

CONSUMER BUYING PERCEPTION TOWARDS ONLINE AND OFFLINE PHARMACY

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Master of Business Administration (MBA)

in

Pharmaceutical Management

by

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Under the Supervision and Guidance of

Dr. Rahul Sharma

2025

CERTIFICATE

This is to certify that **Anshuman Singh** 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 University, Jaipur during Mar 10 - May 31, 2025.

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This is to certify that dissertation titled **Consumer Buying Perception Towards Online and Offline Pharmacy** is a record of the research work undertaken by Anshuman Singh in partial fulfillment of the requirements for the award of the degree of MBA Pharma Management from the IIHMR University, Jaipur under my guidance and supervision and his approach to the research study has been sincere, scientific, and analytical.



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Date 18/06/25

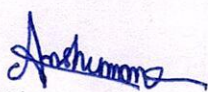


Dr. Saurabh Kumar Banerjee
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18/6/2025

DECLARATION BY STUDENT

I hereby declare that this dissertation titled “Consumer Buying Perception towards Online and Offline Pharmacy” 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 Information derived from the published or unpublished work of others has been duly acknowledged in the text.



(Signature)

Anshuman Singh

Date:

June 18,2025

Abstract

Introduction

Interactions between healthcare professionals (HCPs) and pharmaceutical representatives influence prescribing behaviors but often raise ethical and credibility concerns.

Objectives

- To assess the frequency and nature of HCP–pharma representative interactions
- To explore ethical concerns and credibility of shared information
- To identify factors influencing prescribing decisions

Methodology

A questionnaire-based study was conducted among 100 cardiologists and pulmonologists. It focused on interaction patterns, ethical concerns, trust in pharmaceutical literature, and key prescribing factors.

Results

- Over 50% reported frequent, unrestricted interactions.
- 69% acknowledged ethical dilemmas.
- Most HCPs rarely used pharma-provided literature; only 7% found it extremely credible.
- 69% believed pharma companies influence treatment decisions.
- Efficacy, cost, safety, and patient feedback were top prescribing factors.

Conclusion

Frequent interactions exist, but ethical and credibility issues remain. Transparency and evidence-based promotion are essential to improve trust.

Keywords

HCPs, pharmaceutical representatives, ethics, credibility, prescribing behavior, influence.

Acknowledgement

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Place: Jaipur

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Anshuman Singh

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Chapter 1: Introduction

The internet has grown to be a self-organizing medium with numerous interactions. A wide range of customer goods, including medicines, are publicized and sold on online platforms.

Drug promotion over such online platforms is an unavoidable result of the thriving economy which presents unique moral, legal, and quality challenge which are the primary causes of internet's revolutionary structure. All such issues are significant from the standpoints of consumers, physicians, and regulators. Internet Pharmacies offering products like health-care and cosmetics, also prescription drugs, are among the many marketable activities which are booming in this environment. It also provides information about patient problems as well as drugs that may be used to treat them.

1.1 Online-pharmacy

An online-pharmacy is one that trades pharmaceuticals and medicines over the internet and ships them to consumers. The internet simplifies and simplifies everything. Patients can now purchase drugs online using a qualified medical practitioner's prescription and have them delivered to their homes. They're a big hit, and more and more people are using them instead of going to the pharmacy (1).

How Online Pharmacy model work?

- a) Mobile application that allows customers to send scanned copies of prescriptions and give orders for medications.
- b) Each order must be confirmed and examined by a registered pharmacist.
- c) Registered pharmacists will check and send authenticated prescriptions to the dispensary where the medications will be delivered (6).

1.2 Top online pharmacy platforms

- NetMeds
- Practo
- TATA 1mg
- PharmEasy

- S. Apollo Pharmacy
- Medlife
- Myra Medicines

1.3 Pros of an Online Pharmacy

Convenience

In case of the patients of elderly age, cripples or having a busy schedule can purchase medicines from online platform. This benefits in two ways: time saving and, most importantly, cost saving for those who live far from the physical pharmacy. Expenses for travelling are often higher than those of delivery.

Time-Saving

In no time, anyone can navigate to an Online Pharmacy site through internet, and purchase any required prescription medication. It takes less work and effort than going to the drugstore and queuing up for your medication.

Forthcoming Vision

Digital India project and the Jan Aushadhi Program of central govt. take steps to raise awareness and supply reasonably priced medications to common community without sacrificing quality. The online pharmacy operational paradigm includes Jan Aushadhi stores equipped with online applications.

Lower Price

Internet drug purchasing allows buyers to monetary profit. Quite a few evaluations undertaken by economic organizations revealed that purchasing prescribed medications online can save up to 33% of the price.

Medical Info

Some e-pharmacies offer helpful information regarding diseases and treatments. Moreover, medical resources are also made available including universities, governmental organizations, and health-organizations.

Variety of Choices

Online Pharmacy provides a wide range of possibilities. They typically stock more medications than a traditional drugstore.

Drug Approval

Most of these establishments have a medicine approval process in place. Authenticate prescription is required for dispensing the medication. At least a questionnaire should be filled prior to purchase of medication only then medicines are delivered.

Private & Confidential

Beneficial to people whom it is problematic to communicate with doctors or pharmacists. It is also advantageous to people who are embarrassed or ashamed of their problems, such as erectile dysfunction, acne, STDs, hair loss, etc. They can purchase

1.4 Cons of Online Pharmacy

Absence of Physical evaluation

Internet makes it easier to avoid various filters those are important for evaluation authenticity of the purchase. Physical evaluation which is not possible through e-pharmacy platform. If possible, may not be done by registered pharmacist.

Importance of using the same Online drug store

When you're not using the same online drug store each time, pharmacist may not know of any possible drug interactions associated with an individual. Also, when we buy medicines from different stores it is difficult to track each person and reach to them on same day regarding any concerns towards prescriptions.

Safety of your Health

You may seek treatment that is inappropriate for you if you do not have a prescription.

It may progress the patient to the most severe phases of illness. Prescriptions are required by PharmacyChecker.com-approved drug dispensers. few unlawful e-medicine retailers sell tainted, counterfeit, or outdated pharmaceuticals, which can result in severe drug interactions.

Protection of your Private and Financial data

Any online platform related to pharmacy or online pharmacy should not share any private or financial data of customer with third party. These provisions are included in the privacy policy of respective e-pharmacies, but it is critical to show them. Any online transactions should be secured. The promised security of data can be examined by Pharmacychecker.com. One such tool for data security is encryption technology (1).

1.5 Conventional pharmacy

Conventional pharmacy is believed to be most widely distributed and also preferred by large volume of population. For general population, it is first line healthcare practitioners. At conventional drug stores they dispense the medication according to authenticated prescription, and wherever permissible without prescription also. Not only the dispensing of medication but also the counseling and providing the information regarding various health

issues, treatments and other awareness programs marks their difference than online pharmacy portals. These physical interactions between pharmacist and consumer assure an accurate supply of the right product.

1.6 Pros of Conventional Pharmacy Stores

First and foremost, advantage of conventional pharmacy is that pharmacist can access patient's medical record wherever it is maintained which helps in analyzing the dose and frequency of medication. Also, the need of counseling at the time of medicine dispensing is fulfilled by this path.

Attention to Patients

Personal attention to each patient is possible at conventional pharmacy store as medical history of patient is easily available. In certain countries therapeutic responses are monitored and recorded which helps in further development of dose regimen. Also advising drug related risk factors to the patient is easily possible at conventional pharmacy store.

Monitoring of Drug Utilization

The pharmacist might be involved in drug use monitoring arrangements such as practice research studies and programs to evaluate prescriptions for such surveillance of adverse medication responses.

Responding to Signs of Minor ailments

Pharmacist act as conveyer between patient and medical practitioner for the range of diseases. For minor diseases showing mild symptoms, pharmacist can give nonprescription drugs. For prolongation of symptoms, recommendation of medical practitioner can be suggested by pharmacist. In addition, counseling without medication is another aspect regarding minor ailments.

Updating public and Health-Professionals

The druggist can collect and keep data on various medications, particularly newly introduced drugs, and make available this data as needed to other healthcare practitioners, as well as use it to promote drug rationalization by providing advice as well as clarifications to clinicians and associates of general public (1).

1.7 Cons of Conventional Pharmacy stores

Cost

Because of the middleman's profit, drug costs are higher than e-pharmacies. Due to low income, the patient may face difficulties purchasing costly and branded medicines, which can extend the patient's long-term ailments.

Time

When pharmaceuticals are not accessible at a nearby drugstore, it can be time demanding for the old people to choose the correct drugs at the appropriate time to avoid patients' well-being.

Inconvenience to elderly patients Chronic old patients who are unable to go to drugstores may have trouble locating retailers located at large distances or in unrelated locations (1).

Chapter 2: Literature Review

Article No 1

The name of the article is E-PHARMACY IN INDIA AN EXPONENTIAL GROWTH OPPORTUNITY which is published by Frost and Sullivan. According to that article, it describes how online pharmacies will grow in India. Apart from that, they have given the top online pharmacies in India how their model works. How online pharmacies compete nowadays with offline pharmacies this type of information is given in this article (5).

Article no 2

Here I reviewed 21d article, E-pharmacy vs. conventional pharmacy, which was written by Chordiya S.V, Garge B. M. Here, I got all the differences between E-pharmacy and conventional pharmacy. They said what are the Pros and cons of offline and online pharmacy. So, the data which has been taken from this article direct gives the difference between online and offline pharmacies with respect to their model, profit, customer, cost, challenges, etc. (4).

Article no 3

The next article I reviewed is The Users Perspectives on Online Pharmacy Model, which is written by Architha Aithal., Shabaraya, A. R. This article gives a clear perception of the consumers towards the online pharmacy. India is a developing country, so how the Indian consumers see the online pharmacies are mentioned in this article. The article describes that literate people who belong to two-tier one and two cities are more favorable to the online pharmacies due to various reasons (2).

Article No 4

Another article I have reviewed is The PURCHASE BEHAVIOR OF ONLINE PHARMACIES CLIENTS which is written by Hana Lostakova, Marketa Curdova, Victor Janouch. The article explains the potential procedures when buying through ecom and gives the findings of a quantitative study conducted among online pharmacy consumers to map the reasons that lead clients to purchase online pharmacies and the frequency of purchase. As a result of this essay, we can better understand the purchasing habits of online pharmacy customers. This article summaries the possible processes when buying through e-commerce and presents the findings of a quantitative study conducted among online pharmacy clients to map the reasons that lead customers to shop in an online pharmacy, purchase frequency, and procedure for purchasing over-the-counter medicines and

nutraceutical on the internet (3).

Article No 5

The 5th article I have reviewed is Online Pharmacies: Safety and Regulatory Considerations which is published in international journal of health science. While internet pharmacies offer advantages to customers, patients' safety may be jeopardized as compared to traditional pharmacies. Consumers may be at risk when buying prescription drugs online since it is difficult to distinguish the quality of drug between e-pharmacy and conventional pharmacy.

Additionally, prescription medications acquired online could be counterfeit, illegal, or unauthorized. As per a report prepared by the United States GAO in June 2004, the majority of forged and unapproved pharmaceuticals marketed online come from non-U.S. pharmacies. The FDA and other organizations have tried to impose rules against online medication trades. The most difficult aspect of regulating non-US pharmacies is their offshore location. Unfortunately, due to the internet's extensive anonymity and ever-changing, it is extremely hard to shut down illicit websites (8).

Article No 6

The article's name is E-pharmacy a Boon or Bane, which is published in the International Journal of Pharmaceutical Research; a Pharmaceutical company from India is the third-largest and rapidly developing Indian company. Currently, purchasing medicine online is the most frequent method all over the world because people are accustomed to ordering drugs with the click of a button rather than driving to a pharmacy store. This type of internet store sells anything from health-related items to prescription medications. However, there have been a number of rogue stores that have emerged in recent years as a result of the internet. Such outlets sell illicit and unlicensed pharmaceuticals, and customers should be aware of them. This review essay focuses on the underlying concerns and limitations of online pharmacy. In this review post, we discussed the variances between online and conventional pharmacies, as well as their profits and weaknesses (7).

Chapter 3: Research Questions

What are the different factors that influence consumer buying behavior in online and offline pharmacies?

Chapter 4: Data Analysis and Interpretation

To determine the consumer buying perception toward online and offline pharmacies.

To assess the various constraint of online and offline pharmacy

Chapter 5: Conclusions and Recommendations

Study design- Descriptive study

Data collection method: The data was primary which had collected by using standard questionnaires circulated among the consumers via google forms.

Sample size: 145 consumers.

Analysis: Analysis was done by using Microsoft Excel.

Data collection tool: Questionnaire.

Study area: PAN INDIA.

Chapter 6: Results And Discussions

1. Year group

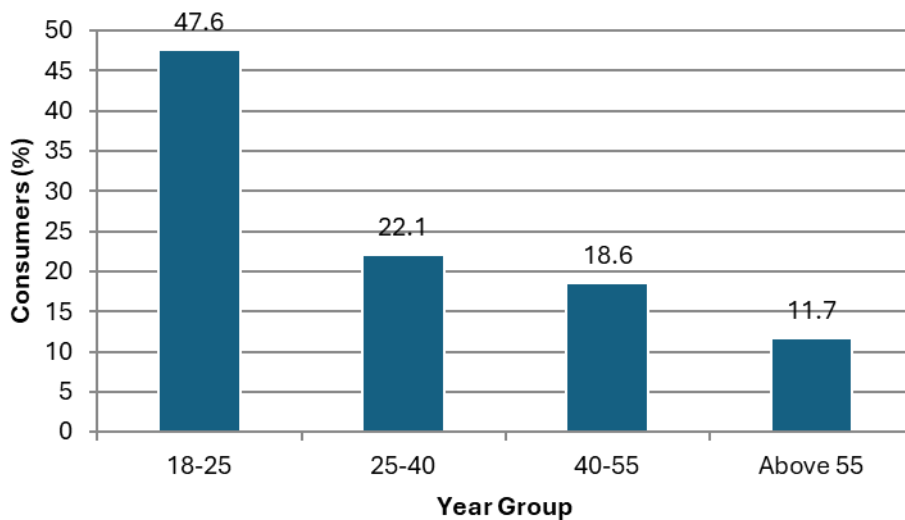


Fig.1. Year group of Consumer

2. How do you purchase medicine?

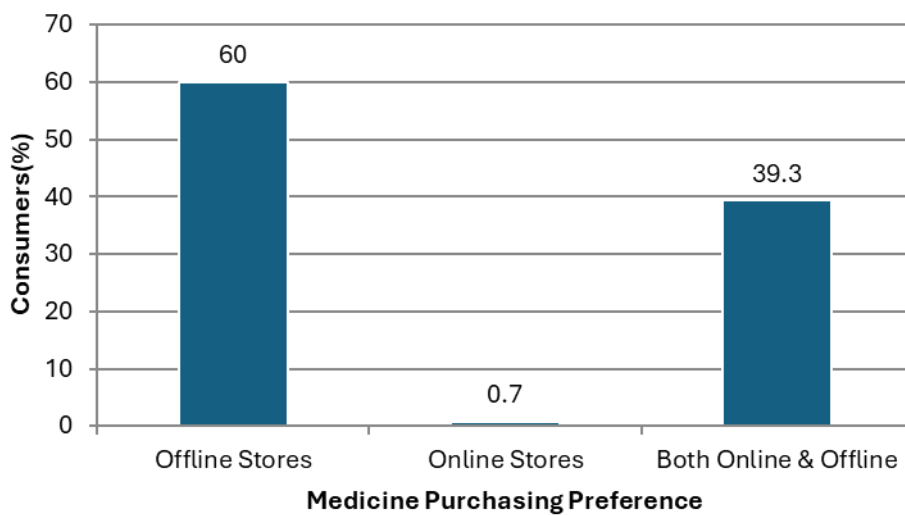
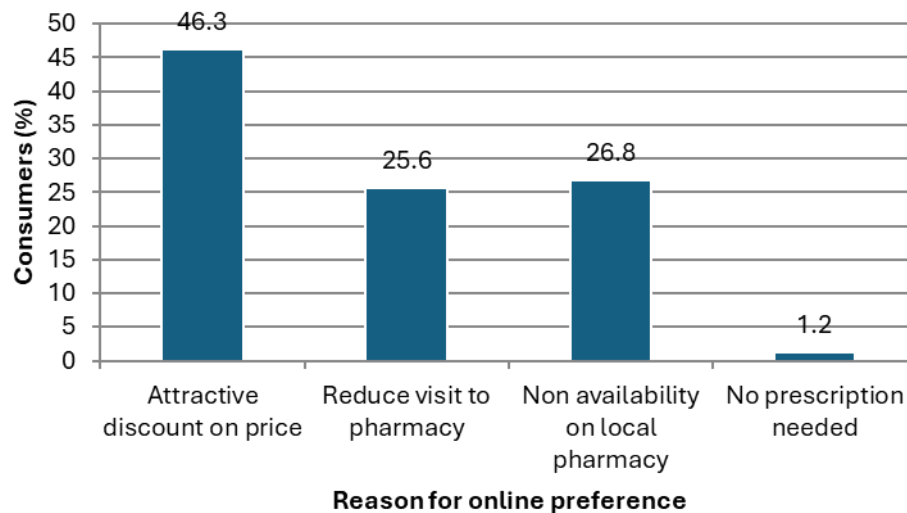


Fig. 2. Medicine Purchasing Preference

Collected data shows that most of the consumers purchase medicines from offline pharmacy stores, while few of them are from both online and offline pharmacies. Consumers purchasing only from an online pharmacy are 0.7% which is negligible as compared to an offline pharmacy.

3. If online, what makes you purchase medicines from an online pharmacy?



4. If offline, what makes you purchase medicines from offline pharmacy?

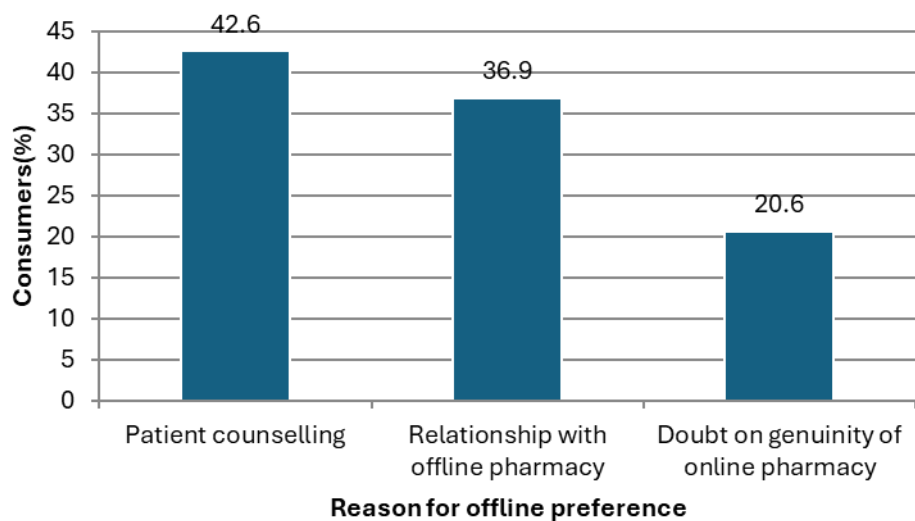


Fig.4. Reason for offline preference

The reason behind consumers preferring offline pharmacies over online is patient counseling at offline pharmacy stores. Also, relationship with offline pharmacy and doubt about the Genuinity of online pharmacy also seems to be major reasons.

5. Which medicine do you buy online?

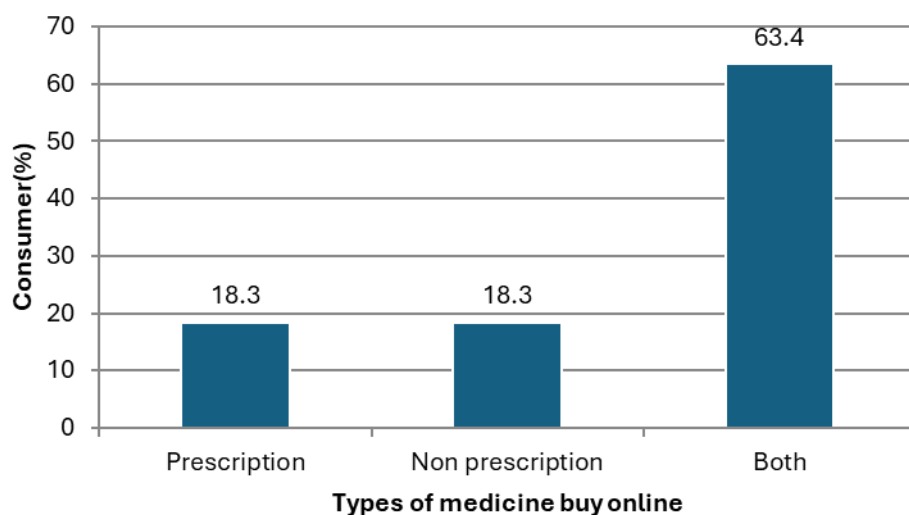


Fig.5. Type of medicine buy online

Both prescription and non- prescription drug are purchased from online store

6.How was the quality of medicines which you purchased from online pharmacy?

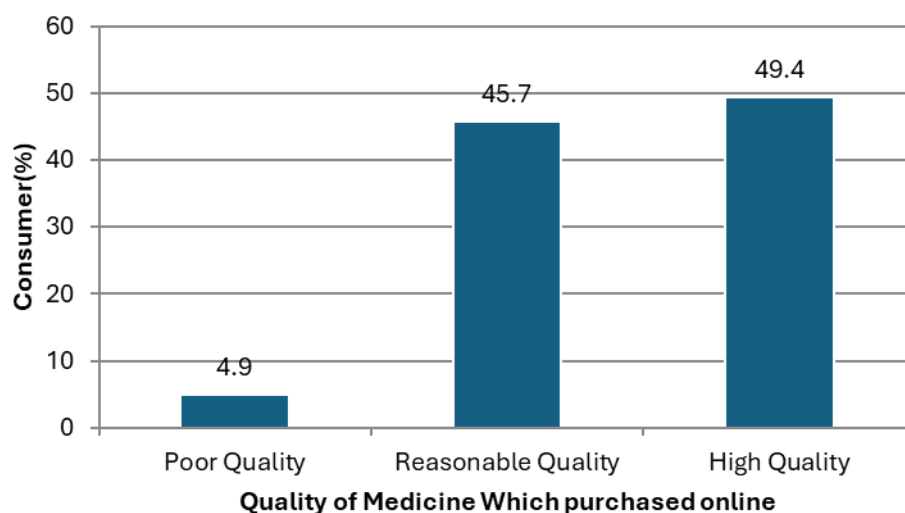


Fig.6. Quality of Medicine Which purchased online

Consumer experience about the quality of medicines from online pharmacy stores is found

to be reasonable to high.

7.Are you aware of the illegal trading of medicine through online?



Fig.7. Awareness of illegal trading in online purchase

A major concern about online pharmacies is that around half of the consumer respondents cannot firmly say that they know about the illegal trading of medication

8.What you order medicines online the future?

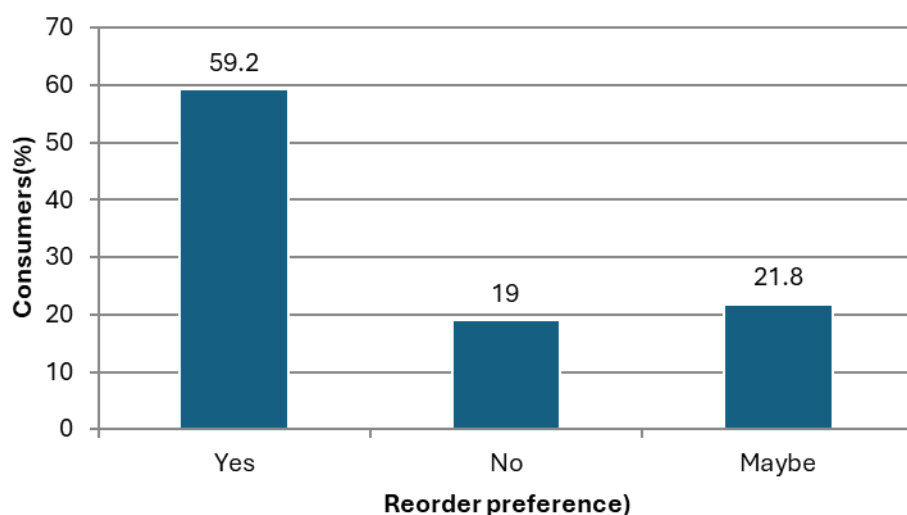


Fig.8. Reorder preference

Most consumer's perception about buying medicines from an online store is positive for the future

9. Would you like to recommend online pharmacy to your

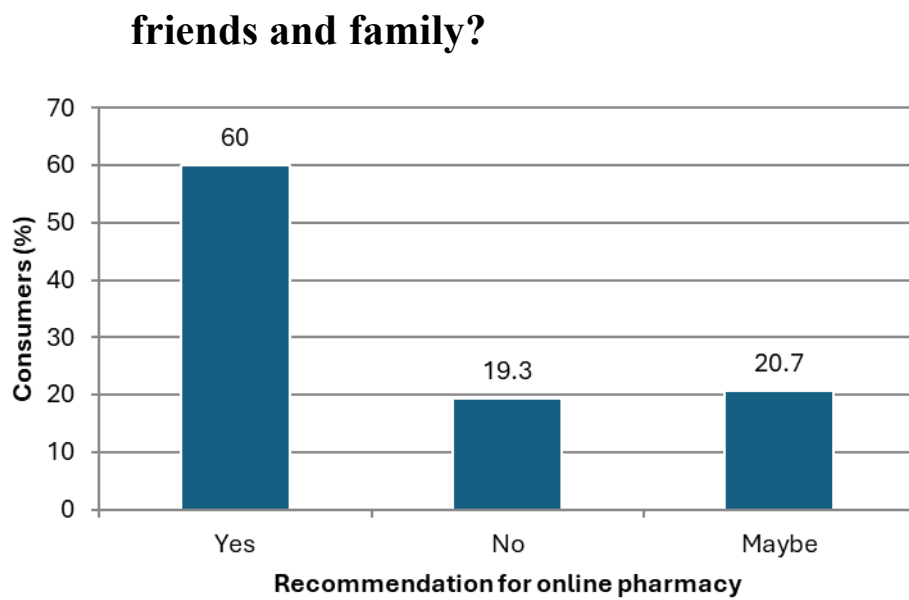


Fig.9. Recommendation for online pharmacy

According to the data, the consumers are willing to recommend online pharmacies to their friends and family for future purchases of medicines.

Chapter 7: Conclusion

Finally, by summarizing the above argument, it is possible to conclude that internet pharmacies lack the human touch that a real drugstore possesses. You are unable to discuss with pharmacist about side effects as at a local drugstore. Hopefully, our articles have clarified some of the differences between E-pharmacies and traditional pharmacies. They can be cheaper than conventional pharmacies, but there are risks to utilizing an online pharmacy. Nowadays, "rogue sites" drug retailers are protected by Internet observation measures. This is a type of implementation priority which focuses on the sale or acquisition of pharmaceuticals without a proper prescription and also the regulation of unapproved new drugs. The topics to examine are the prohibition of illegal drug sales and the ultimate goal of protecting our health. The reality is that pharmaceuticals acquired from online pharmacy stores provide high levels of convenience, provide privacy for the customer, and protect traditional prescription prescribing practices. As a result, consumers may use these products with the same trust they might have had in their neighborhood pharmacist. However, they must avoid "rogue sites" that sell unauthorized items or circumvent traditional measures that protect customers' benefits. Through the employment of modern technology to access every nook and cranny of nations and give medicinal assistance, a favorable transformation in the medical system is potentially predicted.

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Chapter 9: QUESTIONNAIRES

1. Name:
2. Year group
 - a. 18-25
 - b. 25-40
 - c. 40-55
 - d. Above 55
3. How you purchase medicines?
 - a. Always from offline stores
 - b. Always from online pharmacy
 - c. Both online and offline
4. If online, what makes you purchase medicines from online pharmacy?
 - a. Attractive discount on price
 - b. Reduce visits to pharmacy
 - c. Non availability on local pharmacy
 - d. No prescription needed
5. If offline, what makes you purchase medicines from offline pharmacy?
 - a. Delivery time
 - b. Doubt on genuinity
 - c. Patient counselling
 - d. Relationship with offline pharmacy
6. Which medicines do you buy online?
 - a. Prescription drug
 - b. Non-prescription drug
 - c. Both
7. How was the quality of medicines which you purchased from online pharmacy?
 - a. Poor quality
 - b. Reasonable quality
 - c. High quality
8. Are you aware of the illegal trading of medication through online?
 - a. Yes
 - b. No
 - c. Maybe

9. Would you order medicines online in future?

- a. Yes
- b. NO
- c. May be

10. Would you like to recommend online pharmacy to your friends and family?

- a. Yes
- b. No
- c. May be

Annexure

Study Tools:

1. How often do you interact with pharmaceutical company representatives?
☐ Once in month - ☐ Twice in month - ☐ Thrice in month - ☐ No restrictions
 2. What factors influence your decision to prescribe a particular brand of medication?
☐ Efficacy - ☐ Safety - ☐ Cost - ☐ Patients Feedback
 3. Do you perceive any ethical dilemmas or conflicts of interest in your interactions with pharmaceutical companies?
☐ Yes - ☐ No
 4. Have you noticed any changes in your brand preference over the past year? If yes, what factors influenced this change?
☐ Yes - ☐ No
-
5. How often does pharmaceutical company scientific literature influence your decisions?
☐ Rarely - ☐ Occasionally - ☐ Sometimes - ☐ Frequently - ☐ Very frequently
- ☐ Always
 6. What do you think of the credibility of information provided by pharmaceutical companies about their products?
☐ Not Credible - ☐ Slightly Credible - ☐ Moderately Credible - ☐ Credible - ☐ Highly Credible - ☐ Extremely Credible
 7. In your opinion, what role should regulatory bodies play in overseeing interactions between doctors and pharmaceutical companies?
☐ Minimal - ☐ Limited - ☐ Moderate - ☐ Extensive - ☐ Comprehensive - ☐ Mandatory

8. Factors that make the interaction more interesting while you are communicating with pharmaceutical company representatives.

9. How do you stay informed about new medications and treatment options?

☐ Medical Journal - ☐ Conference - ☐ Pharmaceutical Representative - ☐ Others

10. What about the promises made by the pharma companies about safety and Efficacy with evidence?

☐ Not satisfactory - ☐ Slightly satisfactory - ☐ Moderately satisfactory - ☐ Satisfactory - ☐ Highly satisfactory - ☐ Extremely satisfactory

If below satisfactory then, what other factors are you looking for?

11. Is brand loyalty the only key factor that prescribing decisions?

Yes ☐ - ☐ No

12. In your opinion, what steps can be taken to improve transparency and ethical standards in the relationship between doctors and pharmaceutical companies?
