibuprofen, Naproxen, etc.
3. **Smoking cessation OTC drugs:** Nicotine patch.
4. **Topical dermatological (skin, scalp) OTC drugs:** Capsaicin, Doak tar distillate oil, Hydrocortisone, Permethrin, Pyrethrin, Zinc oxide ointment.
5. **Diabetes OTC drugs:** Insulin OTC vials (Humulin 50/50 vial, Humulin N, Humulin R Novolin 70/30 vial, Novolin R vial etc.), Glucose chewable tablet.
6. **Anti-diarrheal drug:** Loperamide.
7. **Anti-ulcer drugs:** Cimetidine, Famotidine, Ranitidine, Nazitidine.
8. **Proton pump inhibitors:** Omeprazole.
9. **Laxatives and Cathartics:** Bisacodyl, Docusate, Glycerin, Psyllium, Sorbitol.
10. **Other digestion drugs:** Aluminium hydroxide gel, Antacid liquid suspension, Calcium antacid tablets, Simethicone drops, etc.
11. **OTC Vitamins:** Calciferol, Ergocalciferol drops, Calcium carbonate, Calcium carbonate, Calcium citrate, Ferrous fumerate, Ferrous gluconate, Ferrous sulfate, Magnesium oxide, Multivitamins, etc.
12. **Anti-histamine:** Cetrizine, Diphenhydramine, Loratadine.
13. **Anti-histamine/Decongestant combinations:** Brompheniramine – Pseudoephedrine elixir.