

## **E-pharmacies Consumer Behavior, in the Digital Era to Target New-Age Customers, Which Is Transforming the Retail Pharmacy Business Model**

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### **Abstract**

The advent of the digital era has revolutionized the way consumers interact with businesses, including the pharmacy industry. E-pharmacies have emerged as a convenient and accessible alternative to retail pharmacies' business model for purchasing medications and healthcare products., offering a wide range of products and services to meet the needs of today's tech-savvy consumers. This trend is transforming the retail pharmacy business model and creating new opportunities to target new-age customers.

To effectively target new-age customers, e-pharmacies must understand the evolving consumer behavior in the digital era. This includes factors such as increased smartphone penetration, rising internet usage, and a growing preference for online shopping. E-pharmacies that can adapt to these trends and provide a seamless online experience will be well-positioned to capture the attention of new-age consumers.

This paper explores the consumer behavior of e-pharmacy users and identifies the factors that drive their purchasing decisions. The paper also discusses the behavior of healthcare professionals (HCP) & retail pharmacists, and strategies that e-pharmacies can use to attract and retain new-age customers.

The findings of this paper suggest that e-pharmacy users are primarily motivated by convenience, price, and selection. It also values customer service, privacy, and security. Overall, the digital era is presenting both challenges and opportunities for e-pharmacies. The growth of e-pharmacies is expected to continue in the coming years. By understanding consumer behavior and adapting to the changing landscape of the retail pharmacy business model, e-pharmacies can successfully target new-age customers and capture a significant share of the market.

**Keywords:** *E-Pharmacies, Consumer Behavior, Digital Era, New-Age Customers, Retail Pharmacy Business Model.*

## Introduction

The internet penetration rate in India went up to nearly 48.7 percent in 2022, from just about four percent in 2007. Although these figures seem relatively low, it meant that almost half of the population of 1.37 billion people had internet access that year. The digital age has ushered in a new era of consumer behavior, transforming how people interact with businesses and make purchasing decisions with the rapid advancement of technology and the widespread adoption of digital platforms.

The advent of e-commerce has revolutionized the way businesses operate and the pharmaceutical industry is no exception. The recent worldwide pandemic has prompted several companies to turn to the online market, the COVID-19 pandemic spurred a massive shift in consumer behavior, and there has been an upsurge in online pharmacies throughout the Indian subcontinent over the last 3–5 years.

E-pharmacies are retail pharmacies that operate over the Internet and sell medications and other healthcare products through their websites or apps, they typically offer convenience, competitive prices, and a wider selection of products. E-pharmacies have been a developing channel of the pharmaceutical supply since the beginning of the century. The emergence of E-pharmacies has transformed the traditional retail pharmacy business model, providing customers with a convenient and hassle-free way to purchase medicines online. In this digital era, E-pharmacies platforms have offered convenient access to a vast array of medications and healthcare services, and have captured the imagination of a new-age customer - a tech-savvy, time-conscious individual who prioritizes ease and efficiency.

This paper delves into the intricate relationship between e-pharmacies consumers' behavior, HCP (healthcare professionals) and retail pharmacy owner opinions on it. There are evolving factors like Consumer preferences, Consumers' satisfaction level with the purchasing experience, Motivational parameters for purchasing, and Reasons why participants may not purchase from e-pharmacies, exploring how this dynamic is reshaping the traditional retail pharmacy business model.

## Objectives of Study

To study the sources of customer awareness for E-Pharmacy.

To study the customer's preference for E-Pharmacy.

To study the customer preference of buying prescribed/non-prescribed Medicine offline (not purchase from e-pharmacies).

To study the customer satisfaction level for E-Pharmacy.

To study the motivational parameters for purchasing from E-Pharmacy.

Understanding Consumer Behavior in the Digital Age to target GenZ

To know the opinions of HCPs and pharmacy owners in E-pharmacy.

## Research Methodology

Using a quantitative analytic approach, the research questionnaire's answers were discovered. Quantitative research most often uses deductive logic, in which researchers start with hypotheses and then collect data which can be used to determine whether empirical evidence to support that hypothesis exists. Quantitative data in this study is collected through the Questionnaires (self-administered)– which are commonly used to collect quantitative data by asking respondents to report attitudes, experiences, demographics, etc.

The Research Questionnaire's answers were discovered through a Feedback form with a set of Questions for Consumers, HCPs (healthcare professionals), and retail Pharmacy Owners' opinions on e-pharmacy. For this inquiry, convenience sampling was used as a strategy, Convenience sampling is a non-probability sampling method where units

are selected for inclusion in the sample because they are the easiest for the researcher to access, Examples of convenience sampling include online and social media surveys, asking acquaintances, and surveying people in a mall, on the street, and in other crowded locations.

The sample size comprised **668** individuals in total. Among these **668** respondents, **432** were consumers, **91** were pharmacists and **145** were healthcare professionals through convenience sampling a quantitative research analytic approach.

Consumer behavior served as the independent variable. The dependent variables were employed to achieve these goals: awareness, age group, type of medicine, purchasing trend, customer satisfaction and motivational factors with online medicine purchases, and potential use of e-pharmacies.

## Results

### *Demographic and socio-economic of Respondents*

Demographic and socio-economic characteristics of respondents refer to the background information collected about the people who participate in a research study or survey.

Here in this study Demographic and socio-economic of Respondents considered are:

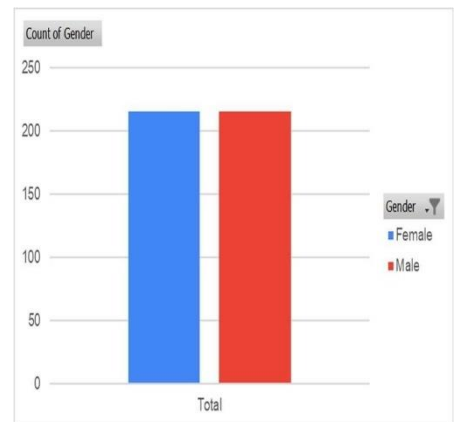
**A- Demographic Characteristics:** Age, Gender, Education, Location, Marital Status

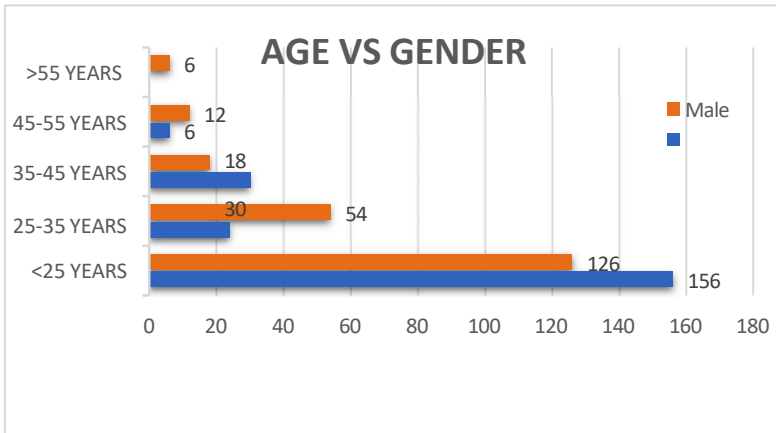
**B- Socio-Economic Characteristics:** - Income, Employment Status

### **A - Demographic Characteristics**

#### *Age Group vs Gender*

AGE	GENDER		Grand Total
	Female	Male	
<25 YEARS	156	126	282
25-35 YEARS	24	54	78
35-45 YEARS	30	18	48
45-55 YEARS	6	12	18
>55 YEARS		6	6
<b>Grand Total</b>	<b>216</b>	<b>216</b>	<b>432</b>

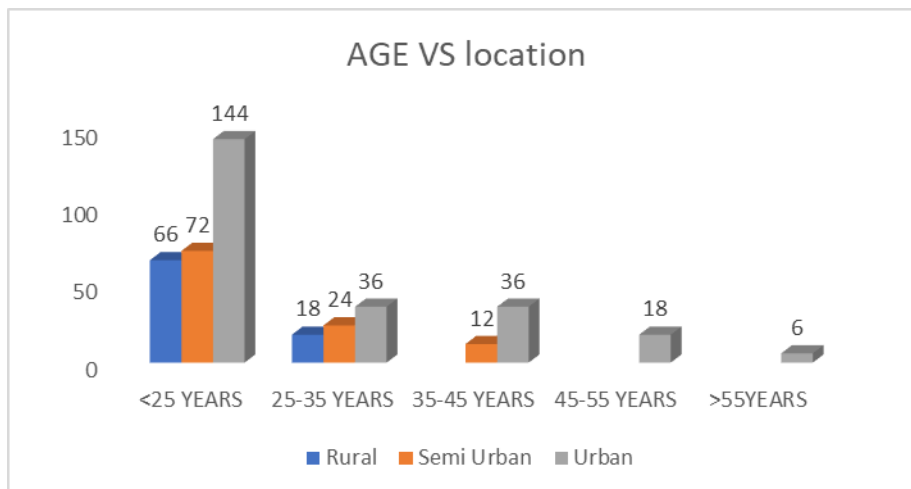




A cross-tabulation of the variables was done to dig deeper into the study. It was determined how many replies fell into each of the age categories that were offered. According to **Table 3.1.1** 58% i.e., 126 of male respondents were in the age group of below 25 years, while 72% i.e., 156 of female respondents were in the age group of below 25 years. In total both female & male respondents are equal i.e., 216 each.

### 3.1.1 AGE vs Location

AGE	LOCATION			Grand Total
	Rural	Semi-Urban	Urban	
<25 YEARS	66	72	144	282
25-35 YEARS	18	24	36	48
35-45 YEARS		12	36	18
45-55 YEARS			18	6
>55 YEARS			6	
<b>Grand Total</b>	<b>84</b>	<b>108</b>	<b>240</b>	<b>432</b>



**Table 3.1.2** interprets the age category with the location where 55.5% i.e., 240 of respondents are from Urban areas, compared to 25% i.e., 108 from semi-urban and 19.5% i.e., 84 from Rural areas.

### 3.1.3 AGE vs Education

AGE	EDUCATION QUALIFICATION				Grand Total
	Grade +2	PhD	Post Graduation	Under Graduation	
<25 YEARS	6		168	108	282
25-35 YEARS	12		42	24	78
35-45 YEARS		6	42		48
45-55 YEARS	6		12		18
>55YEARS		6			6
<b>Grand Total</b>	<b>24</b>	<b>12</b>	<b>264</b>	<b>132</b>	<b>432</b>

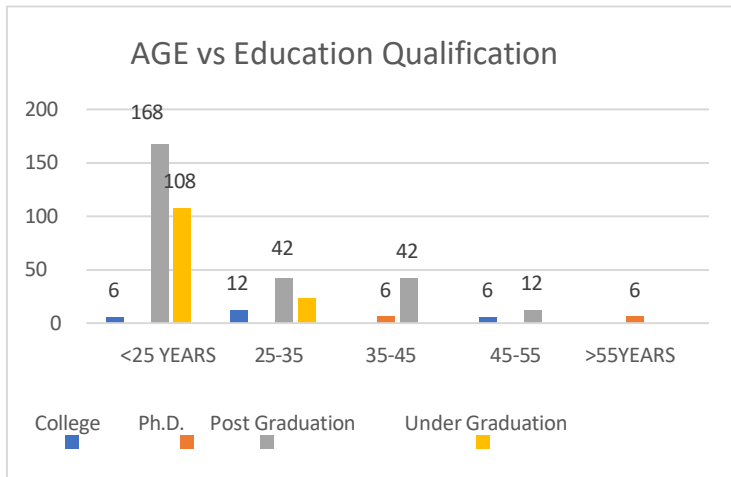
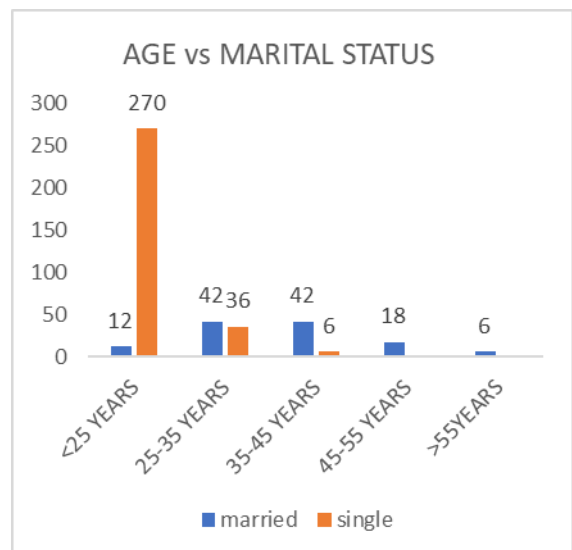


Table 3.1.3 shows the interpretation of age category with Education wise was 30% i.e., 132 of respondents were graduates, while 61% i.e., 264 were postgraduates. In addition, 6% i.e., 24 of the respondents had completed grade +2, and 12 respondents had completed Ph.D. which compares to 3%.

AGE	MARITAL STATUS		Grand Total
	Married	single	
<25 YEARS	12	270	282
25-35 YEARS	42	36	78
35-45 YEARS	42	6	48
45-55 YEARS	18		18
>55YEARS	6		6
<b>Grand Total</b>	<b>120</b>	<b>312</b>	<b>432</b>



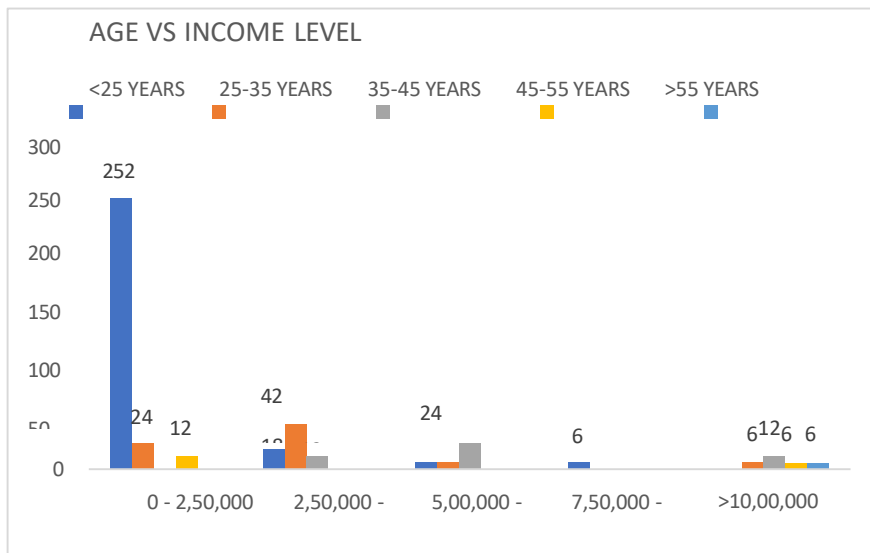
### 3.1.4 Age Vs Marital Status

Table 3.1.4 shows Age vs. marital Status where 312 of the respondents are unmarried and 120 are married. Of those below 25 years 270 and 12 are unmarried and married respectively.

### B - Socio-Economic Characteristics:

#### 3.1.4 AGE VS INCOME

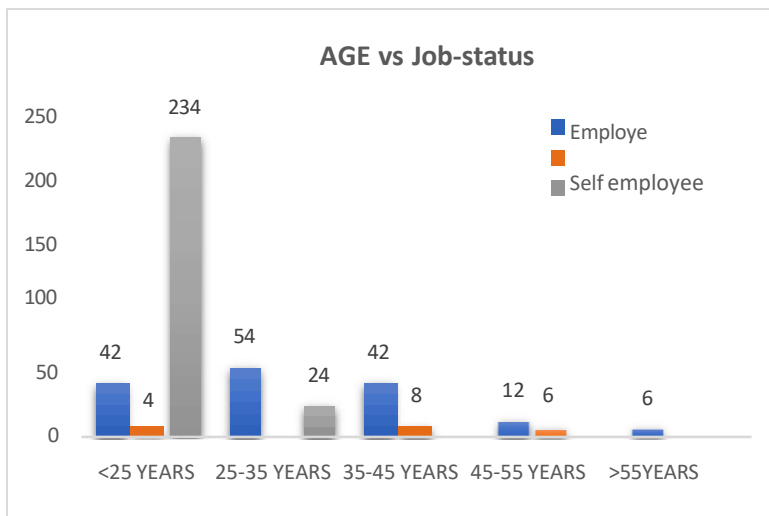
AGE	INCOME LEVEL					Grand Total
	0 - 2,50,000	2,50,000 - 5,00,000	5,00,000 - 7,50,000	7,50,000 - 10,00,000	>10,00,000	
<25 YEARS	252	18	6	6		282
25-35 YEARS	24	42	6		6	78
35-45 YEARS		12	24		12	48
45-55 YEARS	12				6	18
>55 YEARS					6	18
<b>Grand Total</b>	<b>288</b>	<b>72</b>	<b>36</b>	<b>6</b>	<b>30</b>	<b>432</b>



288 respondents are having income in the range of 0- 2,50,000. 172 of the respondents are earning in a range of 2,50,000 - 5,00,000. 36 are earning in range between 5,00,000-7,50,000 and 30 respondents have income more than 10,00,000.

**3.1.5 AGE VS Job-status**

AGE	Job-status			Grand Total
	Employed	Self-employee	Student	
<25 YEARS	42	4	234	280
25-35 YEARS	54		24	78
35-45 YEARS	42	8		50
45-55 YEARS	12	6		18
>55YEARS	6			6
<b>Grand Total</b>	<b>156</b>	<b>18</b>	<b>258</b>	<b>432</b>

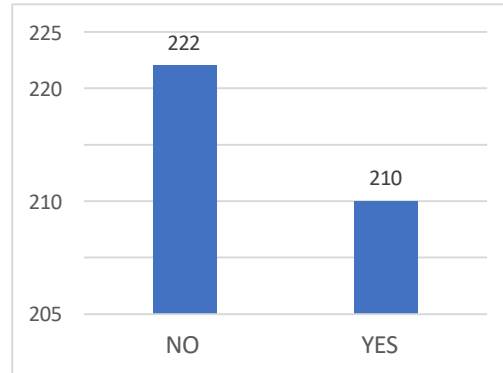


**Table 3.1.6 AGE vs Job- status** (employment status) shows that 156 respondents are employed 42 of them are below 25 years, 258 are students 234 are below 25 years and 18 are self-employed. The graph is plotted on the no of respondents.

From the Demographic and socio-economic character of Respondents, the age group below 25 Years of respondents have more participated in the survey that is 282 of them, in which most of them are students who are pursuing \ completed a post-graduation with an income range between 00-2,50,000.

### Knowledge of E-Pharmacy Purchasing Medicines Online

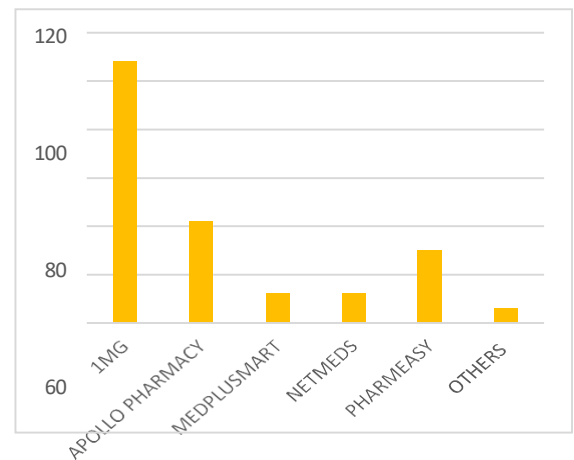
Responses	Count of Are you purchasing medicines online?
NO	222
YES	210
<b>TOTAL</b>	<b>432</b>



**Table 3.2.1** shows a yes/no response to the question of whether or not people purchase medications online. More than 51% i.e., 222 of respondents oppose ordering prescription drugs online. Although it has been demonstrated that people are switching from traditional retail pharmacies to online pharmacies to get their medications; the transition may take some time.

### Most Common Apps

E-PHARMACY APPS	Count of Which e-pharmacy apps you will use to buy medicines
1MG	108
APOLLO PHARMACY	42
MEDPLUSMART	12
NETMEDS	12
PHARMEASY	30
OTHERS	6
<b>Grand Total</b>	<b>210</b>

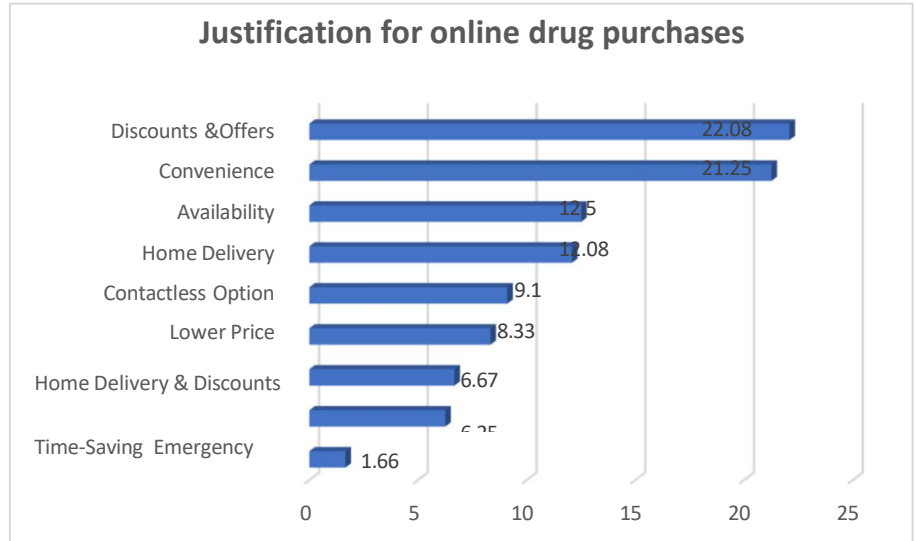


**Table 3.2.2** shows the Most Common Apps used to buy medicines online TATA 1MG is the most used with 108 guys, followed by Apollo Pharmacy with 42 of them, 30 of them from PharmaEasy & 12 from each Netmeds and Medplus mart. The other e-pharmacies apps are Practo, Wellness Forever, and Medi buddy apps with 6 of them.



### 3.2.3 Justification for online drug purchases

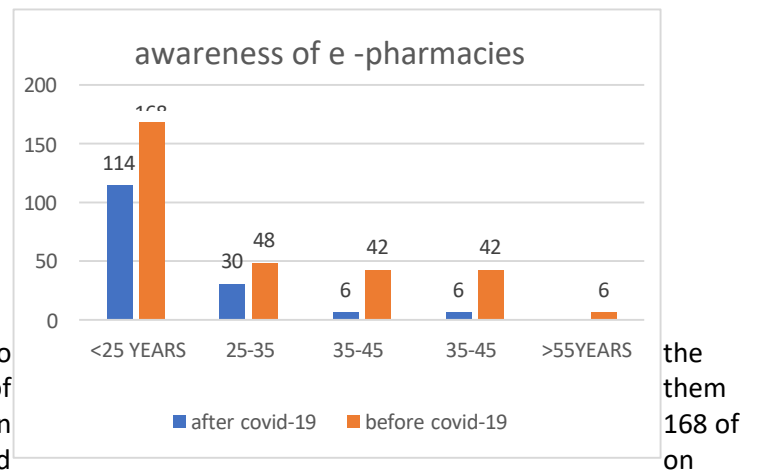
REASONS	% count
Emergency	1.66
Time-Saving	6.25
Home Delivery & Discounts	6.67
Lower Price	8.33
Contactless Option	9.1
Home Delivery	12.08
Availability	12.5
Convenience	21.25
Discounts & offers	22.08



**Table** Shows the percentage of online purchases of medicines in which 22.08% responded to the discounts and offers from the e-pharmacies, followed by 21.5 % convenience, 12.5% availability, 12.08% home delivery and others.

### Awareness of e-pharmacy apps

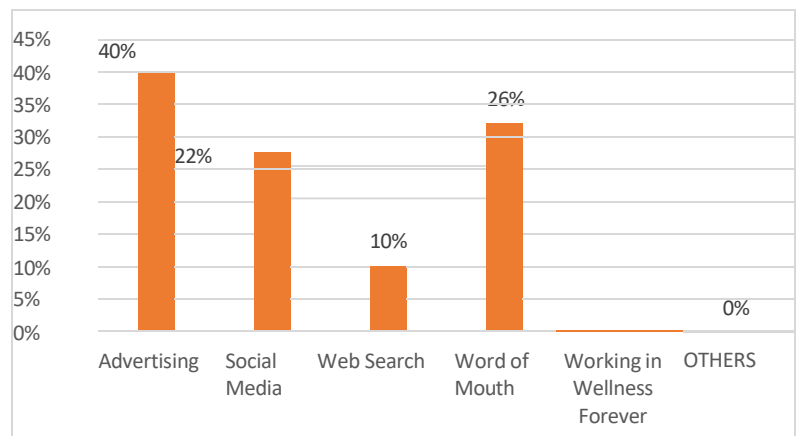
AGE	after covid-19	before covid-19
<25 YEARS	114	168
25-35 YEARS	30	48
35-45 YEARS	6	42
35-45 YEARS	6	42
>55YEARS		6
Grand Total	150	282



**Table 3.2.4** shows the awareness of e-pharmacies apps to consumers to buy medicines online where 65% i.e.,282 of them knew about e-pharmacy before the covid 19 pandemic in them are below 25 years age. The graph is plotted based the no of individuals knew about it.

### How did you get to know e-pharmacy apps

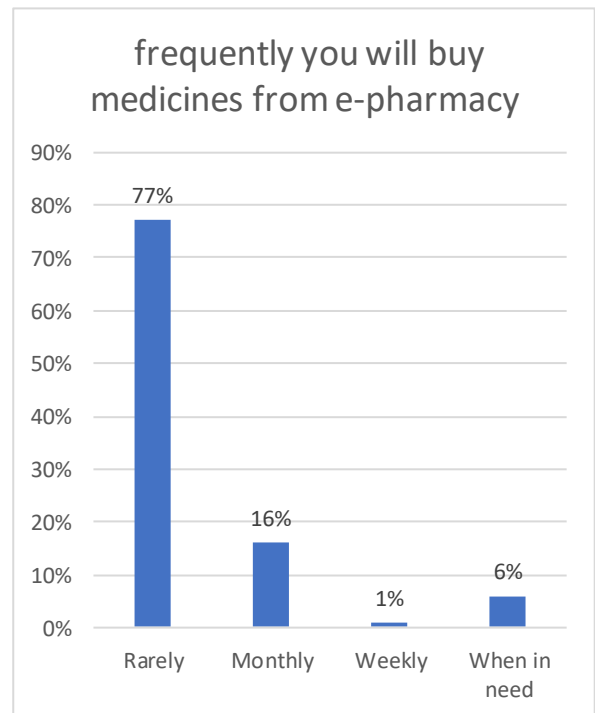
How did you get to know e-pharmacy apps	Count in %
Advertising	40%
Social Media	22%
Web Search	10%
Word of Mouth	26%
Working in Wellness	
Forever	1%
OTHERS	0%



**Table 3.2.5** shows how customers knew about the e-pharmacies apps to where 40% of them responded to the advertising followed by word of mouth with 26% and 22% of them responded to social media, 10% of them knew through the web search, other way is contributed only 1%.

**Frequent Buying of Medicines From E-Pharmacy**

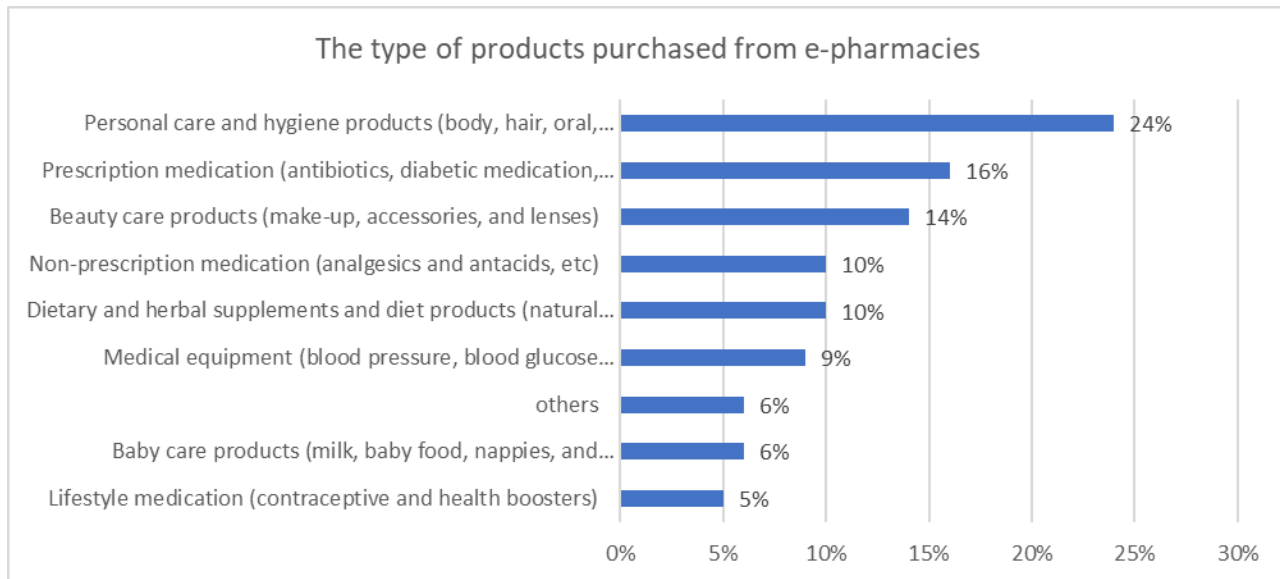
How frequently you will buy medicines from e-pharmacy	COUNT
Rarely	77%
Monthly	16%
Weekly	1%
When in need	6%



**table 3.2.6** shows how customers Frequently Buy Medicines From e-Pharmacy where 77% of them buy medicines rarely, monthly buying customers 16%, weekly buying customers only 1%, and the other 6% customers buy medicines only when needed.

**The type of products purchased from e-pharmacies**

The type of products purchased from e-pharmacies	% count
Personal care and hygiene products (body, hair, oral, health and shaving products)	24%
Dietary and herbal supplements and diet products (natural vitamins and minerals)	10%
Beauty care products (make-up, accessories, and lenses)	14%
Baby care products (milk, baby food, nappies, and changing supplies, etc)	6%
Prescription medication (antibiotics, diabetic medication, chronic disease, psychiatric medication, etc)	16%
Non-prescription medication (analgesics and antacids, etc)	10%
Medical equipment (blood pressure, blood glucose monitor, etc.)	9%
Lifestyle medication (contraceptive and health boosters)	5%
others	6%



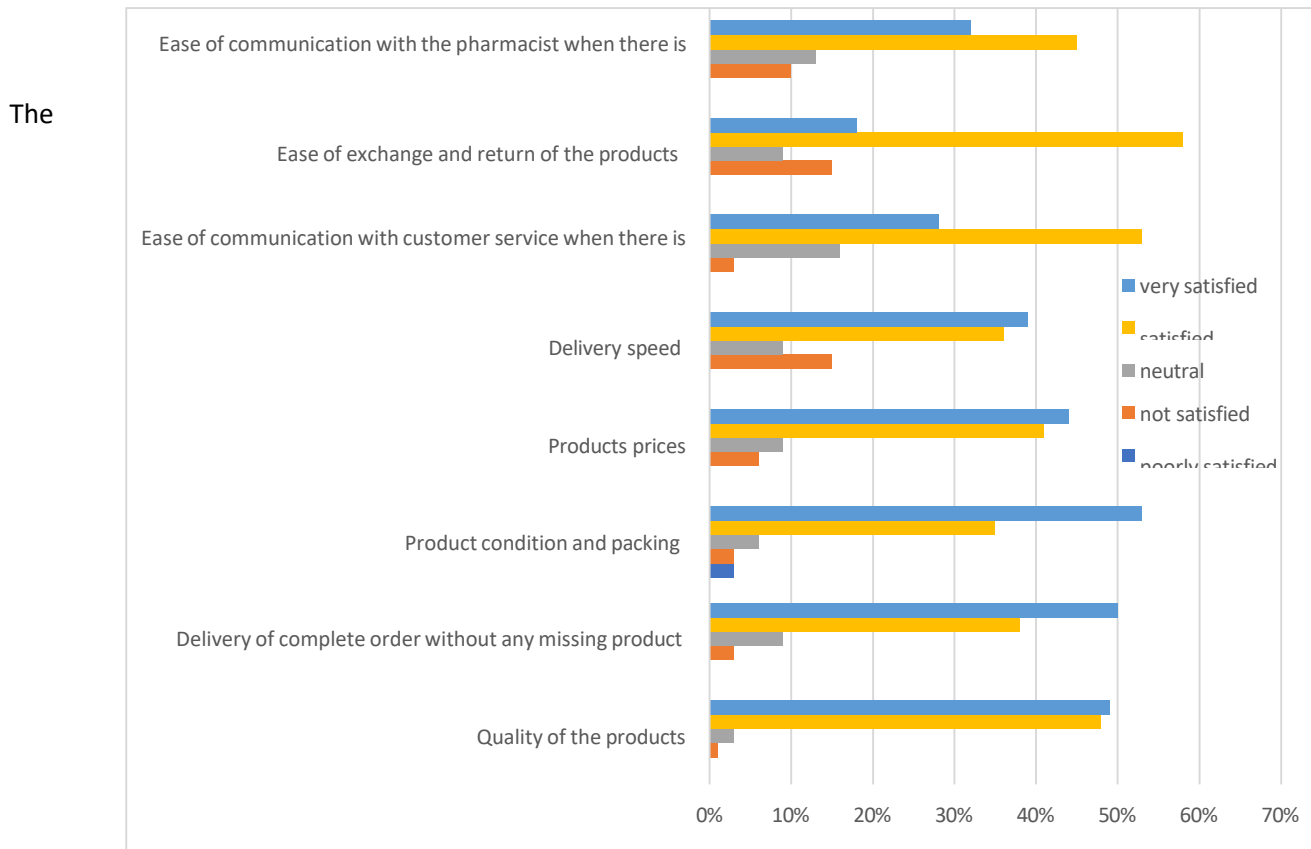
**table** shows the type of products purchased from e-pharmacies where 24% of them are buying personal care & and hygiene products, followed by 16% of them are purchasing prescription medication, 14% purchasing beauty care products, 10% of them are buying non-prescription medication and Dietary and herbal supplements, and diet products each, 9% are purchasing Medical equipment (blood pressure, blood glucose monitor, etc.), 6% will buy baby care products, 5% are buying the lifestyle medication.

The respondents were given a list of statements involving the Consumers’ satisfaction, and Motivational factors, with purchasing medicines from online pharmacies, and Reasons why participants may not purchase from E - pharmacies they were asked to score their level of agreement with the claims on a 5-point Likert scale and 3-point Likert scale

It is frequently used to measure satisfaction or agreement. For example, “Express your satisfaction level with our products.” Respondents would choose from five options ranging from “Highly Satisfied” to “Highly Dissatisfied.” Their perspectives on online pharmacies and their experiences buying prescription medications non-prescription medication, and other medical equipment online were discussed in the statements.

**Consumers’ satisfaction**

Consumers’ satisfaction with the purchasing experience from online pharmacy	poorly satisfied	not satisfied	neutral	satisfied	very satisfied
Quality of the products		1%	3%	48%	49%
Delivery of complete order without any missing product		3%	9%	38%	50%
Product condition and packing	3%	3%	6%	35%	53%
Products prices		6%	9%	41%	44%
Delivery speed		15%	9%	36%	39%
Ease of communication with customer service when there is a problem with order		3%	16%	53%	28%
Ease of exchange and return of the products		15%	9%	58%	18%
Ease of communication with the pharmacist when there is any inquiry		10%	13%	45%	32%



percentage of respondents who were happy with the parameters mentioned above is shown in **Table 3.2.8**. Consumers express satisfaction with online pharmacy purchases. More than 50% of users were very satisfied with the Delivery of a complete order of medicines without any missing product, 53% users were happy with the Product's condition and packing. 49% of respondents contended with the Quality of the products, 44% of respondents were well convinced with the Products prices whereas 15% of users were not satisfied with the Delivery speed, exchange and return of the products. According to 39% of users, there is an Ease of communication with customer service when there is a problem with an order as well as an Ease of communication with the pharmacist when there is any inquiry i.e., 32%.

**Consumers’ satisfaction with the purchasing experience from online pharmacies:**

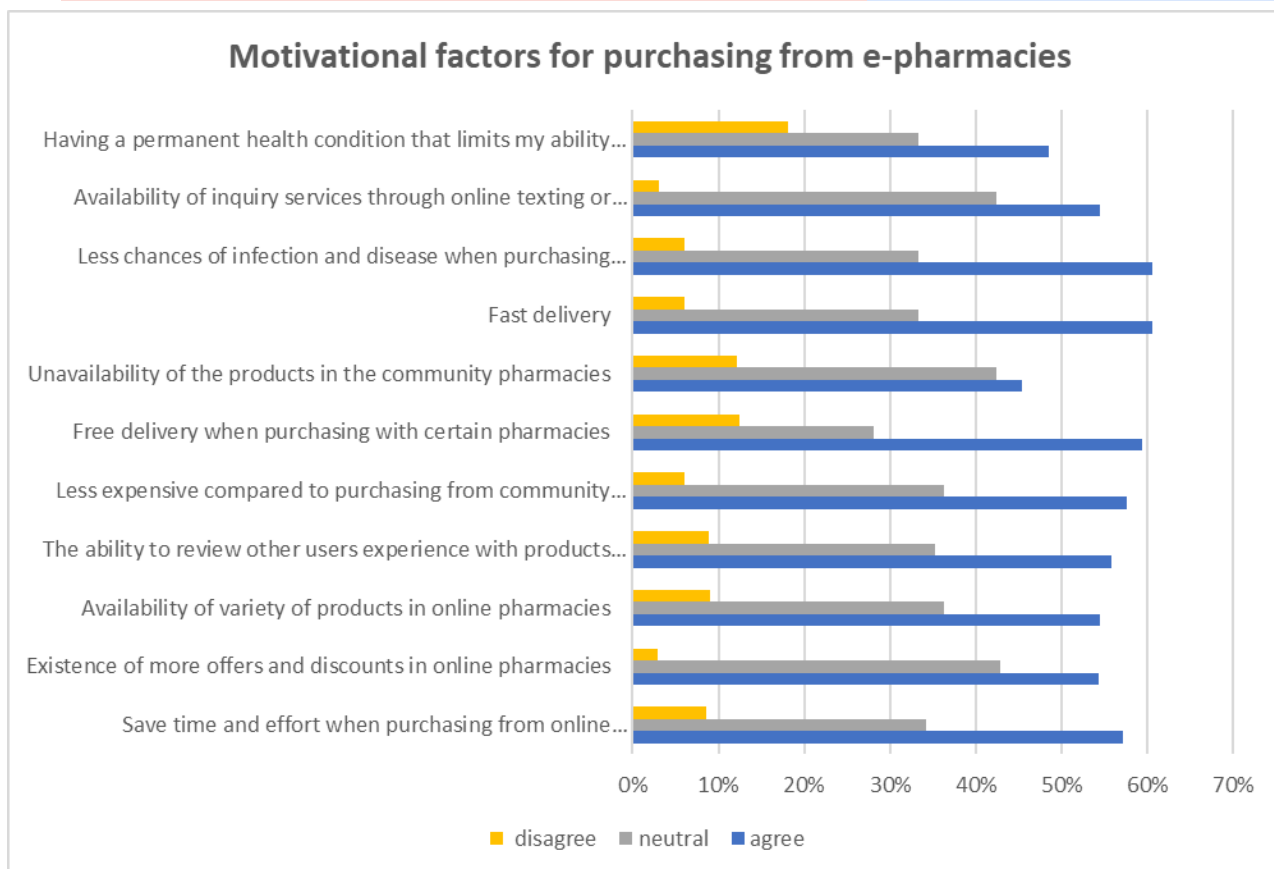
The bar graph is plotted Based on the percentage of consumer satisfaction with the Quality of the products, Delivery of complete orders without any missing product, Product condition, and packing, Product prices, Delivery speed, customer service when there is a problem with an order, ease of exchange, and return of the products, Ease of communication with the

pharmacist when there is any inquiry, The majority of survey respondents are satisfied with the accessibility provided by the e-pharmacies.

**Motivational factors for purchasing from e-pharmacies.**

Motivational factors for purchasing from e-pharmacies	Agree	Neutral	Disagree
Save time and effort when purchasing from online pharmacies	57%	34%	9%
Existence of more offers and discounts in online pharmacies	54%	43%	3%

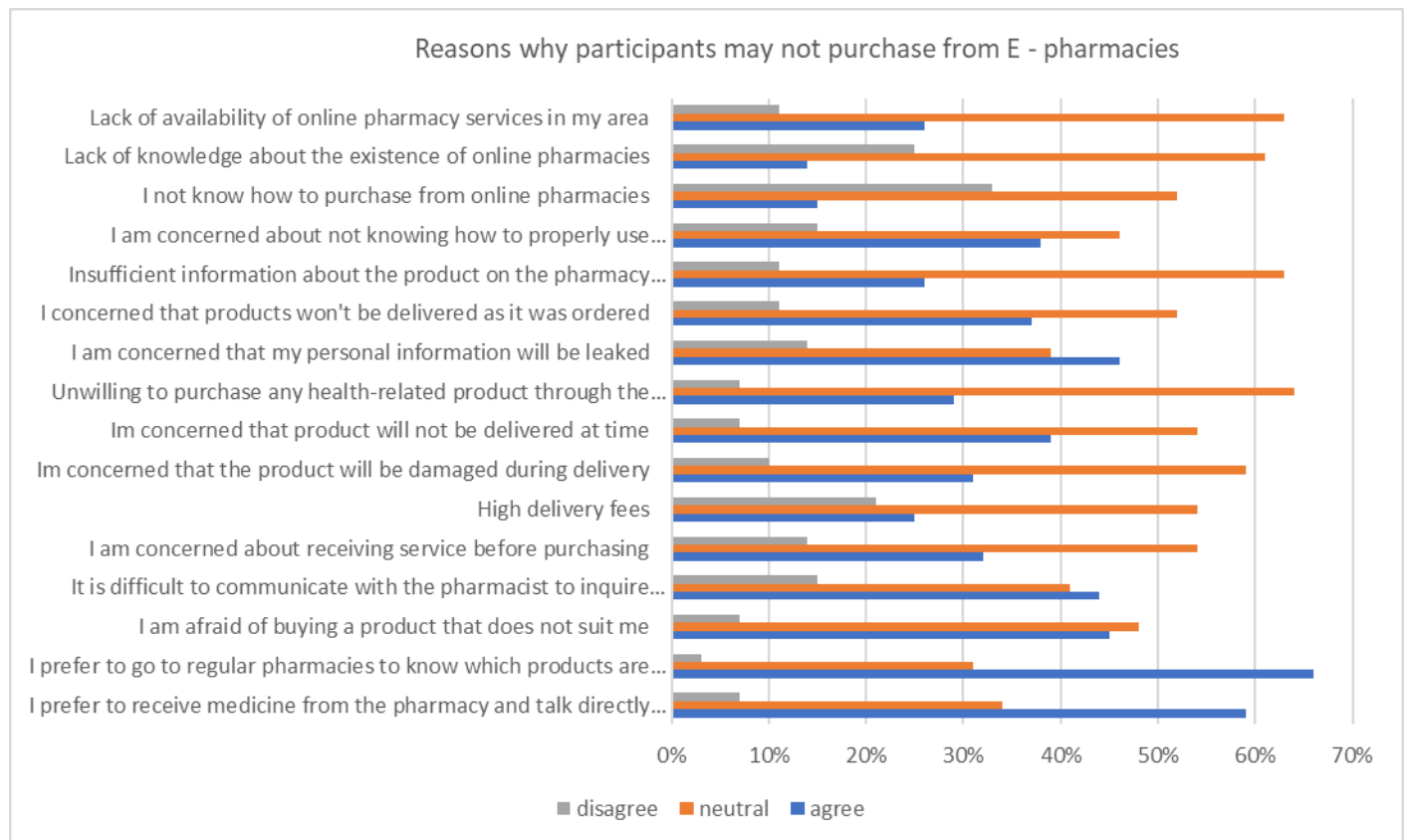
Availability of variety of products in online pharmacies	55%	36%	9%
The ability to review other users experience with products or services provided	56%	35%	9%
Less expensive compared to purchasing from community pharmacies	58%	36%	6%
Free delivery when purchasing with certain pharmacies	59%	28%	13%
Unavailability of the products in the community pharmacies	45%	42%	12%
Fast delivery	61%	33%	6%
Less chances of infection and disease when purchasing from online pharmacies	61%	33%	6%
Availability of inquiry services through online texting or phone calling	55%	42%	3%
Having a permanent health condition that limits my ability to go to regular pharmacies	48%	33%	18%



### Reasons why participants may not purchase from E – pharmacies

Reasons why participants may not purchase from E - pharmacies	agree	neutral	disagree
I prefer to receive medicine from the pharmacy and talk directly to pharmacist	59%	34%	7%
I prefer to go to regular pharmacies to know which products are available	66%	31%	3%
I am afraid of buying a product that does not suit me	45%	48%	7%
It is difficult to communicate with the pharmacist to inquire about the product	44%	41%	15%

I am concerned about receiving service before purchasing	32%	54%	14%
High delivery fees	25%	54%	21%
Im concerned that the product will be damaged during delivery	31%	59%	10%
Im concerned that product will not be delivered at time	39%	54%	7%
Unwilling to purchase any health-related product through the internet	29%	64%	7%
I am concerned that my personal information will be leaked	46%	39%	14%
I concerned that products won't be delivered as it was ordered	37%	52%	11%
Insufficient information about the product on the pharmacy website	26%	63%	11%
I am concerned about not knowing how to properly use medication	38%	46%	15%
I not know how to purchase from online pharmacies	15%	52%	33%
Lack of knowledge about the existence of online pharmacies	14%	61%	25%
Lack of availability of online pharmacy services in my area	26%	63%	11%



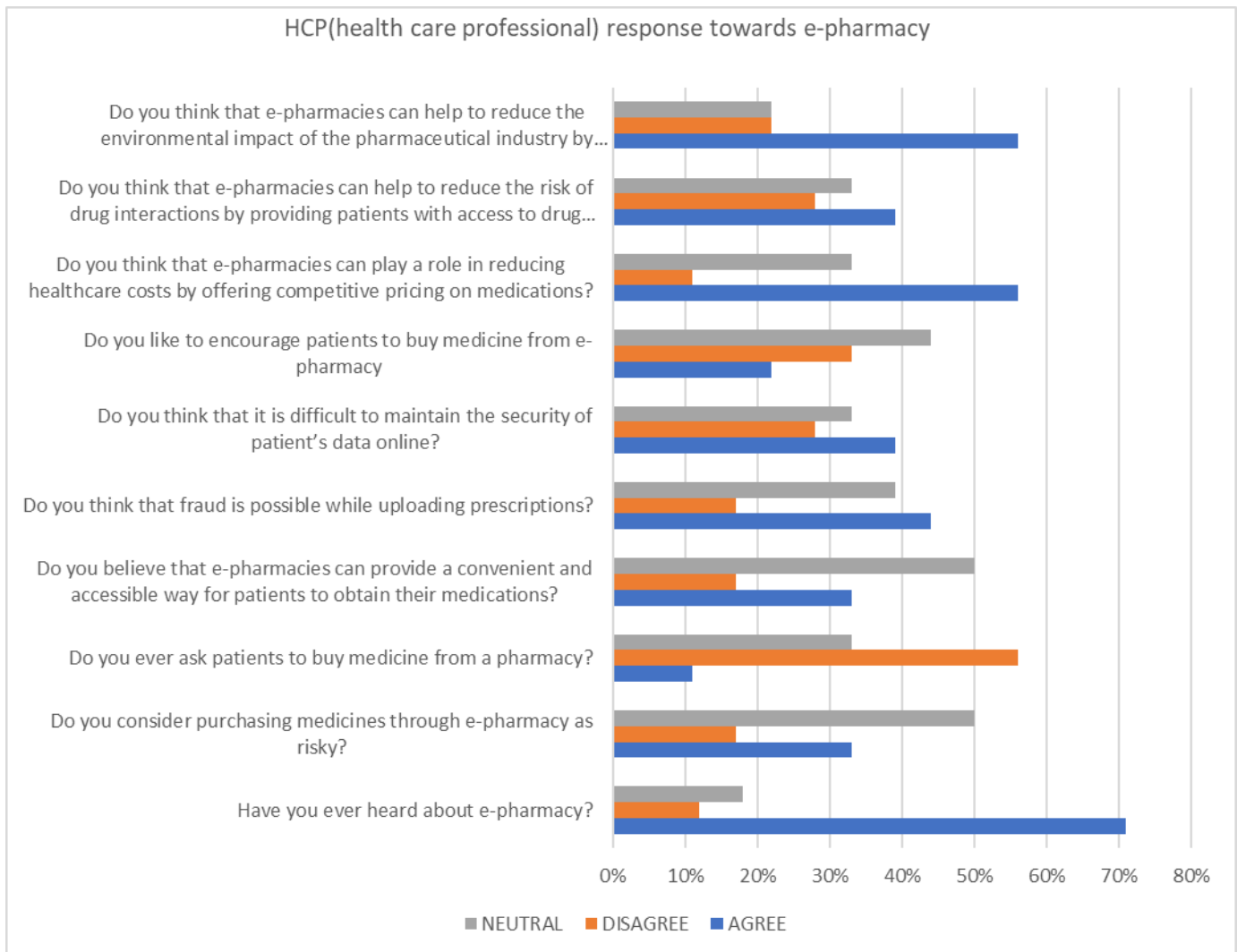
**Table 3.2.9 Motivational factors for purchasing from e-pharmacies**

This research article explores the driving forces behind consumer choices in e-pharmacy transactions. The frequency and percentage of respondents who are motivated to purchase medicines from online pharmacies are shown in **Table 3.2.9** More than half of the respondents that is 57% respondents use e-pharmacy apps to Save time and effort. where 54% of users purchase medicines through online apps because of more offers and discounts given by online pharmacies. The availability of a variety of products also influences the users to buy medicines from online pharmacies. According to respondents, the ability to review other users' experience with products or services provided is one of the plus points considered while purchasing from e-pharmacies. Some pharmacies offer free delivery of medicines also influences users to use online apps. 61% of respondents expressed satisfaction with the Fast delivery of medicines. Some respondents use e-pharmacies because of the Unavailability of the products in the community pharmacies.61%

of respondents say there are fewer chances of infection and disease while purchasing from online pharmacies. Some respondent's permanent health conditions also limit their ability to go to regular pharmacies.

**Table 3.2.10 Reasons why participants may not purchase from E – pharmacies**

Participants may hesitate to purchase from E-pharmacies due to various concerns 29% of respondents are Unwilling to purchase any health-related product through the Internet. 32% say It is difficult for them to communicate with pharmacists to inquire about the product.59% of users don't use online pharmacies because they prefer to receive medicine from pharmacies and talk directly to pharmacists, they are afraid of buying a product that does not suit them. About 31% of users say they are concerned that the product will be damaged during delivery. They believed products wouldn't be delivered as it was ordered and also the product would not be delivered on time. 66% of users prefer to go to regular pharmacies to know which products are available. 26% of respondents don't purchase medicines online because they think their personal information will be leaked. High delivery fees also limit the users to use e-pharmacy apps. Insufficient information about the product on the pharmacy website is one of the reasons why users don't prefer to purchase from e-pharmacies. Some respondents don't use online apps because they are not know how to purchase from online pharmacies, they have a Lack of knowledge about the existence of online pharmacies and a Lack of



knowledge about the existence of online pharmacies.

### Opinion of HCPs (healthcare professionals) and retail pharmacy owners regarding e-pharmacies

Healthcare professionals are a diverse group of individuals who work together to promote, protect, and restore the health of individuals and communities. They encompass a wide range of disciplines, each with its unique focus and expertise.

Here are some of the most common types of healthcare professionals: Doctors, Nurses, Physician assistants, Pharmacists, Dentists, Therapists, and Mental health professionals. In addition to these core disciplines, many other types of healthcare professionals play important roles in the healthcare system. These include nutritionists, dietitians, optometrists, chiropractors, and public health workers. All healthcare professionals share a common goal: to improve the health and well-being of individuals and communities. They work together to provide a comprehensive range of services that meet the needs of their patients.

Healthcare professionals (HCPs) and retail pharmacy owners have mixed opinions on e-pharmacy apps. Here's a summary of their views:

#### HCP (health care professional) response towards e-pharmacy

Healthcare professionals (HCPs) exhibit varied responses to e-pharmacies. Research reveals a spectrum of attitudes, ranging from skepticism about online platforms to recognition of their convenience. Understanding HCP perspectives is crucial for optimizing collaboration and ensuring effective integration of e-pharmacy services into healthcare systems. HCP Respondents have requested a series of questions to assess their common awareness, perception & and behavior

HCP(health care professional) response towards e-pharmacy	AGREE	DISAGREE	NEUTRAL
Have you ever heard about e-pharmacy?	71%	12%	18%
Do you consider purchasing medicines through e-pharmacy as risky?	33%	17%	50%
Do you ever ask patients to buy medicine from a pharmacy?	11%	56%	33%
Do you believe that e-pharmacies can provide a convenient and accessible way for patients to obtain their medications?	33%	17%	50%
Do you think that fraud is possible while uploading prescriptions?	44%	17%	39%
Do you think that it is difficult to maintain the security of patient's data online?	39%	28%	33%
Do you like to encourage patients to buy medicine from e-pharmacy	22%	33%	44%
Do you think that e-pharmacies can play a role in reducing healthcare costs by offering competitive pricing on medications?	56%	11%	33%
Do you think that e-pharmacies can help to reduce the risk of drug interactions by providing patients with access to drug information and interaction checkers?	39%	28%	33%
Do you think that e-pharmacies can help to reduce the environmental impact of the pharmaceutical industry by reducing the need for paper prescriptions and packaging?	56%	22%	22%

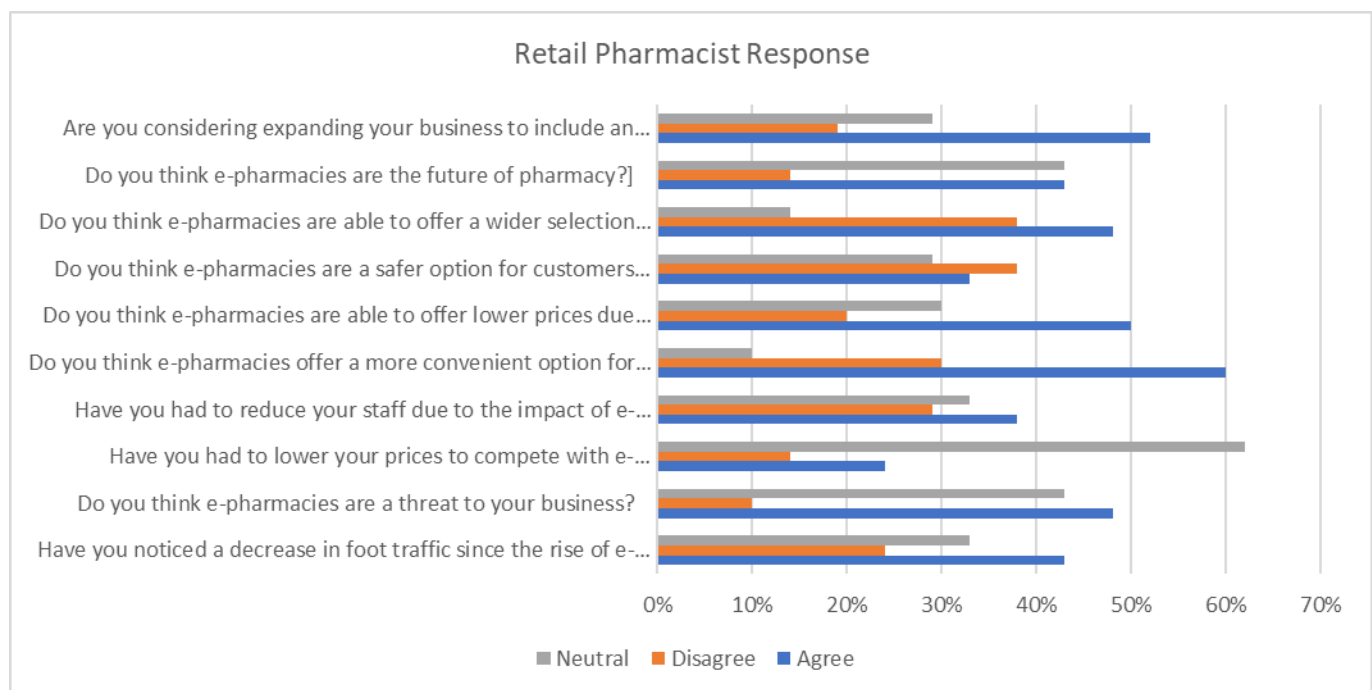
**Table 4.1 shows** 71% of HCPs are aware of online pharmacies but 33 % of HCPs think that purchasing medicines through e-pharmacy is risky. 56% disagree with asking their patients to buy medicine from e- pharmacy because only



33% of them believe that e-pharmacies can provide a convenient and accessible way for patients to obtain their medications. 44% think that there is the possibility of fraud while uploading prescriptions and it is difficult to maintain the security of patient’s data online. They are less likely to encourage patients to buy medicine from a pharmacy. On the other hand, 56% of HCPs think that e-pharmacies can play a role in reducing healthcare costs by offering competitive pricing on medications and 39% of HCP respondents believe that e-pharmacies can help to reduce the risk of drug interactions by providing patients with access to drug information and interaction checkers. According to 56% of HCPs e-pharmacies can help to reduce the environmental impact of the pharmaceutical industry by reducing the need for paper prescriptions and packaging.

#### 4.2 retail pharmacy owners\pharmacist response

Retail Pharmacist Response	Agree	Disagree	Neutral
Have you noticed a decrease in foot traffic since the rise of e-pharmacies?	43%	24%	33%
Do you think e-pharmacies are a threat to your business?	48%	10%	43%
Have you had to lower your prices to compete with e-pharmacies?	24%	14%	62%
Have you had to reduce your staff due to the impact of e-pharmacies?	38%	29%	33%
Do you think e-pharmacies offer a more convenient option for customers?	60%	30%	10%
Do you think e-pharmacies are able to offer lower prices due to their lower overhead costs?	50%	20%	30%
Do you think e-pharmacies are a safer option for customers due to their strict regulations?	33%	38%	29%
Do you think e-pharmacies are able to offer a wider selection of medications than traditional pharmacies?	48%	38%	14%
Do you think e-pharmacies are the future of pharmacy?]	43%	14%	43%
Are you considering expanding your business to include an online presence to compete with e-pharmacies?	52%	19%	29%



**Table 4.2 retail pharmacist response:**

In the research article, pharmacists' responses to e-pharmacy were studied. Findings indicated a mix of apprehension and acceptance. While some embraced the digital shift for convenience, others expressed concerns about patient safety and the impact on traditional pharmacy practices, highlighting the complex dynamics in their attitudes.

43% of pharmacists have noticed a decrease in foot traffic since the rise of e-pharmacies. 43% are still in dilemma that e-pharmacies are a threat to their business, and 38% had to reduce their staff due to the impact of e-pharmacies. 60% of respondents think e-pharmacies offer a more convenient option for customers. 50% believe e-pharmacies can offer lower prices due to their lower overhead costs. 38% of pharmacists don't think e-pharmacies are a safer option for customers. more than 40% consider e-pharmacies can offer a wider selection of medications than traditional pharmacies. 43% of pharmacist have the opinion that e-pharmacies are the future of pharmacy and 52% are willing to expand their business to include an online presence to compete with e-pharmacies.

**5. Strategy to Attract New Age Customers for E-Pharmacy:**

To attract new-age customers to an E-pharmacy, a multifaceted approach consisting of convenience, technology, and trust-building is key. Creating user-friendly interfaces and mobile apps for seamless browsing and purchasing is one of the strategies to attract new-age customers. Implementing AI-driven recommendations tailored to individual health needs, and enhancing the personalized shopping experience will help to attract and retain customers.

Focusing on transparency and security regarding sensitive information, ensuring robust encryption and adherence to data privacy regulations will build trust among new-age customers. In corporations, telemedicine services for consultations and guidance can be a reason to satisfy new-age customers.

Embracing social media and influencer marketing to educate and engage customers on health and wellness topics is one of the strategies. Leveraging content marketing with blogs, videos, or podcasts to provide valuable insights, fostering trust, and positioning the brand as a knowledgeable authority in the field can gain more customers.

Offering subscription models for medication refills, discounts, or loyalty programs to incentivize repeat purchases can help retain existing customers. Lastly, efficient and timely deliveries, reinforcing reliability and convenience, are important for retaining new-age customers in the competitive E-pharmacy landscape.

**6. Discussion**

The significant findings of the study are mentioned in the section. The age below 25 years bracket is where most users of various e-pharmacy sites are familiar. Since this generation is more digitally oriented than previous ones and will continue to utilize e-pharmacy in the future, there has been an increase in usage and awareness of these applications. Major sources for customer awareness of E-Pharmacy were advertisements from companies for both male and female customers followed by social media then web searches and word of mouth. In terms of education level, nearly two-thirds of the respondents in our survey reported being postgraduate students. According to a study, 49.1% of customers prefer to buy medicines online through e Pharmacies and they were aware of e-pharmacy before covid 19. The results of the study reveal that more than half of the respondents were in favor of using the offline method for the purchase of medicines. A sequence of questions was asked connecting

to the respondents' behavior, and knowledge in, the online purchase of medicines through online pharmacies. The responses are taken from consumers to know the behavior, and HCPs (health care professionals), retail pharmacy owners\pharmacists' opinions are collected on how there are encourage the e-pharmacies.

The results of our survey reported that about 16% of the respondents buy medicines monthly from E-pharmacies & and nearly half of the respondents were in favor of convenience facilities provided by E-pharmacy. In the case of HCPs, more than half of HCPs disagree with suggesting their patients buy medicine from e-pharmacy due to the risk associated with it, the security of patients' data online, and the possibility of fraud. Many pharmacists report a decrease in foot traffic due to e-pharmacies, with 43% fearing them as a threat. while more than half find e-pharmacies convenient. Many of them see e-pharmacies as offering a broader medication selection. Most pharmacists views them as the future, and half of them are open to expanding their business online to compete.

## 7. Limitations of the Study

There are a few restrictions in the current study, including 668 respondents made up the study's sample size, which may not accurately represent all of India's citizens. In addition, respondents can organize their answers under their preferences when responding to the questions. However, because they were cautious about answering some questions, respondents might have given only some information. This could be a significant roadblock in a research endeavor.

## 8. Conclusion

The outcome of the present study points out that overall there was good awareness regarding online pharmacies but buying medicines through E-Pharmacy is not very common and customers prefer to buy medicines more through offline retailers in this current sample. As the bulk of our responders were below the ages of 25 years, it became visible that younger respondents were more vigorous with online purchases of medicine. This was most likely elucidated by the fact that younger respondents were more knowledgeable in the use of digital technologies and were more responsive to the possible benefits of online purchasing. New-age marketing techniques can help to expand the e-pharmacy business.

Healthcare professionals are still not really in favor of suggesting online pharmacies to their patients due to safety and risk issues, whereas pharmacists view e-pharmacies as a threat to their business and are willing to expand their business to include an online presence to compete with e-pharmacies.

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