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Review Article

A BRIEF REVIEW ON OTC MEDICATION**Utkarsh Tiwari¹, Dr. Shailesh Kumar Ghatuary², Sarika Chaturvedi³, Mamta Dubey⁴,
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Abstract:

In recent times, there has been an enhance in the use of over-the-counter (OTC) drugs. The utilization of these medicines can be unsafe, as incorrect self-diagnosis or the ingestion of improper doses can lead to side effects and the occurrence of adverse reactions and drug–drug interactions. A cross-sectional expressive observational study was carried out target the entire Spanish population by using an online survey. The results showed that 78.9% of the subjects had previously taken or were currently taking OTC drugs. This consumption decreased as the age of the subjects enhance, with a prevalence of 36.4% of subjects aged ≥ 71 taking OTC drugs. Analgesics were the most extreme OTC drugs (49.1%) especially in women, youngsters with non-formal educational qualifications, and individuals of a low–medium socioeconomic level residing in urban areas. Measures should be implementing to consider the safe use of OTC drugs in order to avoid the occasion of secondary events associated with the lack of in order related to their usage.

Keywords: non prescription drugs, OTC drugs, over-the-counter medicines, misuse of OTC

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INTRODUCTION:

Over-the-counter (OTC) medications are those that are legally sold "Over the Counter," that is, without a prescription from a (RMP) registered healthcare professional. OTC or non-prescription medicine are other names for over-the-counter drugs. These phrases all refer to drugs that are available over the counter. When used according to the instructions on the label and those of your healthcare provider, they are safe and effective. It refers to a medication that is available for purchase without a prescription (from a doctor). Analgesics (pain relievers) like aspirin and acetaminophen are a couple such examples. also known as over-the-counter and non-prescription. Since a few years ago, there has been an increase in the use of over-the-counter medications available in pharmacies¹. Moreover, utilising such medications could. Since a few years ago, there has been an increase in the use of over-the-counter medications available in pharmacies¹. Moreover, the usage of such medications might delay the diagnosis of critical illnesses. ² It has been noted that OTC drug consumption is expanding globally. India's OTC medication industry is now ranked 11th in the world. Due to the high prevalence of self-treatment among Indian patients, OTC medications are in high demand on the Indian market. Yet, self-medication can have negative consequences, exacerbate symptoms, and worsen prognoses, especially in older and chronically ill patients. [1, 2]

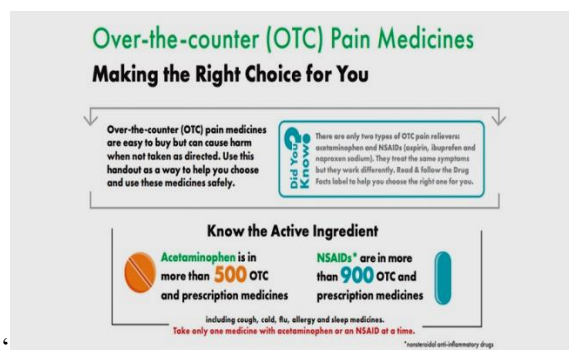


Fig no. 1

COMMONLY MISUSED OTC MEDICINES

Various types of OTC medicines that is most commonly misused.

Dextromethorphan (DXM): one of the most commonly abused over the counter medicine are cough medicines containing Dextromethorphan

(DXM). This is because, in heavy doses, DXM may cause a potent high and hallucinations. Cough medicine abuse is popular among young age people, as these drugs are often readily obtainable among medicine cabinets at home. These medicines are cause harm in combination with other drugs, such as alcohol and marijuana. The maximum daily dose of DXM is 120mg. If an individual takes more than 120mg a day, they will start to skilltoxication and dangerous side effects⁸

Loperamide: is an anti-diarrheal that is in the form of tablet, capsule, or liquid form. When misusing loperamide, people swallow large quantities of the medicine. It is unclear how often this drug is misused³

Acetaminophen (Example: Tylenol)

Acetaminophen is commonly used to treat minor aches and pains like headaches or as a fever-reducing medication. However, the misuse of acetaminophen medication like Tylenol causes hospitalization for approximately 60,000 Americans annually. Overdosing on these drugs can result in damages to the liver, including liver failure, increased liver enzyme levels and liver damage. Acetaminophen overdose typically occurs accidentally or during a mental health crisis when an individual is suffering from a suicide attempt.

Diphenhydramine (Example: Benadryl)

Diphenhydramine is a medication that reduce allergic symptoms and is found in many over the counter allergy remedies such as Benadryl. However, misuse and abuse of diphenhydramine can cause elevated mood, improved energy levels, and mild euphoria.

Pseudoephedrine/ Phenylephrine (Example: Sudafed)

Pseudoephedrine is a decongestant medication often found in OTC medicines like Sudafed. It is used to reduce congestion symptoms and allergies. It helps to enhance nasal congestion. It produce stimulant like effects euphoria.

Diet pills/ Caffeine: Diet pills and caffeine are often used by persons attempt to drop weight or manage their weight. People used diet pills and caffeine in order to suppress their hunger. Both act as a central nervous system stimulant. Ephedrine is a drug that was used in diet pills for years before being banned by the Food and Drug Administration (FDA)¹⁴.



Fig no.2

LIST OF OVER THE COUNTER MEDICATIONS ABUSED⁴

| Class/therapeutic group | Medication example |
|------------------------------------------|-------------------------------------------------------------------------------------------|
| Decongestants | Pseudoephedrine |
| Laxatives (oral and rectal) | Sodium phosphate laxatives and laxatives containing bisacodyl |
| Codeine-containing products ⁷ | Compound analgesics (codeine with ibuprofen or paracetamol) and cough medicines |
| Analgesics | Aspirin and acetaminophen |
| Hypnotics | Xanax (alprazolam), Librium (chlordiazepoxide), Valium (diazepam), and Ativan (lorazepam) |
| Cough medicines | Cough medicines containing dextromethorphan |
| Antihistamines | Chlorphenamine (Piriton), cinnarizine, diphenhydramine, hydroxyzine |

PERCENTAGE USE OF OTC MEDICATION

OTC or over-the-counter drugs are pharmaceutical products that are considered safe to purchase without the requirement of a prescription from a medical professional. These products are accessible in hospital pharmacies, medical stores, and sometimes even grocery shops and are sold legally without any prescription.

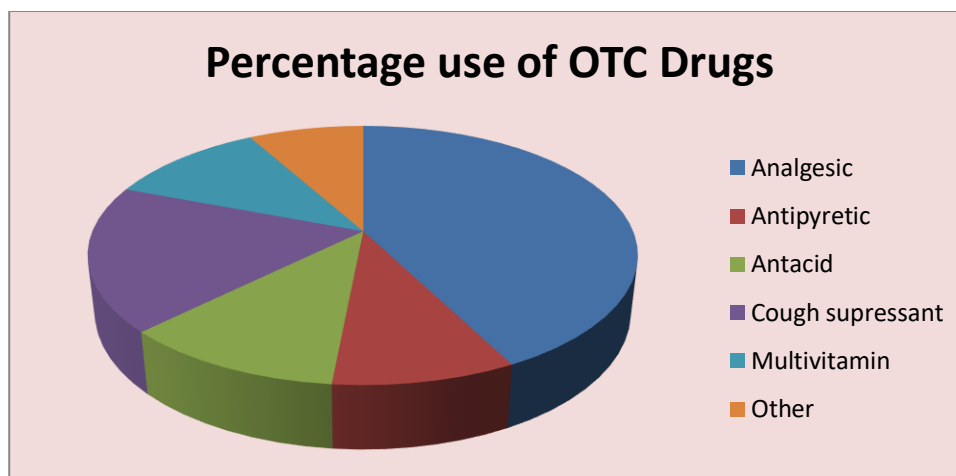


Fig. no. 3

ROLE OF PHARMACIST IN OTC MEDICATIONS

The presence of a pharmacist ensures safe and effective use of OTC medications. Pharmacists can connect with other health care providers in the management of self-care practices by patients. The pharmacists play a vital role in controlling the number of medications being dispensed as OTC drugs. They can also guide and help the consumers regarding OTC medications⁵. Counsel patients on the correct use of the selected product, including dosage, dosage intervals, route of administration, and recommended duration of therapy, as well as proper storage of products. Tell patients not to exceed the recommended dose of the product. Highlight the importance of reading the labels on OTC items before taking any medication and discarding expired medications. Recommend that patients consult a

physician if symptoms do not improve or worsen.⁶ Remind patients to use OTC medications that treat specific symptoms. Advise patients to exercise caution when using multiple medications: if unsure, they should consult a health care professional. Remind patients to always inform their primary health care provider of all medications they are currently taking. Urge patients to consult a health care professional before using any OTC products, especially if they are currently taking any other medications or have a preexisting medical condition. Remind parents or caregivers of pediatric patients to use calibrated measuring devices to administer medications, to always read the label of the medication prior to administering it and to give only those products formulated for pediatric patients. Stress the importance of seeking guidance from a health care professional whenever in doubt about using any OTC products⁹



Fig. No 4 General awareness about OTC medicine by Utkarsh Tiwari

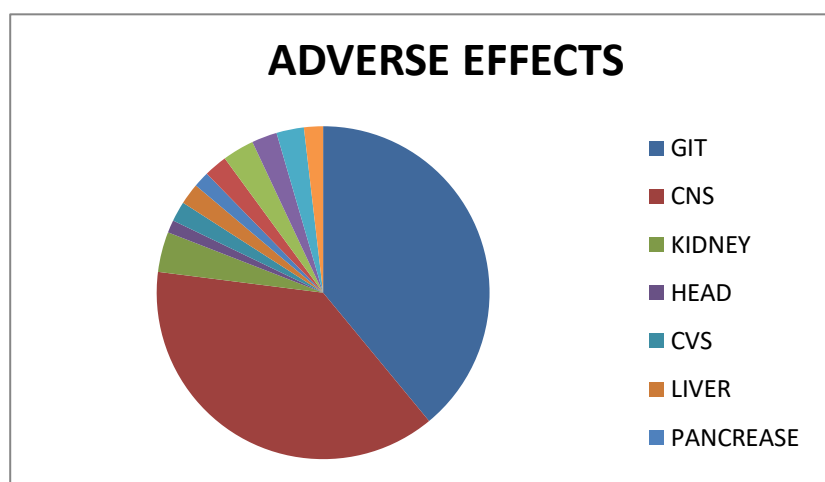
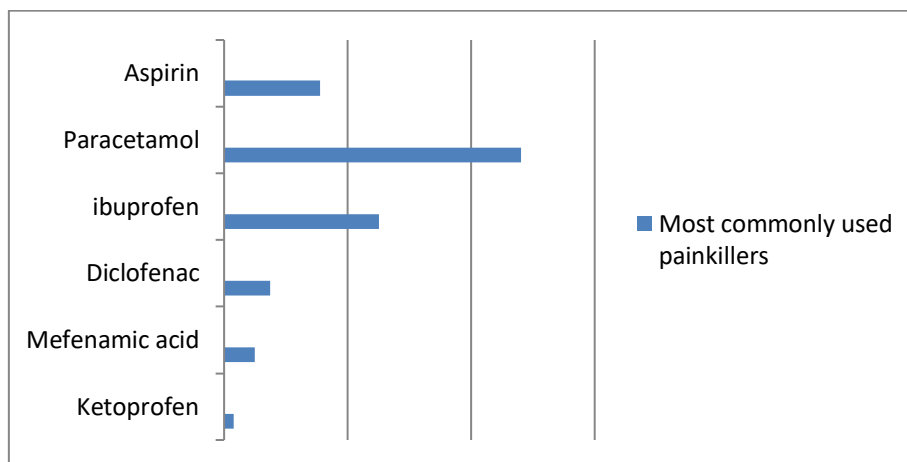
PAIN KILLERS THAT ARE MOSTLY USED BY STUDENTS:

Fig no. 5 adverse effects of painkillers according to body systems mostly known by the students

Common side effects of opioid administration include sedation, dizziness, nausea, vomiting, constipation, physical dependence, tolerance, and respiratory depression. Physical dependence and addiction are clinical concerns that may prevent proper prescribing and in turn inadequate pain management.

INDIAN REGULATION

Currently, there is no OTC schedule in the drugs and cosmetics rule 1945. Hence, any drug outside schedule H, G and X is considered to be an OTC drug.

1. SCHEDULE K

- ❖ Household remedies
- ❖ Items No. 13
- ❖ Form 20 A
- ❖ Form 20B

Examples

- Aspirin tablets, Antacid preparation, Analgesic balm etc
- Digene
- Paracetamol
- Pills tablets for cough

2. Exemption of Schedules G, H or X

- ❖ Topical or external use
- ❖ Application of the ingredients from these schedule

Examples

- Diclofenac
- Clotrimazole
- Oxymetazoline
- Chericof and Honitus

3. AYURVEDIC OTC DRUGS

The Ayurvedic State Licensing Authorities

Examples:

- Vicks Vaporub

- Amrutanjan pain balm
- Zandu pain balm
- Iodex pain balm
- Move pain cream
- Itch guard cream
- Eno fruit salt antacid

MARKETING AUTHORISATION

1. The drugs and cosmetics act, 1940 (DCA) and its subordinate legislation, the drugs and cosmetics rules, 1945(DCR)
2. Other regulations which have a bearing on the pharmaceutical business in India;
 - Drug (prices control) order, 1995
 - Example;** acetylsalicylic acid and Ephedrine
 - Drugs (Magic remedies) Objectionable advt.act,1954

DRUG REGISTRATION IN INDIA

Non prescription (OTC) registration: single or combination containing non-prescription drugs, i.e. out of Schedule G, H or X cannot be directly granted as Over The Counter. First it will be approved as Rx and later on application is required to be filled for switch from Rx to OTC.¹⁰ The drugs which do not come under the prescription medicines schedule are generally sold as OTC medicines. Pharmaceutical regulations and registration are regulated by Central Drugs Standard Control Organization (CDSCO) within Ministry of Health and Family Welfare in India. The Sale, Manufacturing and Distribution of API and Pharmaceuticals are regulated under Drug & Cosmetics Act 1940 and D & C Rules 1945.^{15,16}

CONCLUSION

This study of the literature on OTC drug abuse has shown that there is a recognised issue with a variety of drugs and potential risks on a global scale. The use of proxy, self-report, non-OTC-specific data and the relative paucity of qualitative research including personal experiences of OTC medicine usage have all raised methodological issues. These are urgent areas where research is required to determine the scope of the issue, to shed light on people impacted, and to make clear the specific nature of the issue under investigation. Such study is required to educate legislation, regulation, and the readiness of a variety of health care providers in order to prevent harm to those who purchase over-the-counter medications that may be subject to abuse.

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