



OTC Drugs: A Survey on Consumer Awareness

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Abstract

The purpose of the survey was to assess how often consumers used over-the-counter (OTC) medications and to ascertain their awareness of the risks associated with doing so. We collected feedback on a variety of topics related to over-the-counter drug use. Out of 29 respondents, 72.4% used over-the-counter medications, usually bought on their own. The majority of them began taking their own medications two days after becoming ill. Frequent complaints of headache, cold, fever, generalized weakness, acidity, dysmenorrhea, and disturbed sleep were among the illnesses that led to self-medication. The majority of them 51.7%, 34.5%, by describing the symptom, and 15%, by displaying an old prescription, were able to obtain OTC medications. 72.4% of individuals report sharing over-the-counter medications with friends and family. Adolescents and the elderly exhibited the highest OTC usage. Self-medication was frequently justified by the time commitment required for consultations, the cost of those consultations, and the frequency of those visits. Analysis revealed that not a single middle-aged person knew the name of the medication, its dosage, how often it should be taken, or its side effects.

Keywords: Over the counter (OTC), Self medication

Introduction

The medications that can be bought over-the-counter (OTC) or without a prescription are known as non-prescriptive medications. Right now, the US is the only place where more than 300,000 different OTC medications are sold.[1] With the introduction of new formulations and OTC switches from prescription, the list of over-the-counter medications in today's society is getting out of control.[2] Generally speaking, over-the-counter medications must be proven to be reasonably safe and well tolerated, and they must be used primarily to treat conditions for which a doctor is not directly supervising the patient.

The use of over-the-counter medications is unregulated in India. Chaos also reigns when OTC drug use is not strategically considered, and there are many causes for these concerning circumstances. Maybe a person's busy schedule and low socioeconomic standing lead to their dependence on over-the-counter medications. It was found in India (1995) that individuals with literacy were 76% more likely than those without to self-medicate.[3]

Research clearly shows that taking care of oneself raises health-related awareness and lowers health-related costs.[4] OTC medications are not safe or effective, despite popular belief to the contrary. They may have multiple negative effects in addition to masking the underlying disease. Thus, the study was conducted to examine the population at risk, the frequency of self-medication, the amount of over-the-counter use, and the participants' awareness of the potential side effects.[5]

India has a 44.9% incidence of self-medication, according to the MDPI report 2022. With a 26.31% incidence rate, middle-class lower-class families are the most likely to self-medicate. In January 2021, Hamdard Laboratories released 12 over-the-counter products that boost immunity.[6] In India, common medicinal products include antacids, laxatives, analgesics, cough and cold remedies, vitamins, and allergy products. Over-the-counter painkillers are commonly used in the treatment and management of musculoskeletal injuries, menstrual cramps, and other musculoskeletal issues. According to the Interventional Pain and Spine Centre (IPSC), women are 25% more likely than men to experience chronic pain, which affects 19% of Indian adults.[7]

In India, over-the-counter analgesics such as acetaminophen, aspirin, naproxen, and ibuprofen are most commonly used in conjunction with non-steroidal anti-inflammatory drugs (NSAIDs).[9]

Reasons for self-medication:

A country with a huge population, like India, faces the challenge of an abysmally low doctor-to-patient ratio which creates a conducive atmosphere for preference towards OTC drugs to flourish. Some of the particular reasons for the same may be listed as below:

1. Having a previous prescription
2. Saving time
3. Family member's advice
4. High price of doctor's visit
5. Crowded medical centers
6. Lack of trust in doctors
7. Nurse advice
8. Pharmacist recommendation
9. Poverty, ignorance, misbeliefs
10. Extensive advertisement
11. Availability of drugs other than in Pharmacy[10]

Historical Background

Almost anything could be bottled and sold as medicine before the Food and Drug Administration (FDA) was founded. The majority of medications are available over-the-counter. Without warning consumers, some over-the-counter medications contained opium, cocaine, marijuana, alcohol, and other psychoactive and narcotic substances.[12] When the Food, Drugs, and Cosmetic Act was drafted and implemented in 1938, the FDA was granted the authority to establish specific regulations controlling which medications could only be sold with a prescription and which could be sold over-the-counter.[13]

The FD&C Act was modified in 1951 to address worries about drug safety and to clarify the differences between OTC and prescription drugs. Prescription drugs are substances that can be hazardous, toxic, or habit-forming and should only be used under a doctor's supervision. anything more that could be provided without a prescription.[14]

In 1962, the FD&C Act was modified once more to mandate that medications fulfill stringent safety and efficacy criteria prior to being made available for over-the-counter sales. Even so, assessing viability and well-being at the time was challenging. A medication's potency may not be enough for one person and any drug may have undesirable side effects.[15]

Research Methodology

Following ethical approval and a pilot study, consumers were invited to participate in a predesigned questionnaire to know their view towards OTC drugs.

Survey Method:

The purpose of the survey study was to assess OTC drug use among consumers in order to ascertain awareness of and drawbacks associated with OTC drug use. With the Institute's approval, the study was carried out. Participants were informed of the study's purpose and methodology, and those who agreed to fill out an informed consent form were added to the study.

Data Collection:

In terms of how the questionnaire was distributed, social media sites like Facebook, Instagram, and Whatsapp were utilized along with new communication technology that used the Google questionnaire platform. Included in the Google Form questionnaire was a feedback form that covered a number of topics related to over-the-counter medications. We collected the completed questionnaire responses from one hundred participants.

Target Population:

The study's target population consisted of adults who were at least eighteen years old. It was hoped to obtain a broad representation of the general public by bringing in people from a variety of backgrounds, including age, gender, and educational attainment.

Questionnaire Development:

A methodical questionnaire was created to gather information about the goals of the research. The following sections were included in the questionnaire:

- Demographic data
- Awareness and Knowledge
- Use and Practices
- Perceptions and Attitudes.

The questionnaire consisted of open-ended, Likert scale, and multiple-choice questions. In order to collect data that was both quantitative and qualitative, it was imperative that the questions were designed with clarity, validity, and reliability in mind.

Observation and Result:

In our study, we observed that of 29 respondents 93.1% were aware of OTC drugs and had an average knowledge of 39.7% about OTC drugs. 72.4% used OTC preparations, commonly purchased by self. Majority of them started self medication within 2 days of their illness. Sharing of OTC preparations among friends and relatives was found in 72.4% of total respondents.

Section 1: Demographic information 1. Age Group

29 responses

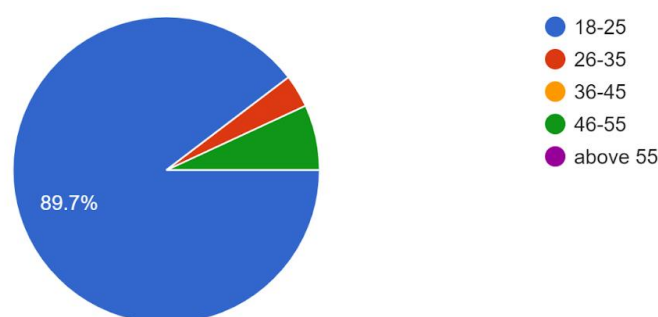


Figure 1: Age Group Of respondents

2. Highest level of education.

29 responses

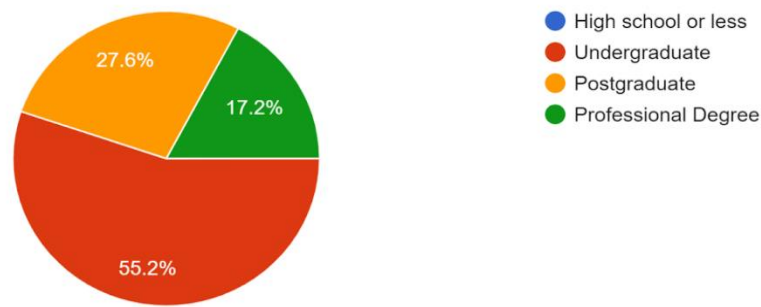


Figure 2: Education level of Respondents

Section 2: Awareness and drugsKnowledge 3. Are you aware of the term "over-the-counter?"

29 responses

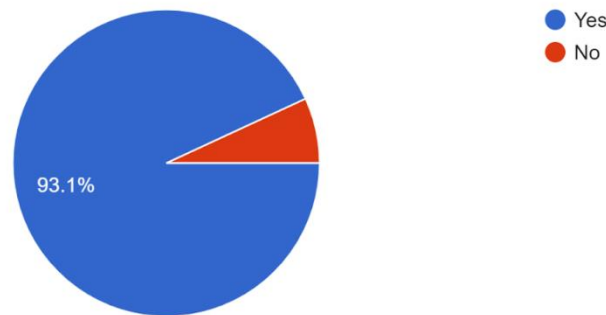


Figure 3: Awareness about OTC drugs

4. How would you rate your overall knowledge about OTC drugs?

29 responses

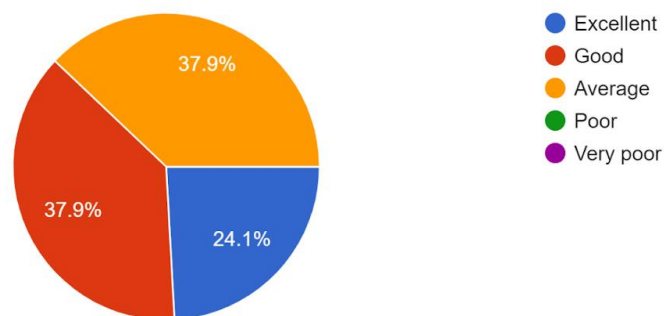


Figure 4: Respondents knowledge about OTC drugs

5. Have you received any information or education about OTC drugs from healthcare professionals?

29 responses

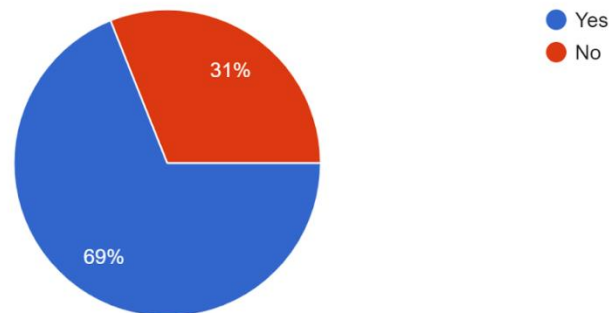


Figure 5: Information of OTC from healthcare professionals to respondents.

Section 3: Usage and Practices 6. How often do you use OTC drugs?

29 responses

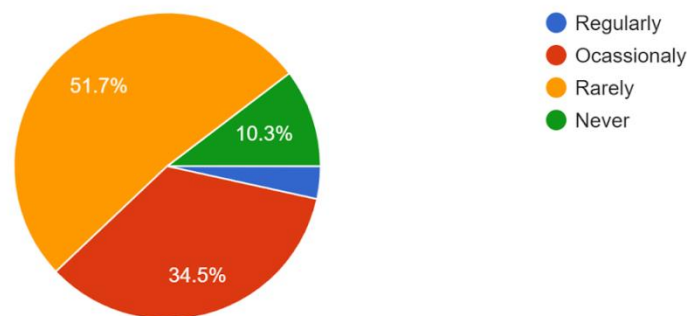


Figure 6: Use of OTC

There were several reasons for the use of OTC of which, the common reasons that were found for them to obtain OTC were, cough and cold, while they felt that the disease was not serious to consult the doctor, in order to prevent occurrence of the known illness, based on their previous experiences with the medications and in order to avoid consultation fees.

7. What are the most common reasons for using OTC Drugs? (select all that apply)

29 responses

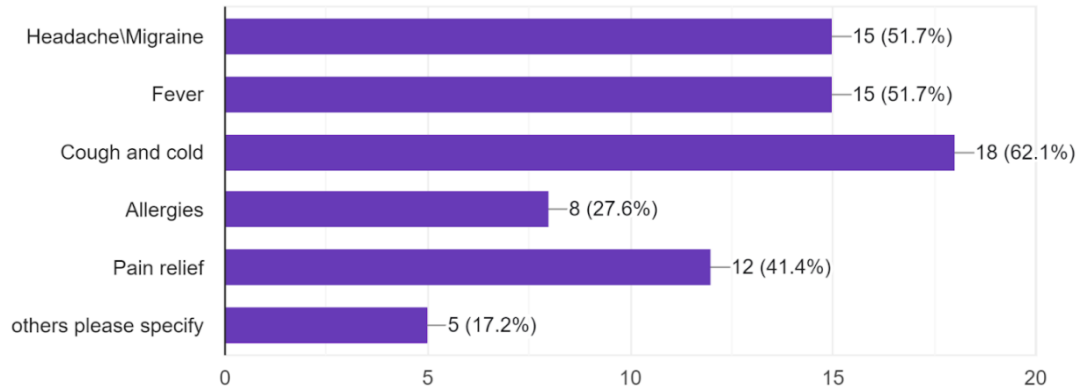


Figure 7: Common reasons for using OTC drugs.

44.8% of total respondents always check and read labels and instructions carefully before using OTC drugs, 27.6% read instructions sometimes and 20.7% never read the instructions provided on OTC drugs.

While 82.8% of total respondents never experienced any adverse effects or side effects after using OTC, 17.2% did experienced side effects including rashes, vomiting and indigestion respectively.

8. Do you read the labels and instructions carefully before using OTC drugs?

29 responses

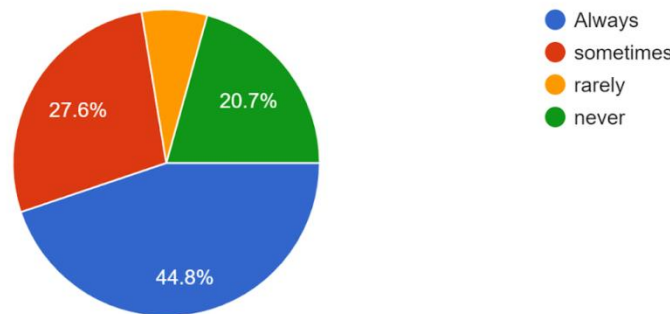


Figure 8: Respondents reading instructions before using OTC

9. Have you ever experienced any adverse effects or side effects after using OTC drugs?

29 responses

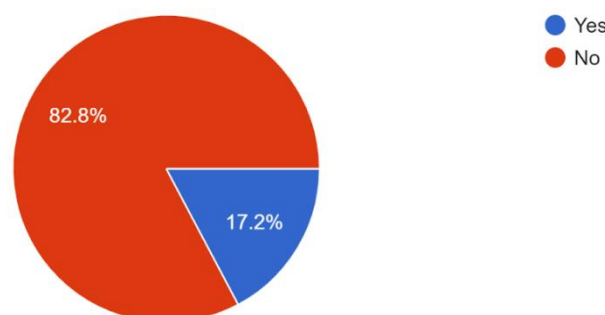


Figure 9: Adverse effects after using OTC Drugs.

10. If yes, what kind of adverse effects or side effects did you experience?

29 responses

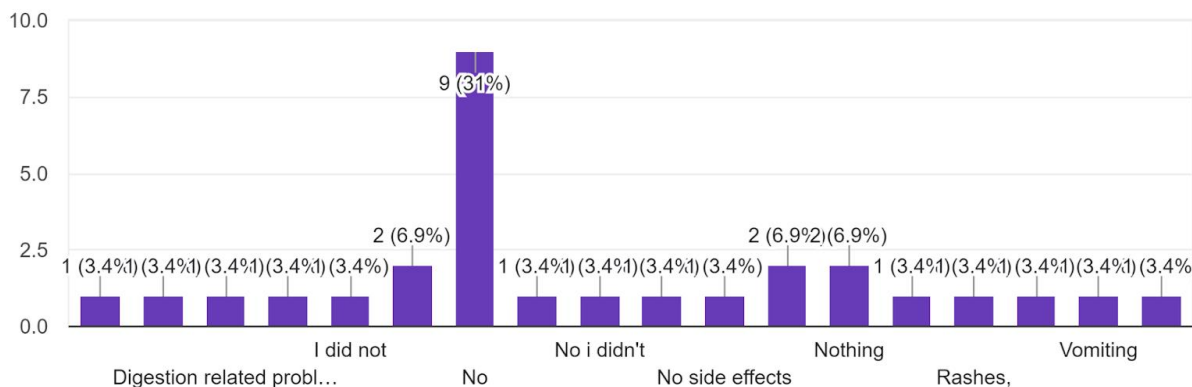


Figure 10: Type of adverse effects experienced by respondents.

Only 13.8% of respondents believed that OTC drugs are not safe even when they are available without prescription, 20.7% of them agreed that OTC is safe as it is available without prescription while 65.5% gave neutral reaction.

Section 4: Perceptions and attitudes 11. Do you believe that OTC drugs are safe because they are available without a prescription?

29 responses

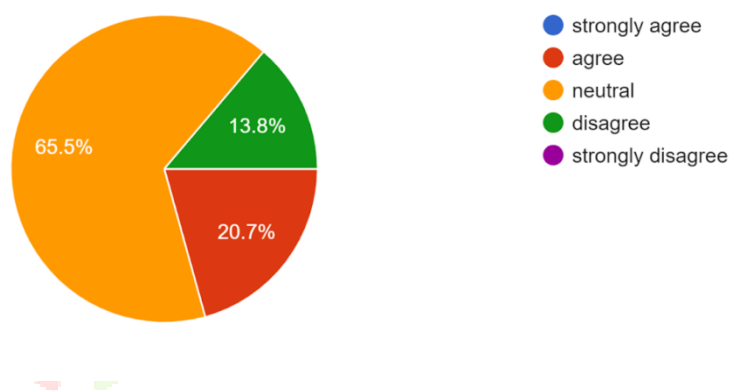


Figure 11: Believe on OTC drugs

12. Have you ever taken OTC drugs without consulting a healthcare professionals?

29 responses

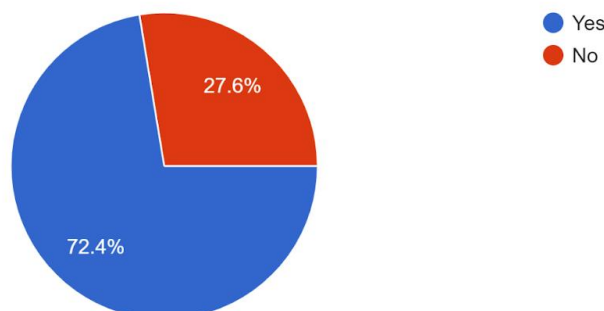


Figure 12: OTC drugs without consultation.

13. If you have any concerns or questions about OTC drugs, where do you typically seek information?

29 responses

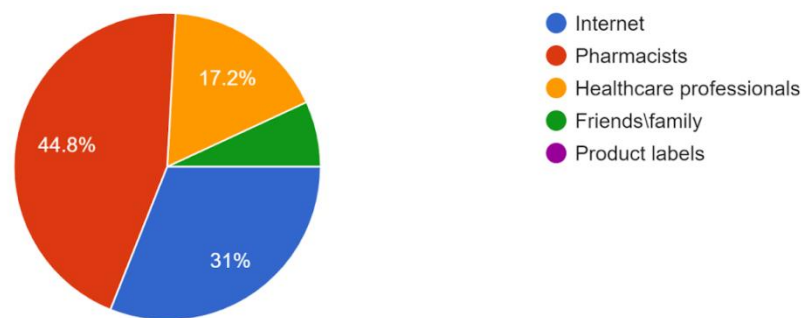


Figure 13: Where do people seek information about OTC drugs.

14. Do you think there is a need for more public awareness and education about the proper use of OTC drugs?

29 responses

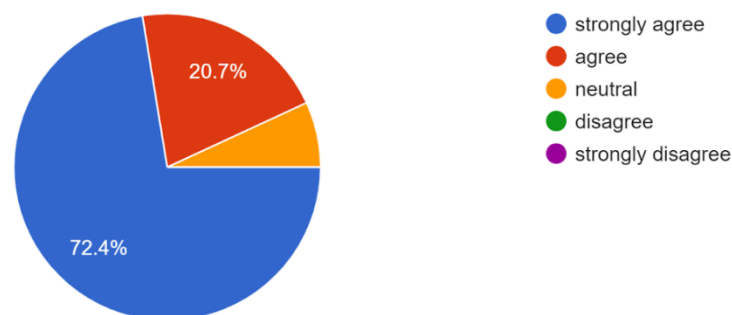


Figure 14: Need for public awareness about OTC drugs.

However it was analyzed from the collected information that use of OTC preparations resulted in either reduction or cure of symptoms, only a few of them suffered with any adverse events, 72.4% respondents also believed that seeking help from healthcare professionals is important in any case and there is a need for more public awareness and education about the proper use of OTC drugs.

OTC preparations are widely used in developing nations like ours for a variety of reasons, including the lack of laws governing the sale and purchase of pharmaceuticals, people's tendency to self-medicate due to past experiences, negligence, and some degree of poverty. Similar studies have, however, made it clear that factors such as gender, age, ethnicity, education level, and occupation have no bearing on the use of over-the-counter medications.

The most frequent ones that were identified were: emergency situations, in which case they believed the illness was not serious enough to see a doctor; prevention of the known illness based on past experiences with the medications; and avoidance of consultation fees.

Discussion:

OTC preparations are widely used in developing nations like ours for a variety of reasons, including the lack of laws governing the sale and purchase of pharmaceuticals, people's tendency to self-medicate due to past experiences, negligence, and some degree of poverty. Similar studies have, however, made it clear that factors such as gender, age, ethnicity, education level, and occupation have no bearing on the use of over-the-counter medications.

By teaching patients, physicians and pharmacists have a significant impact on raising public awareness of self-medication. Pharmacists should carefully evaluate the type and severity of the patient's condition before recommending any over-the-counter medications. When necessary, they should advise the patient to seek professional care. Self-medication may be encouraged by the ease with which prescription drugs can be purchased over-the-counter without a valid prescription, the lax regulation of medical advertising, the low level of medical literacy in the general public, and the need to cut healthcare expenses.

Therefore, it is recommended that strict guidelines and regulations regarding their use be implemented, along with mandatory public education regarding the kinds of illnesses that can be self-diagnosed and the medications associated with them. It is also critical to draw attention to the risks associated with OTC drug misuse.

As it stands, consumer behavior as reported in the survey study is representative of public behavior. To gather useful information, a prospective direct interview would be preferable. It is possible to conduct future research in both urban and rural areas of India. Some of the respondents find it difficult to remember when they last used an NPM or the brand name of the medication they took. As a result, the information was erroneous or lacking. Because participants were afraid to admit they had used over-the-counter medicine without first consulting a specialist, we may have overlooked a lot of information.

Conclusion:

The practice of self-care and self-medication is essential to any healthcare system. The self-medication procedure involves using over-the-counter (OTC) drugs to treat common ailments and symptoms such as pain, cough and cold, diarrhea, constipation, and acne. Some OTC drugs contain active ingredients that could be abused if used in higher-than-recommended doses. The five main classes of self-medication are codeine-based (primarily compound analgesic) drugs, cough products (especially dextromethorphan), sedatives, decongestants, and laxatives. The popularity of OTC drugs among patients may raise their potential for abuse. Patient counseling and pharmacist vigilance can help lower the abuse of over-the-counter medications. While linked studies are insufficient, strategies and actions such as limiting supplies, raising public and professional awareness, and making use of already-existing support and services are employed. Further research is needed to assess management practices, document individual experiences, and quantify the extent of abuse in order to inform policy, legislation, and interventions.

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