



## **A STUDY ON CONSUMER'S BUYING BEHAVIOR TOWARDS OTC PRODUCTS OF THE PHARMACEUTICAL INDUSTRY**

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### **ABSTRACT**

*Understanding the reasons for studying a discipline enables one to better appreciate its contributions. Studying consumer behavior has a lot of benefits to marketers that enable them to create long lasting relationship with customers. In a general sense, the most important reason for studying consumer behavior is the significant role it plays in our lives. Much of our time is spent directly in the market place, shopping or engaging in other activities. A large amount of additional time is spent on thinking about products and services, talking to friends about them, and seeing or hearing advertisements about them. In addition, the goods we purchase and the manner in which we use them significantly influence how we live our daily lives. The present research study throws enough light on the customers' attitude, perception and satisfaction towards the theory of behavior planned to investigate the factors antecedent factors contributing to an individual brand choice within the over-the-counter pharmaceutical market. Furthermore the attitudes and subjective norms were examined to determine whether they affect the consumer's willingness to repurchase from the same brand. This is an empirical evidence suggest that the direct experience with the brand tolerance towards price and trust and subjective opinions for others are most vital to purchase the OTC pharmaceutical products.*

**Keywords:** Consumer behavior, advertisement, attitude, perception, Over-the-counter, Pharmaceuticals, consumer willingness.

## **Introduction**

In recent past the trend is increasing in self-medication without prescription drugs which is referred as the “over-the-counter” (OTC) drugs available in medical stores and in other retail outlets. Parallel to that, there are several products which have been deregulated for the purchase with non-prescription. The deregulation progression has supported by the pharmaceutical industry, the dispensary profession and administration health policy makers and is reinforced by the view that patients wish to have a superior role in their handling choices.

Self-medication also has recompenses for healthcare classifications as it simplifies better use of clinical skills of druggists, increases access to suppository and may subsidize to reducing prearranged drug costs accompanying with publicly sponsored health programmes. However, increased availability of non-prescription drugs may encourage consumers to believe that there is a drug treatment for all most all ailments. Furthermore, the use of such products may delay the diagnosis of serious illness, with increased risks of interactions and adverse reactions and of self-treatment existence undertaken when medical aid should have been required. There is also the probable for misuse and abuse of such products.

## **Statement of the problem**

The Indian Pharmaceutical Industry today is in the front rank of India’s science-based industries. People are aware of the OTC product .and they use this medicine for normal disease. In India, most residents are aware that OTC medicines could be purchased in convenience stores, although most still showed preference for making purchases in pharmacies. This may be due to different expectations for this outlet – the public may expect that pharmacies can provide professional help, as well as offer good quality, lower prices, and a greater variety of products. In India, most residents are aware that OTC medicines could be purchased in convenience stores, although most still showed preference for making purchases in pharmacies.

In the present era, every business organization’s marketing strategy involves a range of processes concerned with finding out what consumers want and need, and the resultant behaviour of the ultimate consumers. Nowadays, improper commitment in rendering due services to the customers is a common phenomenon.

## **Need for the study**

Marketing is heart of every business organization. It is an art of the creating genuine customer value. The market place continually throws out fresh challenges and companies must respond. The environment of OTC drugs is highly volatile making existing functional practices to fall out within a short period of time.

The position of the OTC drugs will be weakened in the market, unless the company rises to the occasion to be proactive, pragmatic and positive and update the data regarding the changing profiles of rural/urban customers. Among all problems confronting the players, the major problems such as investment of capital, customer churn, increasing customer base, devising strategic methodologies and practices for increasing the Average Revenue per User (ARPU), keeping in pace with technological advancement and meeting regulatory requirements are more important.

### **Significance of the study**

A study of this type would enable the OTC drugs to know the perception of their consumer behaviour so that necessary steps can be taken so as to focus on the shift in preferences in the wake of new features of service that are announced by the competitors in the market. The study helps in understanding the dynamics of market related to OTC drugs, more particularly at micro level. Thus, the present research study is an attempt to unearth the perception of consumers, their attitude and preferences, opportunities to be tapped and strategies to be framed by consumer behaviour on OTC drugs. Hence, the present study of consumer behaviour towards OTC drugs in a backward area like Kurnool district assumes significance.

The present study is empirical in character as it investigated how customers evaluate the OTC drugs by recalling the past six month's interaction in the process of consumer behaviour. The ultimate decision of whether or not to purchase the OTC drugs and from whom to buy has always been rested in the hands of the final consumers. Hence, the researcher considered the opinion of all categories of consumers – male, female, etc., in order to get information regarding their evaluation of OTC drugs.

### **Objectives of the study**

The main objective of the study is to make in depth analysis of consumers expectations from OTC products potency, safety and availability and the present marketing strategies of OTC

products. It would then attempt to identify various strategies that would fit-in pharmaceuticals to market their OTC product.

The objectives of the study broadly are as follows:

1. To study the various aspects of consumer behaviour.
2. To study the OTC market trends in India and in general.

### **Methodology of research**

The primary purpose of the present research work is to explore the consumer behaviour on OTC drugs in Kurnool district. The needed data for the study were collected from both the primary and secondary sources.

### **Field work and design of sample (primary data)**

The field work was conducted in random areas. Interviews were conducted for customers of OTC drugs in places like colleges, business establishments and other public places etc., through a questionnaire administered amongst them.

About 1000 questionnaires were administered on random sampling basis in urban and semi-urban areas to the targeted consumers, out of which, 400 respondents responded. The questionnaire method is chosen for its versatility, speed and cost benefit.

### **Secondary data**

The secondary data were collected from research journals, economic dailies and other published literature.

### **Tabulation and analysis of data**

The collected data were tabulated and presented through tables and graphs. In order to achieve the objectives of the study, the data were analyzed with the help of simple techniques of statistical analysis such as average, percentages, bar diagrams and in order to interpret data and draw conclusions.

### **Review of literature**

An attempt is made to review the literature that includes earlier studies on the subject for ascertaining the research gaps. Accordingly, a sincere attempt has been made to identify the

research gaps as compared to earlier studies. For this purpose, scholarly books, authoritative database, articles, reports, news bulletins, dissertations, theses, journals, and magazines, international institutional reports, CD ROMs, microfilms and the like have been thoroughly reviewed. The review covers the opinions, ideas and research findings of the luminaries in the OTC drugs filed. The various studies referred for the purpose of this study are as follows:

**Suvadip Biswas, Krishnendu Mondal and Supreeti Biswas<sup>3</sup>** in their cross-sectional study found that use of OTC drugs is very common among medical students, facilitated by the easy availability of drugs, and information from textbooks/seniors. **Lunde<sup>4</sup>** indicated that self-care includes four main aspects: health promotion, disease prevention, treatment of minor illnesses and injuries, and the management of chronic diseases and rehabilitation.

**Loh and Waruszynski<sup>5</sup>** concluded in their study that even though self-care/self-medication is as old as human history, governments and health insurers still encourage the public to do more of it. The main reason for promoting self-care is to reduce health care expenditures. **Temin P<sup>6</sup>** found in his study that colds are a very common type of minor illness in which most people can self-treat by using OTC medications.

**Clavijo<sup>7</sup>** revealed through his study teratogenic risks were identified in 6.1% of the pregnant women who took drugs not prescribed by a physician (mainly tetracycline and sex hormones with androgenic component, the latter being taken for attempted abortion).

**Shweta Vats<sup>8</sup>** analyzed the effect of social media promotion of prescription medicine on behavior of working youth. It also studied the adoption of social media by working youth for collecting information on prescription drugs. This study also aimed at getting an insight into correlation between demographic factors and attitude and perception for social media based prescription drug advertisement.

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<sup>3</sup> Suvadip Biswas, Krishnendu Mondal, Supreeti Biswas., A study on knowledge and practices of over the counter medications among 2<sup>nd</sup> year medical students, *World Journal of Pharmacy and Pharmaceutical Sciences volume 4, issue 07, 2015.*

<sup>4</sup> Lunde i. Self-care: what is it? *Jsoc admin pharm 1990.*

<sup>5</sup> Loh E, Waruszynski B cost saving associated with community pharmacist interventions in Canada: a preliminary economic evaluation of the cphis data. *can pharm j 1996.*

<sup>6</sup> Temin P. realized benefits from switching drugs. *J Law Econ 1982.*

<sup>7</sup> Clavijo, H.A, et al. self-medication during pregnancy. *World Health Forum 1995.*

<sup>8</sup> Vats, S. (2014), "impact of direct to consumer advertising through interactive internet media on working youth", *International Journal of Business and Administration Research Review, vol.1.*

## **An Overview of OTC Market**

Healthcare is a highly important aspect for any nation. Countries spend huge amount of funds on developing and maintaining healthcare facilities. While talking about healthcare, one important aspect to be noted is that pharmaceuticals play a major role here. Medicines are the products sold to patients for treating their ailments, reducing the symptoms, fighting infections and controlling health issues. While medicines play a very important role in the treatment, they also pose certain harmful problems. All medicines have side effects, despite what is marketed by their makers. Many medicines need to be given to patients only after considering their history, vulnerability, and many other factors like lifestyle, habits, etc.

OTC drugs mean legally allowed selling “Over the Counter” i.e. without a prescription of a registered medical practitioner or healthcare professional. Over the counter (OTC) drugs also called self-medication drugs. These can be purchased without a prescription. In many countries, OTC or non-prescription drugs are selected by a regulatory agency in order to check whether the ingredients which are used in the manufacturing of drugs are safe and effective when used without a doctor’s advice. Currently, non drug-licensed stores (e.g. non-pharmacists) can sell a few medicines classified as ‘Household Remedies’ listed in Schedule K of the D&C Rules in villages whose population is below 1000 subject to certain other conditions. These non-prescription drugs are usually regulated by active pharmaceutical ingredients (APIs), not final products. This implies that the governments allow drugs manufacturers the right to formulate ingredients, or combinations of ingredients, to make proper medicinal mixtures.

Regulations related to who is authorized to dispense these drugs, to where they are to be sold, and whether a prescription is required vary considerably from country to country. In India, all the drugs that are not included in the list of prescription drugs are considered as non-prescription drugs or OTC drugs. It should be noted that both OTCs and prescription drugs have side effects, especially if taken without medical advice.

A large number of potent drugs such as pain relievers, cough remedies, anti-allergies, laxatives, antibiotics, antacids and vitamins are sold over-the- counter (OTC). Self medication with OTC medicines could cause allergy, habituation, and addiction. For example, excessive use of vitamins can cause hyper vitamins is, or vitamin poisoning. Antimicrobial resistance is a worldwide problem, particularly in India where antibiotics are often available without a prescription.

The major reason of buying medicines without prescription is self medication either on the basis of earlier experience due to the usage of the same drug or similar drugs. An attempt is made to study the various reasons of self medication or buying drugs without prescription as well as the hazards of the same. In India, though the phrase has no legal recognition, all the drugs that are not included in the list of ‘prescription only drugs’ are considered as non-prescription drugs or OTC drugs.

Prescription-only drugs are those medicines that are listed in Schedules H and X appended to the Drug and Cosmetics Act (DCA) and its Rules. Drugs listed in Schedule G (mostly antihistamines) do not need prescription to purchase but require the following mandatory text on the label: “Caution: It is dangerous to take this preparation except under medical supervision”. Drugs falling in these 3 schedules are currently not advertised to the public under a voluntary commitment by the pharmaceutical industry. Currently, non drug-licensed stores (e.g. non-chemists) can sell a few medicines classified as ‘Household Remedies’ listed in Schedule K of the DCA(Drug and Cosmetics Act) and Rules in villages whose population is below 1000.

OTC proprietary drugs registered as ‘Ayurvedic Medicines (traditional Indian medicines containing natural / herbal ingredients) are also regulated by the DCA (Drug and Cosmetics Act) and DCR (Drug and Cosmetics Rules). However, as they do not require a drug licence they can be sold by non-chemists. Some of the top OTC brands in India (e.g. Vicks Vapo Rub, Amrutanjan Balm, Zandu Balm, Iodex , Moov Pain Cream, Itch Guard Cream, Eno Fruit Salt, Vicks Cough Drops, Halls Lozenges, etc.), are registered as ‘Ayurvedic Medicines’ because of their plant-based natural active ingredients. There are no price controls on ‘Ayurvedic Medicines’.

OTC drugs along with their opportunities are also coming with challenges. Due to non-prescription in nature, the future of OTC brands is unknown and uncertain. On the other hand, the perception is always there in people mind that is whatever the doctor prescribes that is good, otherwise not. Due to this phenomenon home-made medicines are posing challenges for OTC drugs. Meanwhile the growth of OTC drugs has also created an inherent challenge and that is competition among known brands. In India most maximum population are living in rural areas where the literacy rate is very low which creates a tough challenge for pharmaceuticals companies to establish awareness for their brands. That’s why multi-dollar companies are spending huge amounts for promotion. That means to the extent promotion drive would be enhanced, that will create more and more challenges.

## An analysis of Consumer Responses on consumption of OTC drugs

**Table 1.1: Age group of Respondents**

Age	No. of Respondents	% to total
20-30	85	21.25
30-40	146	36.50
40-50	134	33.50
50 and above	35	8.75
Total	400	100

Source: Field Survey.

Different ages, gender, origin and education provide significant guide points to a wide range of consumers in their navigation and selections and decisions for OTC products. Hence this study made an attempt on such aspects. About 58 per cent of the OTC consumer respondents belonged to the age group of 20 to 40 years, followed by 33.5 per cent of the respondents in the age group of 40-50 years. Less than 10 per cent of them belonged to the age group of above 50. Thus it is clear the majority of younger groups were found to be very much in the practice of relying on OTC drugs. It is found that the older age group mainly relied upon self-medication in case of chronic ailments as revealed during personal interactions with the researcher.

**Table 1.2: Sex Ratio of Respondents.**

Sex	No. of Respondents	% to total
Male	274	68.50
Female	126	31.50
Total	400	100

Source: Field Survey.

Among the respondents, majority of the OTC drug consumers belonged to 'male' category and the rest of them were of 'female' consumers (See table 1.2).

The incidence of purchase of OTC drugs or self-medication is also found considerably among women respondents. Women with high literacy expressed confidence in their practice of self-medication as revealed in the study during the interactions with female respondents.



**Table 1.3: Location of the Respondents.**

<b>Sex</b>	<b>No. of Respondents</b>	<b>% to total</b>
Urban	160	40.00
Rural	240	60.00
Total	400	100

Source: Field Survey.

It can be seen from the above table that 60 per cent of the consumer-respondents of OTC drugs belonged to rural background and the rest of them belonged to urban areas. OTC drug consumption is found more among the rural people when compared to urbanites as it is evident from the opinions of majority of rural consumers in the study.

**Table 1.4: Educational levels of the Respondents**

<b>Marital Status</b>	<b>No. of Respondents</b>	<b>% to total</b>
Illiterate	103	25.75
College and Above	127	31.75
Primary School	70	17.50
Secondary School	40	10.00
Read and write Only	60	15.00
Total	400	100

Source: Field Survey.

More than 25 per cent of the consumer respondents were illiterates. 31 per cent of them studied college plus levels. Among the remaining 17.5 per cent belonged to primary and 10 per cent belonged to secondary school levels. It would be safe, if the people who are using it, have sufficient knowledge about its dose, time of intake, side effects due to over dose; but due to lack of information it can cause serious effects like skin problem, hypersensitivity and allergy. However, with increasing literacy, the self medication practice which is also increasing day by day. Table 1.4 shows percentage of literate people who are using the self medication which is high as compared to that of illiterate people.

**Table 1.5: Occupations of Respondents.**

Category	No. of Respondents	% to total
Agriculture	234	58.50
Business	79	19.75
Profession	17	4.25
Students	60	15.00
Other	10	2.50
Total	400	100

Source: Field Survey.

Table 1.5 shows 58.50 per cent of the consumer – respondents belonged to agriculturist category. Most of these agriculturists again are illiterates as seen from the survey details, followed by business category. 19.75 per cent of them belonged to business category and 4.25 per cent of them belonged to professional category like lawyers, teachers, etc. In the present study, student - consumers were found to be around 15 per cent. Several earlier studies also proved that students were using OTC medicines frequently. Keeping in view the findings of this study, institution should educate the students about the safe use of OTC medications. Moreover, availability of round the clock health center on campus can be another way that may influence the students' perception to take medication based on appropriate assessment.

### **Findings of the Study**

**Consumer behaviour has been always of great interest to marketers:** The knowledge of consumer behavior helps the marketer to understand how consumers think, feel and select from alternatives like products, brands and the like and how the consumers are influenced by their environment, the reference groups, family, and salespersons and so on. A consumers' buying behavior is influenced by cultural, social, personal and psychological factors. Most of these factors are uncontrollable and beyond the hands of marketers but they have to be considered while trying to understand the complex behavior of the consumers. Consumer is the study "of the processes involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs an

**Many drugs are bought without prescription:** The study reveals that many prescriptions medicines are not legally allowed to be sold over the counter. These include painkillers like Crocin, Maftalspas, etc. containing Paracetamol, Mefenemic acid, Diclofenac, Aceclofenac, etc,

followed by topical applications like Vicks vaporub, Volini gel, Iodex, Moov gel etc. Consumers also purchased cold, flu & fever medications like Cetrizine, Crocin, Disprin etc. without prescription. Many consumers purchased cough syrups, acidity or gastro-intestinal medicines etc, too without prescriptions. Also, consumers purchased pimple creams like clindamycin, benzoyl peroxide, etc. without prescriptions. Among the medicines some are OTCs which are allowed by law to be purchased without prescription.

**Side effects are evident:** The study reveals that as most of the OTC drug consumers rely on self medication, previous prescriptions or chemists' advice without visiting the doctor when they are ill caused them become susceptible to side-effects.

**Long term consumption or incorrect diagnosis may lead to adverse effects:** The study reveals, despite the known side-effects of such OTC medicines, consumers are still buying and chemists are selling such drugs without checking for valid prescriptions. Both OTC and prescription medicines can be harmful if dosage is not correct, or if taken for longer than required, Continuous use, consumption during pregnancy and breastfeeding through incorrect self diagnosis need to be avoided.

**Faith in pharmacies and purchase convenience encourage OTC market:** Self-care includes four main aspects: health promotion, disease prevention, treatment of minor illnesses and injuries, and the management of chronic diseases and rehabilitation.

People aware of the OTC product .and they use this medicine for normal illness. In India, most residents are aware that OTC medicines could be purchased in convenience stores, although most of them still showed preference for making purchases in pharmacies. This may be due to different expectations for this outlet – the public may expect that pharmacies can provide professional help, as well as offer good quality, lower prices, and a greater variety of products.

**OTC products have a wide range:** Pain killers, cough remedies and fever products were the majority of OTC medications commonly stocked at home and always following the directions on the labels. Different ages, gender, and education provide significant guide points to a wide range of consumers, in their navigation and selections and decisions for OTC products.

**Extent of consumer preference to self-medication:** The study reveals that consumer's first preference is self-medication instead of going to the doctor for common health problems. Majority of the participants stop the drug and consult their physician when the OTC medicine did not work within the expected period of recovery and this will reduce further complications.

**Emerged as an alternative to Primary Health Care:** Educated consumers treat themselves minor ailments using OTC products as a first line of defense. One positive factor is OTC products will reach the areas where primary health care is in question. Private healthcare cost more even in minor ailment also so the companies should bring down the cost of OTC products to reach the needy. Thus by educating public (consumer) on how to manage common ailments and finally how to prevent them, the pharma companies can achieve its real goal of health for all and improve the quality of people's life.

The social benefit, at a national level, will be lesser work load on general practitioners, lesser crowding in primary health centers (PHCs), pharmacists who are more empowered to guide and counsel patients and more confident public who are in a better position to take more informed choice of the best available solution to treat their common ailments and prevent the frequent occurrence of the same. This will increase productivity at work and every one in society can make superior contribution towards nation building as it strives to be a developed one.

**Doctors warn against self-medication:** Doctor's response was highly negative towards self medication through OTC drugs. They felt that self medication can lead to complications and can have detrimental effects. Doctors were of the opinion that consumers will get more involved in health management if more OTC drugs are available in open market without prescription and this will decrease the foot falls at their clinic. Hence they are against OTC promotions.

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