

**MARKET ASSESSMENT ON PRACTICES AMONG PHARMACIST REGARDING
OVER-THE-COUNTER MEDICATION IN CHENNAI CITY**

Dissertation submitted to



The IIHMR University, Jaipur

For the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Pharmaceutical Management

by

Suraj Sanjay

Under the Supervision and Guidance of

Dr. Ashok Peepliwal

Associate Professor

School of Pharmaceutical Management

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled **MARKET ASSESSMENT ON PRACTICES AMONG PHARMACIST REGARDING OVER-THE-COUNTER MEDICATION IN CHENNAI CITY** is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Suraj Sanjay

Date: 27/05/2021

CERTIFICATE

This is to certify that **SURAJ SANJAY** in partial fulfillment of the requirements for the award of the degree of MBA (Pharmaceutical Management) from the IIHMR University, Jaipur has successfully completed her/his internship at IIHMR during March 27, 2021, to June 19, 2021.

Place:

Date:

Dr. Ashok Peepliwal

Associate Professor

CERTIFICATE

This is to certify that dissertation titled **MARKET ASSESSMENT ON PRACTICES AMONG PHARMACIST REGARDING OVER-THE-COUNTER MEDICATION IN CHENNAI CITY** is a record of the research work undertaken by SURAJ SANJAY in partial fulfillment of the requirements for the award of the degree of MBA Pharmaceutical Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

Dr. Ashok Peepliwal

IIHMR University, Jaipur

Date:

Dr. Saurabh Kumar

IIHMR University, Jaipur

Date:

ABSTRACT

The over-the-counter drugs are the drugs which can be purchased without prescription and can be bought from the registered pharmacist in the pharmacy store and that must be proven to be clinically safe and effective. So, the purpose of the research was to assess the practices of pharmacist regarding OTC and to analyze the various influencing factors and pattern of over-the-counter drugs in Chennai city, the research methodology was both Primary and secondary research in Chennai city and the sample size was 60 pharmacists. The data analysis in the current study will be done by using simple statistical tools like Excel and survey will be collected by google form. The study found of that, Analgesic/antipyretics were the most commonly dispensed OTC drug with around 71.7% followed by gastritis/antacid which accounts around 45% and multivitamins which results around 40%. And considering the factors which are influencing the pharmacist to dispense OTC it was shown that from patient feedback (63.30%) is considered as the major factor among them and followed by formulations/API which accounts 35% and by doctor's recommendation by 38.3%. It was also showed the type of medical counselling given while dispensing the OTC, it resulted that 83.3% counsel about the dose and frequency. According to study, the most common cause for inappropriate use of OTC was long-term usage or chronic use (51.7%), taking doses of OTC medication too often in a day (45%)

Keywords: OTC medications, Practices, pharmaceutical industry

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INTRODUCTION

The over-the-counter drugs are the drugs which can be purchased without prescription and can be bought from the registered pharmacist in the pharmacy store and that must be proven to be clinically safe and effective.

According to the WHO, India accounts for 21% of the global burden of illness, and millions of people die each year as a result of these health concerns, India loses more than 7% of its GDP. These healthcare issues include lack of medical facility, counterfeit and spurious drugs in market and unqualified medical practitioners in rural areas. Physical consultancy and transportation are also few problems. To come out from above these problems' majority of the population now a day's practices self-medication with OTC medicines for treating minor ailments.

To compete in this turbulent, uncertain, complicated, and ambiguous world, India's pharmaceutical sector must recreate its conventional growth methods, with a focus on marketing. As a result, while advertising OTC medications to consumers, the pharmaceutical sector also considers safety and efficacy. Greater health awareness among developed and developing countries, as well as the simplicity with which OTC goods may be assessed, results in increased demand and considerable growth in the OTC market sector. For maintaining the appropriate use of rational drugs, the whole healthcare fraternity should regulate newer approach and policy for better safety and patient autonomy.

Providing all necessary healthcare support in country like India is tedious task. Also, in the meanwhile many pharma drugs have been approved to use as OTC medicine, Self-medication is undoubtedly both useful and harmful, in one side it helps the patients by providing medicines at their ease, helps to reduce hospital bills, and on other side it can cause adverse effects and there are no proper guidance and awareness among the community.

In present tech environment anyone can get unverified data and information of health but they don't see the after picture of self-treatment , so a trusted source is required and pharmacist fits more than better in this role , because pharmacist acts as base to deliver the information and people believes them and also patient doesn't hesitate to go pharmacy and ask his queries as it doesn't

require any prior appointment and also by pharmacist advice patient also could for treatment if the symptoms are severe that means pharmacist can help in changing the behavior of the patient . Considering the OTC, pharmacist provides most reliable, effective, relevant information to the patient about their medications.

There were facts that many adverse effects were noted which were approximately 200000 cases per year which includes increased rates of gastric issues, insomnia, eye issues, and various other problems, however there were also benefits of opting OTC drugs as it reduces the other health and hospital expenditure. Currently in India there are no proper set of guidelines in OTC and here the unscheduled drugs are sometimes considered as OTC. Recently FDA and other regulatory bodies have decided that OTC are safe to use and make it possible that it is available to all and there have certain regulatory norms of these OTC medications. It also states that the packaging material of the OTC should be good and there should be particular set of instruction to follow while packing of OTC drugs. Pharmacist is the most suitable person to recommend the proper usage of OTC knowing all the safety protocols and understanding the patient behavior and symptoms, they are also the pharmacological actions, adverse effects, dose and frequency, contraindication of the OTC medications and would also counsel the patient while dispensing.

There are also many advantages of OTC medications which includes less visit to hospitals, decreased other health expenditure, but as mentioned earlier that without the proper counselling from the pharmacist or without having the awareness of the medication, it should not be consumed because it may lead to certain medical complications such as drug therapy failure.

So why the people take these risks with uncertainty, the main growth factors which is responsible for consuming OTC are patient convenience, time and cost efficient and avoiding of hospitals. But also comparing with the fast-paced world everyone's life is so rigid and stressful with bad lifestyle and food which further invites many physical as well as mental disorders. In the shorter zone many small symptoms like headache, diarrhoea, cold gastric issues which are managed by OTC medications that indicated the growth of OTC market. Also, in consideration to this it is the duty of pharmaceutical companies to design the marketing strategies and tactics according to that. Considering the pharmaceutical marketing the direct customer are the doctors, but the indirect customers are patients.

However, with OTC marketing and drug promotion tactics, the pharmaceutical sector directly advertises to patients, by demonstrating the benefits and uses of the OTC medicine. Pharmaceutical businesses use marketing techniques to communicate their unique selling proposition to customers. Pharmaceutical business units can achieve their marketing goals with the help of the marketing strategy. The pharmaceutical business must examine a variety of guidelines for OTC medicine marketing tactics, such as advertising that is truthful and non-deceptive, and that does not mislead buyers. Advertisers in the over-the-counter market should be able to back up their promises with evidence. Their marketing should not be deceptive.

Because of the rising need for healthcare awareness among the general public, the pharmaceutical sector is currently considered a pull market. In a pull approach, the manufacturer advertises their goods to the market to generate demand. Pull strategy refers to when customers pull a product through the distribution system, compelling wholesalers, and retailers to stock it. The pharmaceutical industry has viewed the OTC market as a significant growth driver.

OTC and Pharmacist

The pharma companies take advice and surveys from each targeted pharmacist because the pharmacist are the one who actually knows the market reality that is which drug has higher sales and which one has the lower sales , they also the competitor market their promotional strategies and also they have the idea of patient perception towards each brand of the drugs, it was also found that patient do believe in pharmacist so if any chemist recommend any OTC product people will believe them so, they play a vital role in deciding the marketing strategies while launching the product

A well-trained pharmacist should have adequate knowledge about diagnosing and to see if they are required for OTC or not, if the patient symptoms are severe or diplomatic, they should not dispense OTC to them rather they should advise them to check doctor once, secondly it is the duty of the pharmacist to dispense the effective dose and frequency depending on the symptoms.

OTC market in India and International

Due to easy availability, especially in the covid time patients used to visit pharmacy frequently than precovid time so the market share of OTC in pharmaceutical industry is rising to a greater extent especially in India where the OTC consumer division is worth of USD 4.5 billion, it is said that it is expected to grow at the rate of 15% making a worth of USD 16 to 19 billion. Pharmacists are the fameless warriors who dispensed medications even during the covid time, so pharmacist play a vital role in healthcare as well as in pharmaceutical industries.

Taking all this in to consider and potential use of OTC and practice of pharmacist we made this study the practice of OTC medications among pharmacist in Chennai city.

LITERATURE REVIEW

1. **Abinaya Ravichandran and Asha Basavareddy ,2016** in their research paper, Perception of pharmacist regarding OTC , so it showed more than 84 percent of the respondents took over-the-counter medications, and 87 percent of those surveyed shared OTC meds with friends and family. As a result, both prescribed and non-prescribed drugs are easily accessible to the general population. Pharmacists play a critical role in regulating the quantity of over-the-counter pharmaceuticals dispensed. They can also consult and advise customers on over-the-counter drugs. This survey was prepared to analyze pharmacists' knowledge, attitude, and practice about dispensing OTC pharmaceuticals to get a better frame of the pattern of sales and dispensing of OTC drugs by pharmacists. According to studies conducted in pharmacies in Bengaluru, Karnataka, and Tamil Nadu, a substantial proportion of dispensing counters do not require a prescription, which is concerning. The most regularly given OTC pharmaceuticals were analgesics and antipyretics, drugs for gastritis, and antidiarrheal agents, which is consistent with the findings of previous surveys conducted across the country. The majority of pharmacists (50 percent) believe that administering OTC drugs is safe, but that it is best to see a doctor first. OTC medications are safe to dispense, according to 43.75 percent of pharmacists, while 6.25 percent believe they are dangerous. Many pharmacists continue to believe that administering OTC medications without consulting a doctor is perfectly safe. Pharmacists need to be informed on the differences between OTC and non-OTC drug distribution.
2. **Manjushree Nagaraj, B. N Srinivas, Ananya Chakraborty, 2017** in their research paper A Study on the Dispensing Pattern of Over-the-Counter Drugs in Retail Pharmacies, the study investigated Patients using a structured questionnaire in the respective pharmacies. Analgesics were the most regularly given OTC medications in this survey as well, with NSAIDS being the most common. Pain, which includes tooth pain, mayalgia, and bodily pains, was the most common reason for OTC medicine purchases. Antibiotics were mostly prescribed in this study for fever, cough, and tooth infection. In earlier research, the most generally prescribed antibiotics were Ceftriaxone, Amoxicillin, and Co amoxiclav, with prescriptions lasting 3-7 days. The most usually prescribed antibiotic was levofloxacin,

which was only prescribed for 1-2 days in this study. The study was notable for the fact that 55.09 percent of the medications were in the Schedule H category, which meant they could not be sold over the counter. The most popular FDC were diclofenac and paracetamol, which accounted for 34% of all medicines prescribed. The concerning finding was that while administering OTC drugs, pharmacists did not inquire about drug allergies or existing co-morbid illnesses. All patients were not provided appropriate instructions, and the side effects of the medications were not explained. Drugs were not given out according to the correct dosing schedule.

3. **Mr. Abhishek Dadhich, 2017** in the research paper Pharmacist perception towards Over-The-Counter Brand Medicine Marketing with Special Reference to Rajasthan. The study intends to explore the chemist attitude and perception towards brand OTC medicine marketing strategies performed by the major pharmaceutical companies in Rajasthan. It also intends to investigate the impact of marketing mix aspects on chemists' perceptions and attitudes. The research study considers dependent variables such as chemist perception and attitude, as well as independent variables such as product, price, location, and promotion with product labelling. The study found that, when compared to other variables, OTC product labelling has a favorable impact on chemist attitude, whereas OTC marketing mix aspects such as location and promotion had a good impact on chemist perception. To build a successful brand in the OTC market, pharmaceutical businesses should include these marketing mix factors in their marketing plans. Though OTC medicine is sold by pharmaceutical firms, product labelling is an important factor to consider as a brand OTC medicine since product labelling assists chemists in providing proper consumer counselling regarding the safe and effective use of OTC medicine in common ailments. The study may draw attention to and be valuable to pharmaceutical companies in evaluating their OTC medicine marketing methods from the perspective of chemists, which it produces and influences through its efforts.

4. **Bikash ranjan Meher, Sakthi balan ,2018**, in their research paper “Knowledge, Attitude and Practice of Over-the-Counter Drugs among Dispensers Working in the Retail Pharmacies of a South Indian City, this study was a cross sectional questionnaire-based study carried out in the retail pharmacies of Puducherry city between June 2015 to December 2015. Many dispensers were unaware of OTC medications, according to one survey. They also had no idea which OTC medications were included in the schedule. There was little interest for updating OTC medications on a regular basis. As a result, there should be an education programme to keep them up to date on all areas of OTC as well as drug schedules. There should also be a rigid policy in place with strict enforcement. In their study, a substantial number of participants (74%) felt the need to update their knowledge on OTC drugs on a regular basis, but only a self-medication all percentage (17%) actually did so. As a result, the health departments of each state should implement a programme to raise public knowledge regarding over-the-counter medications. In this study, it was also observed that majority of drug dispensers (80%) asked for prescription before dispensing drugs, it is contrary to some other studies done in India and outside, where dispensing without prescription was quite high. Their research also revealed a startling fact: many persons without a formal pharmacy degree (66%) work in retail pharmacies, and there was a substantial difference in the KAP between the two groups when it came to OTC drugs. Policymakers should think about these problems and take the appropriate steps to avoid them, as well as create the path for increased public knowledge and drug dispenser awareness.
5. **Balamurugan E and Ganesh K 2011**, in their research paper “Practices of Self Medication use in coastal regions of South India, this study investigates the Patients reported using self-medications for a variety of ailments, including headaches, stomachaches, coughs, and fevers, in the current study, and factors influencing self-medications include patient satisfaction with the healthcare provider, drug cost, educational level, socioeconomic factors, age, and gender. Interactions between prescribed drugs and self-medication substances are a significant risk issue that healthcare providers should be aware of. Also, the easy availability of a wide range of drugs without a prescription is a major factor contributing to irrational drug usage in self-medication,

which is leading to imminent health issues such as antibiotic resistance, increased load of mortality and morbidity and economic loss. The need to promote appropriate drug usage in the health-care system is not only for financial reasons, which policymakers and managers are typically most concerned about, but also for patient and community health and medical treatment. To ensure their ethical marketing and use, authorities must enhance existing legislation governing OTC medications. Also important is specific pharmacovigilance, with the patient, pharmacist, and physician encouraged to report any adverse events. Periodic research on self-medication knowledge, attitudes, and behavior may provide insight into the changing pattern of drug use.

OBJECTIVES

- To assess the practices of pharmacist regarding over-the-counter medication
- To evaluate the various influencing factors and patterns of over-the-counter drugs in Chennai city

RESEARCH METHODOLOGY

Type of research – Primary and secondary research

Area of study – Market research

Data collection

- Primary data will be collected from the survey by pharmacist.
- Secondary data will be collected from published journals, literature, and reference books, along with this statistical information will also be accessed in research study.

Duration – 3 months

Sample size – 60 pharmacists

Area of study – Market research in the Chennai city

Inclusion criteria – Pharmacist and pharmacy shops

Data analysis – The data analysis in the current study will be done by using simple statistical tools like Excel and survey will be collected by google form.

RESULTS AND FINDINGS

1) GENDER

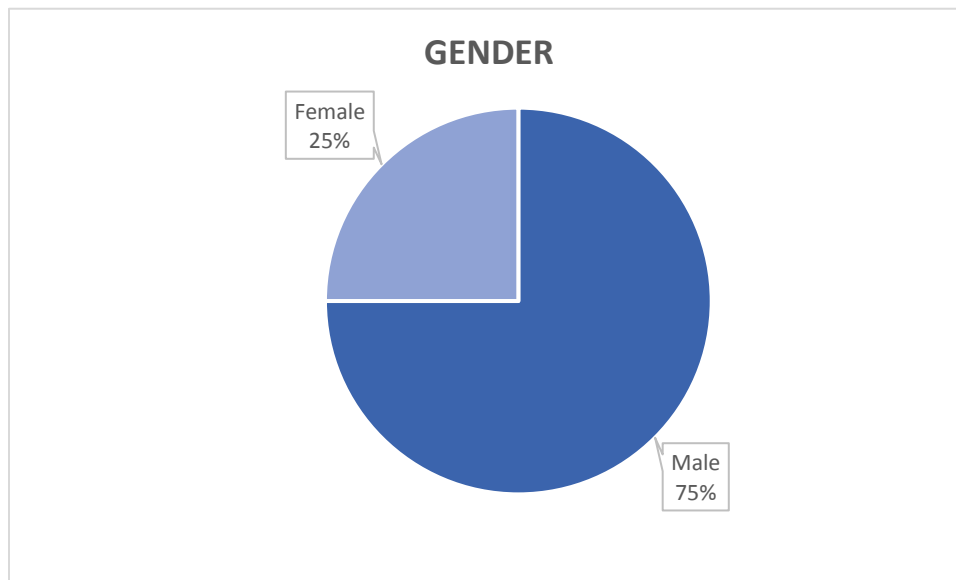


Figure 1: Gender

In the above survey conducted among 60 pharmacists in Chennai city, the results showed about 75 percent of pharmacist were male and 25 percent were female.

2) How the patients ask about OTC mostly

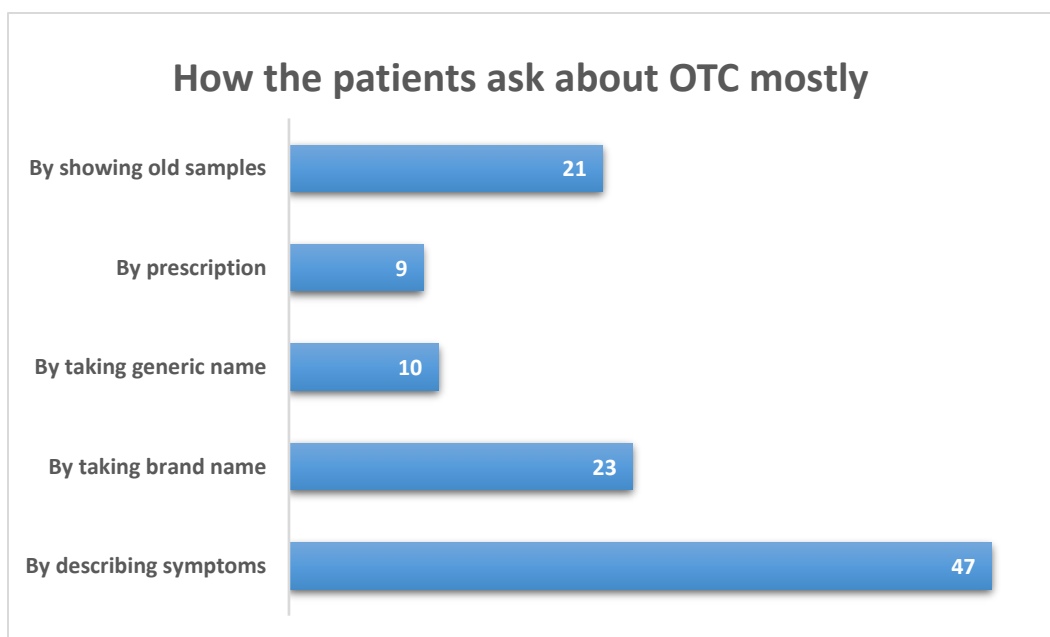


Figure 2:How the patients ask about OTC mostly

In the above question, pharmacist was asked how the patients mostly ask about the OTC and the study resulted that majority about 47% patients ask OTC by describing their symptoms, followed by taking brand name and showing old samples, this shows that majority of the people are not well aware about the medications, they take it for emergency reasons and for their convivence.

3) Average number of patient request OTC in a day

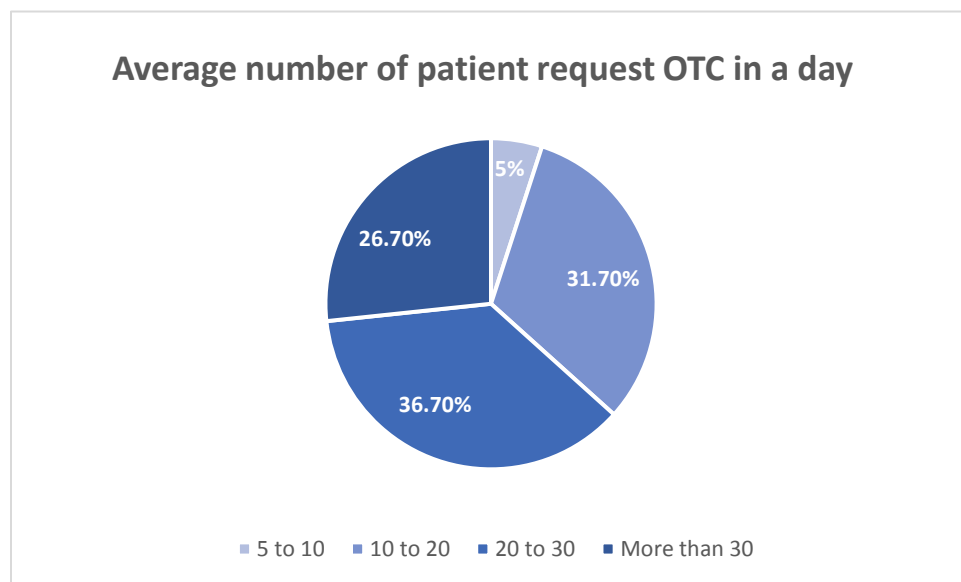


Figure 3: Average number of patient request OTC in a day

From the above figure it showed that on an average of 20 to 30 (36.7%) OTC medications request are made in the pharmacy, it also shows that around 26.7% showed average of more than 30 OTC request and it was also said that after COVID the sales of OTC also have increased compared to pre covid.

4) The most commonly dispensed OTC drugs in your pharmacy

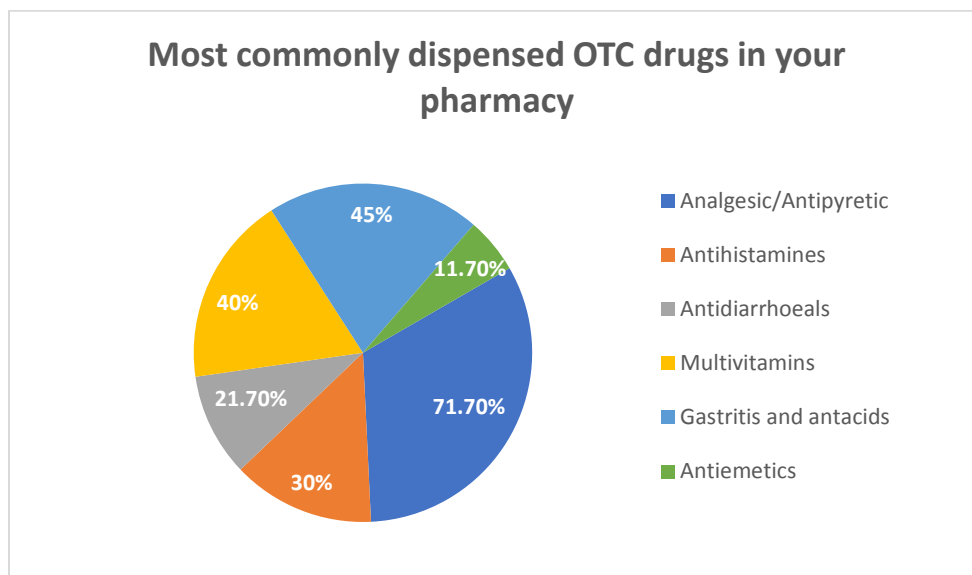


Figure 4: The most commonly dispensed OTC drugs in your pharmacy

From the above the survey, it was cleared that Analgesic/antipyretics were the most commonly dispensed OTC drug with around 71.7% followed by gastritis/antacid which accounts around 45% and multivitamins which results around 40%. Also, antiemetics were the least purchased.

5. Factors influencing pharmacist to dispense OTC product.

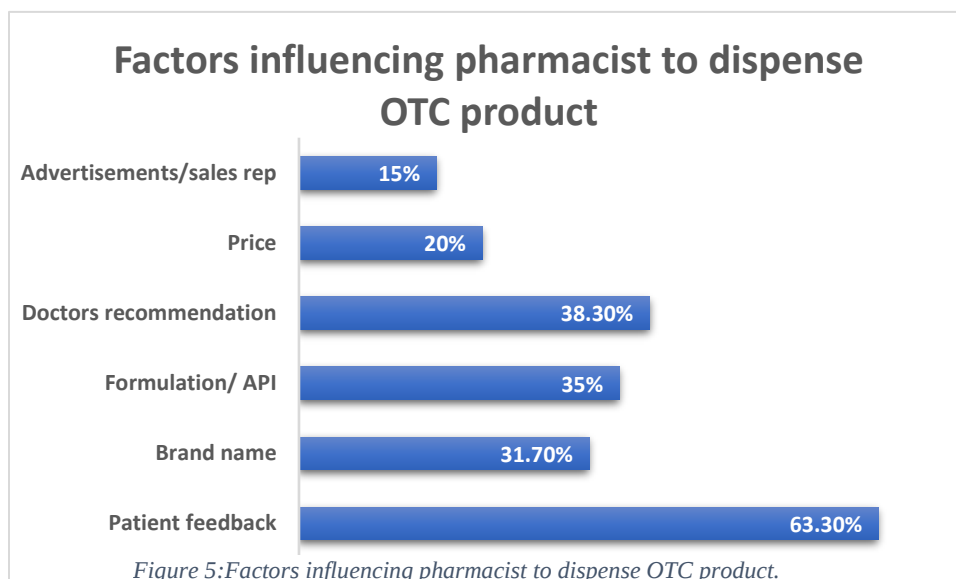


Figure 5: Factors influencing pharmacist to dispense OTC product.

Considering the factors which are influencing the pharmacist to dispense OTC it was shown that from patient feedback (63.30%) is considered as the major factor among them and followed by formulations/API which accounts 35% and by doctor's recommendation by 38.3% and the least factor considered was the advertisement and by sales rep (15%)

6. Do you counsel the patient while dispensing OTC?

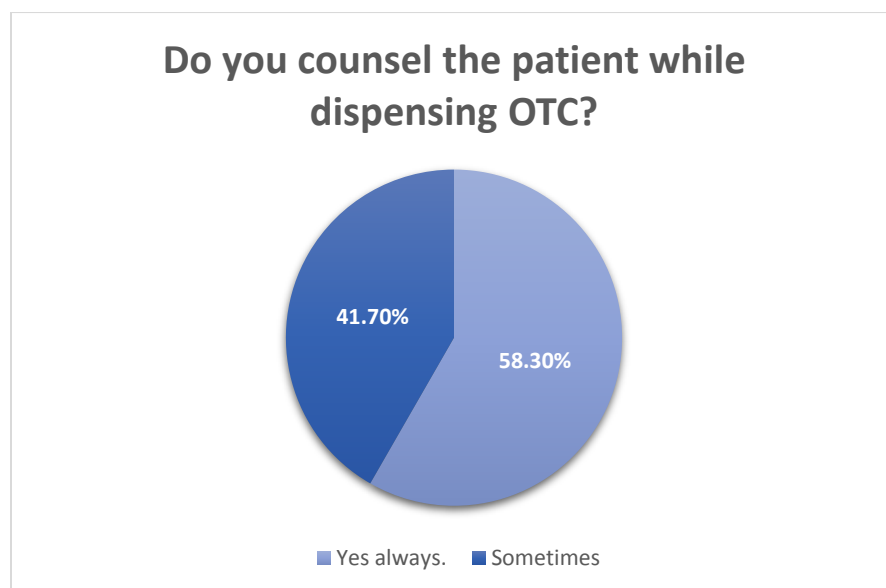


Figure 6: Do you counsel the patient while dispensing OTC

From the above figure it's clear that while asking about the counselling the patient it showed that 58.30% pharmacist said yes, always while 41.70% pharmacist said sometimes, and no pharmacist said no to counselling

7. What type of medical counselling is given while dispensing OTC?

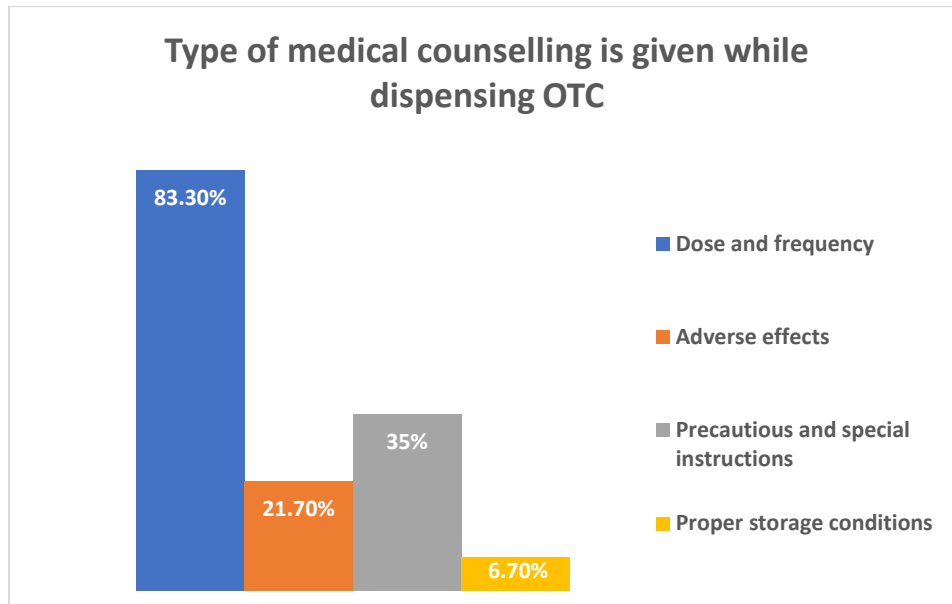


Figure 7: What type of medical counselling is given while dispensing OTC

From the figure given above it showed the type of medical counselling given while dispensing the OTC, it resulted that 83.3% counsel about the dose and frequency followed by 35% counsel about the precautions and special instruction while the counselling about the proper storage condition was given the least.

8. Do you advise patients to see a doctor instead of self-medicate when they come to you with any symptoms?

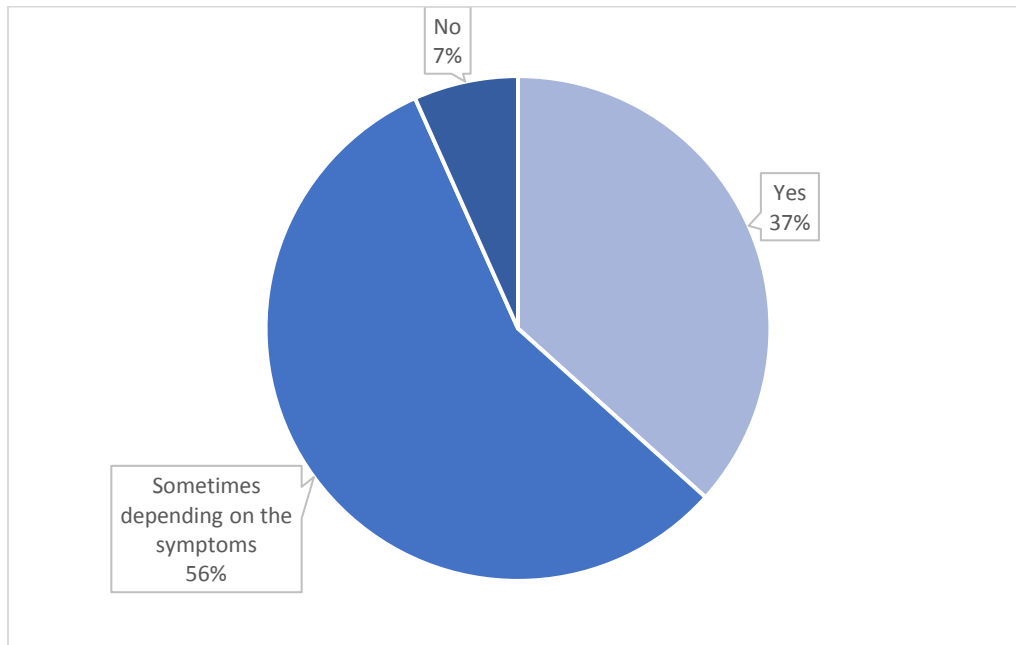


Figure 8: Do you advise patients to see a doctor instead of self-medicate

From the above figure it was resulted that around 56% of pharmacist advise the patient to consult a doctor depending on the symptoms while 37% pharmacist directly advise you to consult a doctor and about 7% do not recommend consulting a doctor while dispensing the OTC

9. Do you dispense an alternative brand in case of unavailability of required brand?

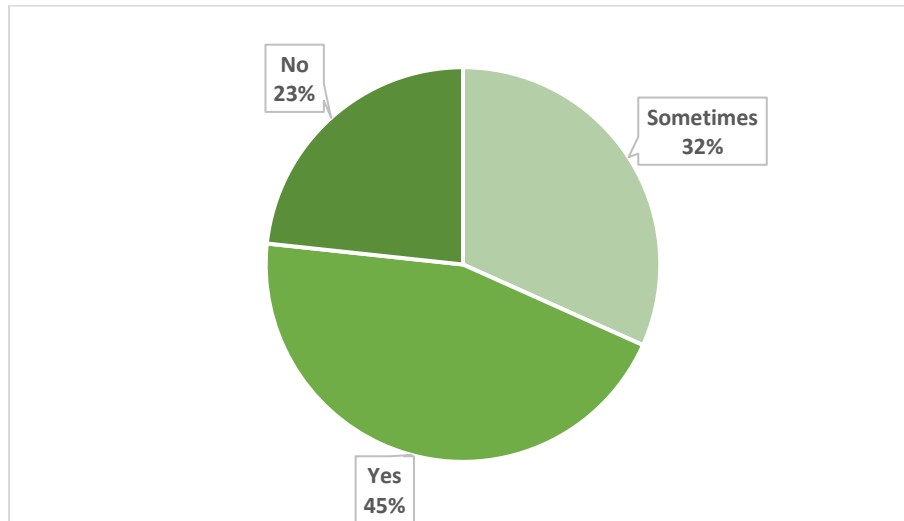


Figure 9: Do you dispense an alternative brand in case of unavailability of required brand

In the above-mentioned figure while asking about dispensing an alternative brand in case of unavailability of required brand about 45% of pharmacist said yes that they will substitute the medicine while 32% of pharmacist said sometimes depending on the availability and 23% of pharmacist said no

10. According to you the main factor for the inappropriate use of Over-the-counter medications?

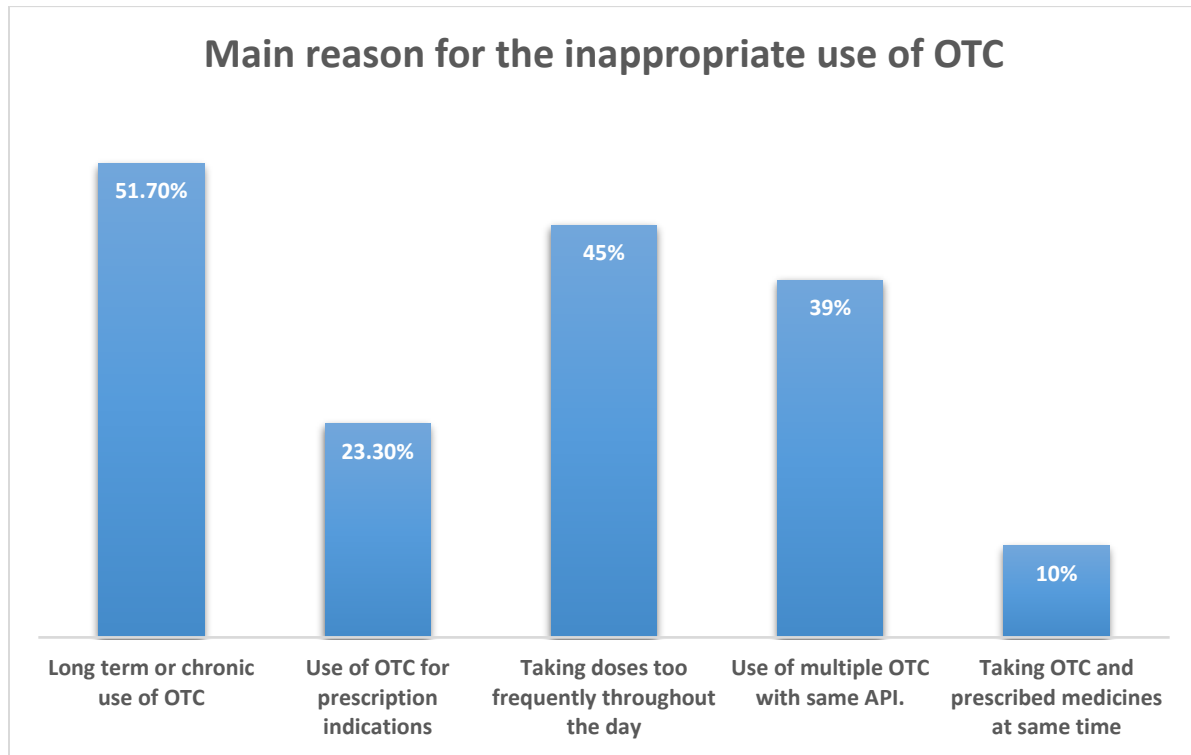


Figure 10: According to you the main factor for the inappropriate use of Over the counter medications

The main factor for the inappropriate use of Over-the-counter medications as stated by pharmacist are long-term or chronic use (51%), taking doses OTC drugs too frequently throughout the day (45%), use of multiple OTC with same API.

CONCLUSION AND DISCUSSION

The healthcare delivery system in developing countries, such as India, is plagued with issues. The main issue is there are less doctors compared to the population, the ration is totally abnormal. For their primary healthcare needs, most individuals still rely on pharmacists or other allied health workers. Community pharmacists have traditionally played an important role in the healthcare system. The findings show that OTC medicine is used for common conditions in Chennai, and pharmaceutical companies, the government, and other health stakeholders have a responsibility to raise knowledge and awareness among consumers about safe and effective OTC drug use. Pharma businesses should employ appropriate promotional and commercial channels to raise OTC brand awareness, and they may also enlist the support of pharmacists and other health service providers to promote their OTC brand among the general public. Although OTC medications empower users, their use can cause a slew of problems for consumers. The inappropriate use of OTC may lead to various medical complications so one should be aware of it. As a result, the community has to be informed about the types of symptoms that can be self-diagnosed, analyzed, treated, as well as the drawbacks and risks of over-the-counter medications. The final link between medication and patients is pharmacists and drug dispensers. As a result, pharmacists may be able to play an important role in changing patients' self-medication habits. They can also present the patient with appropriate, clear, and relevant information about their drugs as well as various kinds of OTC drug use. All of this is stated out in detail in a good pharmacy manual. Because of technological advancements, the usage of OTC is becoming more common among the youth these days. The majority of them have access to the internet and can obtain drug information from it, and their unfettered access to pharmacy supplies is exacerbating this trend. When the prescription brand was not available, about 45% of the participants in this study indicated they changed brands without seeing their doctor. There are prescribed recommendations accessible regarding the idea of generic substitution because it can sometimes do significant harm to a patient's safety, but they are not strictly followed due to a lack of severe enforcement. In this survey, it shows that the majority of pharmacist (58%) offer advice when giving medications. According to the findings of this study, 83.3 percent of pharmacists counselled patients or their attendants on the dosage and frequency of OTC medications.

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ANNEXURE-1

QUESTIONNAIRES

1. Gender
 - Male
 - Female
 - Others

2. How the patients ask about OTC mostly
 - By describing symptoms
 - By taking brand name
 - By taking generic name
 - By prescription
 - By showing old samples

3. Average number of patient request OTC in a day
 - 5- 10
 - 10-20
 - 20-30
 - More than 30

4. The most commonly dispensed OTC drugs in your pharmacy
 - Analgesic/Antipyretic
 - Antihistamines
 - Antidiarrhoeals
 - Multivitamins
 - Gastritis and antacids
 - Antiemetics

5. Factors influencing pharmacist to dispense OTC product.
- Patient feedback
 - Brand name
 - Formulation/ API
 - Doctors' recommendation
 - Price
 - Advertisements/sales rep
6. Do you counsel the patient while dispensing OTC?
- Yes always.
 - No
 - Sometimes
7. What type of medical counselling is given while dispensing OTC?
- Dose and frequency
 - Adverse effects
 - Precautions and special instructions
 - Proper storage conditions
8. Do you advise patients to see a doctor instead of self-medicate when they come to you with any symptoms?
- Yes
 - No
 - Sometimes depending on the symptoms

9. Do you dispense an alternative brand in case of non-availability of prescribed brand?

- Yes
- No
- Sometimes

10. According to you the main factors for the inappropriate use of OTC

- Long term usage of OTC
- Use of OTC for prescription indications.
- Taking doses too often in a day
- Use of multiple OTC with same API.
- Taking OTC and prescribed medicines at same time