



## **Survey Based on Usage of OTC Drugs in The Community**

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### **ABSTRACT**

*This article looks at a survey about how people in the community use over-the-counter (OTC) medicines. OTC drugs are the ones you can buy without a prescription, like pain relievers and cough medicine. The survey focuses on what people think when they buy these medicines, how their decisions are influenced, and how factors like money and education play a role. The survey also explores how much people know about OTC medicines, like when to use them, possible side effects, and what they should not be mixed with. It checks if people are aware of the right information when they choose these medicines. The findings show that factors like brand loyalty, how the medicine is packed, and suggestions from doctors affect people's choices. The survey also reveals that people with different incomes and education levels use OTC medicines in different ways. The article suggests that community education is important to make sure people know the right information about OTC medicines. This helps them make better choices and use these medicines safely. The hope is that this information will be useful for making health policies, planning public health campaigns, and guiding future research to improve how people use OTC medicines in the community.*

**Keywords:** Over the counter drugs, OTC drugs, OTC products, purchase, use, self-medication

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### **INTRODUCTION**

Over-the-counter (OTC) medicine, as defined by Pranita P. Gayakar in 2016, can be purchased without a prescription. The classification as OTC or prescription is determined by the US Food and Drug Administration. Prescription medicines are those specifically ordered by a doctor and administered by a pharmacist, while OTC drugs are deemed safe and effective for use without a doctor's prescription. [11] OTC drugs encompass a wide range of treatments, addressing various conditions such as illnesses, deficiencies, aches, pains, allergies, colds, migraines, body pain, and itches. Beyond symptom relief, OTCs can also play a preventative role, combating tooth decay, treating athlete's foot, and managing recurring conditions like vaginal yeast infections, stomach pain, and migraines. These medications, including vitamins, minerals, and supplements, are considered safe and effective when used according to the directions on the label or as advised by healthcare professionals [1-10].

### **OBJECTIVES**

This review article delves into the patterns, awareness, and perceptions surrounding over-the-counter (OTC) drug usage in our community.

#### **Survey Purpose: Understanding OTC Drug Use**

- Identifying popular OTC drugs and exploring motivations for self-medication.

#### **Demographic Analysis**

- Examining variations in OTC drug usage across age, occupation, and socio-economic backgrounds.

#### **Awareness and Perception**

- Assessing community awareness and perceived risks associated with self-medication.

#### **Effectiveness and Practices**

- Investigating how community members view the effectiveness of OTC drugs and evaluating prevalent self-medication practices.

#### **Common Illnesses and Awareness**

- Identifying prevalent illnesses for OTC drug use and promoting awareness for appropriate usage. This concise review aims to provide valuable insights into community behaviors, beliefs, and practices related to OTC drug usage, with a focus on enhancing safe and effective self-medication practices.

[12]

## **Rationale**

This review article aims to explore how people in our community use over-the-counter (OTC) drugs. The reasons behind their choices, the impact on different groups, and community awareness are crucial aspects we want to understand. By looking into common illnesses, assessing risks, and gauging the effectiveness of OTC drugs, we aim to provide insights for better community health. The goal is to contribute useful information for shaping public health policies and promoting safe OTC drug use. [13]

## **MATERIAL AND METHODS**

### **Literature Review:**

Conducted an extensive literature review to identify relevant studies, articles, and publications related to over-the-counter (OTC) drug usage, consumer behavior, and community health impact.

### **Inclusion and Exclusion Criteria:**

Established clear inclusion and exclusion criteria to ensure the selection of studies aligning with the review's focus. Included studies with a primary emphasis on OTC drug patterns, consumer perspectives, and community-level impact.

[23]

### **Questionnaire Development:**

Prepared a structured questionnaire based on insights gathered from the literature review. The questionnaire included sections on OTC drug preferences, reasons for self-medication, demographic information, and awareness of proper usage.

### **Circulation of Questionnaire:**

Distributed the finalized questionnaire to a representative sample within the community. Employed diverse channels such as community centers, online platforms, and healthcare facilities to ensure a broad response.

### **Data Collection:**

Gathered responses systematically, ensuring data integrity and reliability. Encouraged open and honest responses by maintaining respondent anonymity and emphasizing the importance of their insights.

### **Creating Statistics:**

Generated descriptive statistics, including frequencies, percentages, and averages, to quantify and summarize the survey findings. Employed inferential statistics where applicable to draw meaningful conclusions from the data.

Synthesized the analyzed data to draw meaningful conclusions regarding OTC drug patterns, consumer behaviors, and community awareness. Emphasized key findings, trends, and areas requiring attention or further investigation.

[14]

### **Study period:**

A study was conducted for 1 month

### **Study design:**

This study is a prospective study which focuses on the socio-economic aspect of the community that uses Over the Counter Drugs.

### **Site of Study:**

Tier 1 and Tier 2 cities of India.

### **Questionnaire:**

1. Do you discuss your symptoms with the pharmacist before buying OTC medication?
2. Why do you use OTC products?
3. How often do you rely on OTC medications for minor health issues instead of consulting a healthcare professional?
4. Are you aware of the potential risks and side effects associated with OTC medications?
5. Do you read and follow the recommended dosage and usage instructions on OTC drug labels?
6. Are there any OTC medications you use regularly as part of your self-care routine?
7. How do you decide when it's appropriate to consult a healthcare professional for an issue rather than relying on OTC medications?
8. Which sources of information do you trust when it comes to making decisions about OTC medications?
9. Have you ever experienced adverse reactions or side effects from OTC drugs?
10. Are you aware of the USFDA banned drugs that are still being marketed in India?
11. Are you aware of the Ayurvedic OTC drugs marketed in India?
12. Do you check the label for expiry/manufacture date on OTC medication?

13. Do you check the label for the content and its power (mg) on the OTC medication?
14. Do you think you take any OTC medicine in excess?
15. Have you developed a resistance against any OTC medicine?
16. Do you use OTC drug because they are more convenient, easy to use and save time?
17. How often have you visited a community pharmacy to purchase OTC drugs in the last 1 month?
18. How do you decide which OTC drugs to purchase?
19. What influences your decision to try a new OTC drug product?
20. What factors influence your choice of where to purchase OTC drugs?
21. Do you believe that OTC drugs obtained from hospital pharmacies are safer or more reliable than those from other sources?
22. Do you believe that prescribed drugs are reliable and more efficient as compared to the OTC drugs?
23. Do you think OTC products are safe for Geriatrics?
24. Do you combine Ayurvedic or Homeopathic medicines with allopathic medication?
25. What measures do you take when you face a health condition?
26. Are you aware of the food and drug interactions of the OTC drugs on the body?
27. How do you decide the discontinuation of OTC drugs?

## RESULTS

### Usage of OTC drugs:

The survey found that about 15.7% of people use pain relief or fever-reducing medicines. Only 5.5% of participants used antibiotics, and just antipyretic (fever-reducing) medicines were used by 2.1% of people. Another 3.4% of participants used different drugs mentioned in the figure. About 1.3% of participants used both pain relief or fever-reducing medicines and other over-the-counter drugs. The majority, which is 61.2% of participants, used a combination of any drugs mentioned in the figure.

### Motive and Reasons behind purchase of the OTC drugs:

The figure shows that 89 people are used because they are aware of the treatment required. The 52 number of people used because of lack of time, 73 individuals used because the cost of a physician is high, moreover 170 peoples used because they are easily accessible.

234 people prefer using over-the-counter (OTC) drugs for their convenience, ease of use, and time-saving benefits. These drugs are readily available in pharmacies, making them a time-efficient choice. On the other hand, 150 individuals avoid OTC drugs due to health concerns or a preference for prescription medications.

### Reliance on Medical health professionals (Physicians, Pharmacists, etc.) while purchasing OTC products:

Out of a total of 383 individuals, 64.75% (248 individuals) prefer discussing their symptoms with pharmacists for advice on over-the-counter medications and guidance on managing common health issues. Conversely, 19.05% (73 individuals) opt not to discuss their symptoms, as they feel confident in their knowledge of treatment. Additionally, 16.20% (62 individuals) occasionally seek advice from pharmacists, being partially aware of treatment options. The survey indicates that 7.7% of individuals refrain from using over-the-counter (OTC) drugs due to various reasons such as personal preferences, alternative health practices, or concerns about potential side effects linked to OTC medications. Meanwhile, 27.1% of people abstain from using OTC drugs because of time constraints, struggling to manage their health amidst busy schedules. On the other hand, 40.6% of participants turn to OTC medicine when a physician is unavailable, appreciating the easy availability of these drugs at pharmacies without requiring a prescription. Additionally, 24.7% of individuals choose OTC medications whenever they experience a health condition, valuing their convenience, accessibility, and cost-effectiveness. According to the survey results, 39.16% (150 out of 383) of participants prefer consulting healthcare professionals over relying on over-the-counter (OTC) medications, especially when dealing with severe diseases for effective treatment and recovery. Another 16.97% (65 out of 383) of participants seek physician consultation based on availability, aiming for better and more effective treatment. In emergency situations, 38.85% (149 out of 383) of participants consult healthcare professionals, seeking prompt medical assistance and advice during critical health conditions rather than relying on OTC medications. Meanwhile, 5.23% (20 out of 383) of participants choose not to use OTC drugs, and this decision may be influenced by personal preferences, a perceived lack of necessity, engagement in alternative health practices, or past experiences shaping their perception of OTC medications.

### Awareness Among Customers

Out of a total of 383 people surveyed, 30.6% (117 people) are knowledgeable about the potential risks and side effects associated with over-the-counter (OTC) drugs. Meanwhile, 30.3% (116 people) have awareness of these risks, and 26.4% (101 people) are not aware of the potential risks and side effects of OTC drugs.

The results indicate that 39.2% (150 people) of the surveyed individuals are cognizant of drugs banned by the USFDA but are still available in the Indian market. Conversely, 61% (234 people) of the respondents are unaware of this circumstance, considering 383 as 100%. The findings from the survey reveal that 62.7% of respondents have knowledge about Ayurvedic over-the-counter (OTC) drugs available in the Indian market, whereas 37.3% lack awareness of these products. According to the survey results, 49.3% (189 participants) of the surveyed individuals are knowledgeable about the interactions between over-the-counter (OTC) drugs and food, while 50.9% (195 participants) are not aware of these interactions.

#### **Customers' habits while taking OTC drugs**

Most folks, about 61.6%, don't regularly use medications as part of their self-care routine. On the other hand, 38.4% of people do include medications in their regular self-care habits. Most people, 86.2% to be exact, make it a habit to look at the expiration or manufacturing date on over-the-counter (OTC) medications. In contrast, 13.8% of individuals don't bother checking for these dates. According to the data, 21% of the participants use over-the-counter (OTC) medication excessively, while 50% don't exceed the recommended usage. For 27% of the participants, their behaviour regarding OTC medication usage falls into a varied range, showing both excess use and non-use tendencies. The survey findings indicate that 164 people do not build resistance to any over-the-counter (OTC) medication, while 75 individuals develop resistance, and 145 individuals may be encountering resistance to OTC medications. Approximately 25.3% of individual's mix Ayurvedic or Homeopathy medicines with allopathic medication, while 43.6% refrain from combining these alternative medicines with allopathic treatments. About 31.1% of people may be opting for a combination of different medications.

### **DISCUSSION**

The insights gleaned from the motivations and behaviour surrounding over-the-counter (OTC) drug usage have several significant implications for both healthcare professionals and the general public. Understanding these dynamics is crucial for fostering informed decision-making and promoting responsible self-care practices.

#### **1. Informed Consumer Choice:**

The awareness of treatment needs and accessibility as primary motivations for choosing OTC drugs underscores the importance of educating consumers. Healthcare providers can play a pivotal role in empowering individuals to make informed choices by providing guidance on suitable OTC options based on their understanding of health conditions.

#### **2. Time Constraints and Convenience:**

Recognizing that some individuals turn to OTC products due to time constraints suggests the need for healthcare solutions that are not only effective but also time-efficient. This finding may prompt the development of more user-friendly healthcare options, aligning with the preferences of those seeking quick and convenient remedies.

#### **3. Financial Considerations:**

The influence of the cost of physician services on OTC drug selection highlights economic factors affecting healthcare decisions. This emphasizes the importance of accessible and affordable healthcare, potentially prompting discussions on healthcare policy and affordability reforms.

#### **4. Awareness of Side Effects:**

The awareness of potential side effects, coupled with a significant percentage admitting to excessive OTC medicine intake, raises concerns about self-medication practices. Healthcare professionals should focus on enhancing patient education regarding the appropriate use of OTC medications to mitigate potential risks.

#### **5. Role of Healthcare Professionals:**

The reliance on healthcare professionals for recommendations, coupled with the prevalence of seeking professional advice when facing health issues, underscores the trust placed in medical expertise. Healthcare professionals should continue to serve as reliable sources of information and guidance, promoting safe and effective OTC drug use.

#### **6. Digital Influence on Consumer Choices:**

The increasing role of digital platforms, online reviews, and word of mouth in shaping consumer opinions about new OTC products highlights the evolving landscape of healthcare information dissemination. Stakeholders in the healthcare industry may consider leveraging these platforms to provide accurate and reliable information to the public. [15]

Respondents:

**Table 1: Distribution of study population by age and gender**

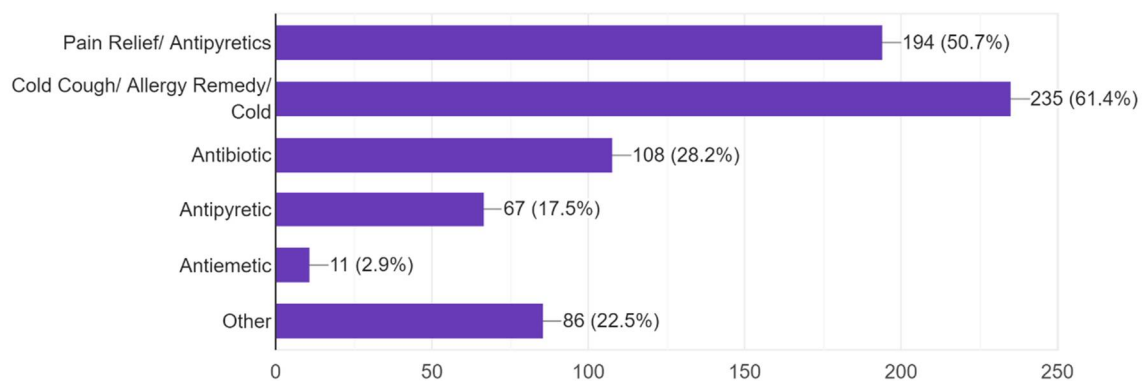
Age category	Male	Female	Percentage (%)
5- 14 Years	15	30	12.6%
15 -26 Years	52	90	36.9%
27-40 Years	60	55	30.6%
40-50 Years	50	30	19.5%
Above 50 Years	1	1	0.3%
Total	178	206	100

**Table 2: Distribution of study population by educational status and self-medication**

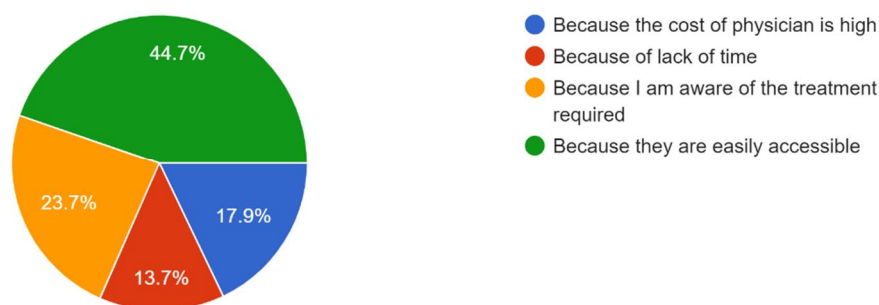
Occupation	Count (%)
Student (undergraduate)	144 (37.8%)
Health care	40 (7.9%)
Teacher	34 (11.3%)
Business	56 (14.7%)
Civil servant	25 (6.0%)
Others	85 (22.3%)



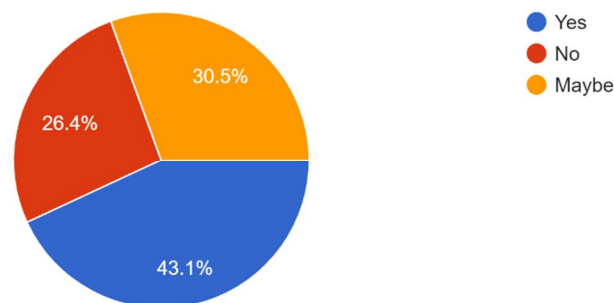
**Figure 1: Research Methodology**



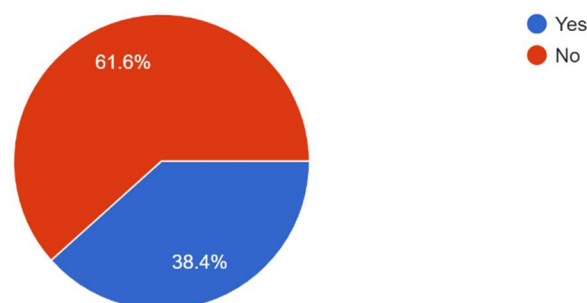
**Figure 2: Commonly Used OTC drugs**



**Figure 3: Reasons behind purchase of the OTC drugs**



**Figure 4: Awareness Among Customers**



**Figure 5: Consumption of OTC drugs as a part of self-care routine**

## CONCLUSION

Choosing over-the-counter (OTC) drugs is driven by various factors. Some individuals use OTC products because they understand the necessary treatment, emphasizing their awareness of health conditions. The

accessibility of OTC products without a prescription is a significant reason for usage, reflecting the importance of convenience. Time constraints also led some to opt for OTC solutions, seeking a quick and convenient remedy without a doctor's appointment. Financial considerations, particularly the high cost of physician services, influence others to self-treat with readily available OTC options. Awareness of potential side effects is present, with 43.1% knowledgeable about excessive OTC drug use consequences, and 26.9% having experienced adverse effects. Despite this awareness, 50% admit to excessive OTC medicine intake, indicating a concerning trend. In health-related situations, the majority generally turn to healthcare professionals, preferring their expert advice. However, some resort to self-medication, relying on OTC drugs or leftover medications. Further details on health conditions, frequency of measures, and reasons behind choices would enhance analysis, potentially revealing patterns based on demographics. In the decision to try a new OTC product, healthcare professional recommendations, advertising, online reviews, and word of mouth play crucial roles. Trust in healthcare professionals' advice is evident, attributing it to their perceived knowledge and expertise. Digital platforms and personal experiences increasingly shape opinions, with online reviews and word of mouth contributing to a collective knowledge base. Summarily, individuals navigate a complex decision-making process for trying new OTC products, balancing professional advice, personal experiences, and marketing influences. This holistic approach reflects a community-wide effort to strike a balance between expert guidance and shared insights.

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