



Growth Of E-Commerce After Covid 19 With Special Reference To E-Pharmacy

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Abstract

In the past, handwritten prescriptions were the preferred method for distributing medications, but the boom in e-commerce has replaced this method, and now medications are distributed online using electronic prescriptions, also referred to as e-pharmacies or online, internet, cyber, or tele pharmacies. If the e-pharmacy model is held between largely access to the medicines for the under-served population, it is anticipated that pharma sales in India could be affected by it by approximately 5–15%. The current study is to understand the changes in the field of telemedicine after the emergence of pandemic COVID 19.

Keywords- Telemedicine, COVID-19, E-pharmacy, prescription, e-commerce.

Introduction

Indian Government has also taken good measures to develop the health sector. The government has launched some programs such as Make in India, Digital India, Jan Aushadhi, Telemedicine, and E-healthcare which are helping rural parts of India to improve their health. The IIPA (Indian Internet Pharmacies Association) is also working with the Government of India to bring changes in regulations. Linkage of Aadhaar UID number to prescription is a significant suggestion for avoiding the misuse of online sale of drugs.

In the last two decades, internet has become a part of everyone's life. In fact, during the pandemic, internet has been able to change the way in which the common people carry out their everyday chores. It has, in addition, provided a platform for the laypersons to educate themselves about various aspects of their health. Online shopping has emerged as a significant aspect of this internet awareness. Combination of the availability of health-related information and opportunity of online shopping of medicines has led to the practice of e-pharmacy. An online Pharmacy is an E-commerce portal which offers medicines to be delivered directly to the consumers. Drugs sold through this platform include not only the performance enhancing and lifestyle drugs but also the life-saving drugs including those belonging to the category of analgesic, cardiologic and psychiatric drugs. According to a Mark-Monitor report, more than 3000 websites were reported to be selling prescription drugs. In another report by US National Association of Boards of Pharmacy 5859 Internet outlets were quoted as selling

prescription medicines (Orizio et al., 2011).

Internet pharmacies offer a plethora of benefits. They are convenient and they facilitate the consumers to avoid hassles like going to pharmacies in bad weather, parking issues near pharmacies, long queues and waiting time for filling of prescription. For patients with limited mobility as well as those who are living far from pharmacies, authentic Internet pharmacies prove to be a great asset (Jain et al., 2017).

E-PHARMACY REGULATION IN INDIA

The Drug Control Administration is separate for each state. The Pharmacy Act of 1948, the Drug and Cosmetics Act of 1940, the Indian Medical Act of 1956, and the Drugs and Cosmetic Rules of 1945 are the laws that govern pharmacy regulation. The Information Technology Act of 2000 also defines laws related to e-commerce.

In terms of India, there are no specific laws governing telemedicine and e-health. In essence, there is no legal oversight of online pharmacies. We found that the laws governing the E-pharmacy model were ambiguous in their applicability, allowing major players to exploit this for the benefit of their own businesses. It appears to be very difficult to control, monitor, and track the sale of drugs through e-pharmacies because there are no clear regulations regarding the sale of drugs over the internet. However, there are some RULES that the Indian e-pharmacies must adhere to.

Salient points of the Draft Rule:

- For the sale of medications online, it is necessary to have an e-pharmacy portal, keep all client and pharmacist information private, including prescription information, and always adhere to applicable Indian information technology laws.
- Only cash or credit cards are accepted for drug purchases from online pharmacies, and paperwork must be kept track of.
- The dispenser's name, address, and licence number must be included on the memo.
- The memo should include all relevant drug sales information, such as names, quantities, batch numbers, expiration dates, and manufacturer names.
- The memo should include information about the electronic pharmacy, such as the name of the registered pharmacist, the charge's address, and the digital signature.
- The memo should include information about the electronic pharmacy, such as the registered pharmacist-in-name, charge's address, and digital signature.
- Schedule X drugs may not be purchased from online pharmacies.
- The relevant authorities are required to inspect the location from which the E-Pharmacy business is operated every two years.
- Every prescription obtained via the E- Pharmacy portal must be verified by a registered pharmacist, who must also thoroughly check the patient's name and registered doctor information.

Advantages of E-Pharmacy: -

Improved Range: Owing to the limitation of space, retail drug stores can just keep a restricted stock, which generally results in a customer visiting numerous stores to get a prescription filled. On the other hand, E-Pharmacies can reach for supplies at multiple stores across the country at any point of time.

Improved Patient Compliance: Many e-Pharmacies offer additional data to customers, for example, information regarding drug interaction, side effects, reminders for taking the next dose, reminder for approaching exhaustion of supplies etc. This kind of information leads to improved compliance.

Anonymity: E-pharmacies provide anonymity to the patient. This discreetness, in turn, encourages them to share doubts/queries regarding the medications that they are uncomfortable to ask in busy off-line stores where they are face to face with people to avoid the feelings of pity, shame, ridicule etc.

Convenience: E-pharmacies offer much higher convenience as compared to in-person pharmacies because of home delivery, especially for the house-bound patients like senior citizens, residents of remote areas, mobility issues due to some sickness or those having too busy schedules.

Rare Disease Treatment Availability: Despite their high prices due to low sales volume, the rare disease treatment market is growing rapidly all over the globe. Services of e-pharmacies are not limited by this as they transact in medicines sourcing them from the entire country.

RESEARCH METHODOLOGY

In order to find answers to the questions raised by the research topic, the study was carried out using a quantitative analysis approach. Through the use of an online platform such as e-mail, Google form, WhatsApp, etc., a study that was based on a questionnaire was carried out for a period of four months. This study lasted for four months, and it consisted of twenty different questions. These questions were developed, validated, and distributed to 250 customers through random sampling. The questions have been crafted to be straightforward so that respondents, including elderly people, will be able to give quick and accurate responses on their own. The respondents were divided into groups according to a variety of criteria, including age, gender, place of residence, nationality, occupation, marital status, and so on.

The results of the study's 20 questions provide evidence that the research accomplished what it set out to do. The demographic profile of the research sample is covered in the first section of the questionnaire, which can be found here. It takes into account aspects such as gender, age, educational qualifications, marital status, income, occupation, and amount of money spent on the internet. The second section of the questionnaire is comprised of a variety of questions aimed at gaining an understanding of the purchasing habits and preferences of customers with regard to online pharmacies. And then, using things like tables, bar charts, pie charts, and the like, these responses are analysed.

DATA ANALYSIS AND INTERPRETION

1. Classification of Respondents on the basis of Age

Age Group

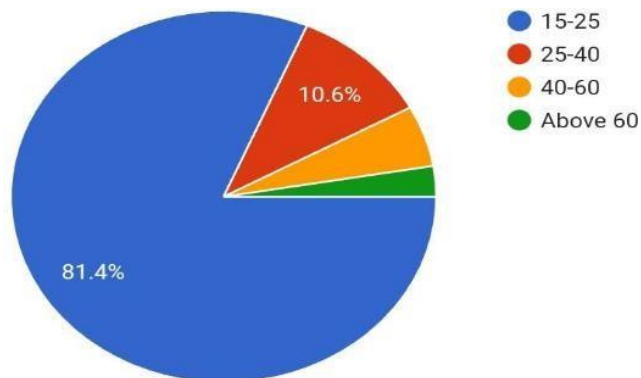


Fig 1

Interpretation

Out of all 115 respondents, we found that there were 81.4% respondents of age 15-25, 10.6% respondents of age 25-40, 5.3% respondents of age 40-60 and 2.7% respondents of age above 60.

2. Classification of Respondent on the basis of Gender

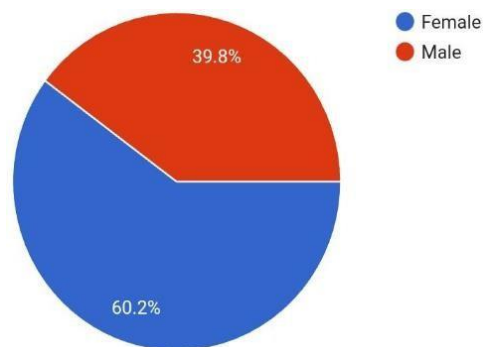


Fig 2

Interpretation

Among 115 respondents, we found that 39.5% were Male whereas 60.5% were Female.

3. Occupation of the respondent

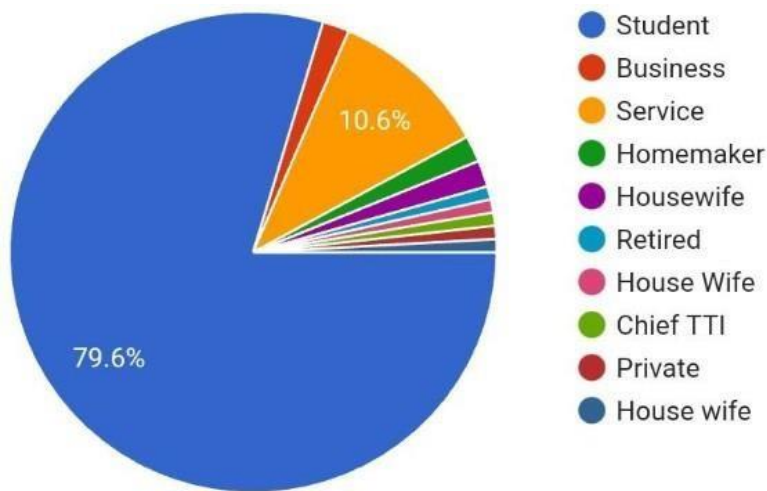


Fig 3

Interpretation

Out of all 115 respondents, 79.6% of them are students, 6.1% of them have their own business, 10.6% of them work in service sector and 3.7% of them are people who are retired or housewife.

4. Respondents using E-Pharmacy before Covid-19

<u>S.No.</u>	<u>Observation</u>	<u>No. of Respondents</u>	<u>Percentage</u>
<u>1</u>	<u>YES</u>	<u>26</u>	<u>22.6</u>
<u>2</u>	<u>NO</u>	<u>89</u>	<u>77.4</u>
		<u>115</u>	<u>100</u>

Table 1

Interpretation

Among the 115 respondents, we analyzed that only 26 respondents i.e. 22.6% of all respondents used E-PHARMACY before Covid-19 and most of them i.e. 89 respondents has never used an e-pharmacy app/website before.

5. Respondents using E-Pharmacy After Covid-19

<u>S. No.</u>	<u>Observation</u>	<u>No. of Respondents</u>	<u>Percentage</u>
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<u>1</u>	<u>YES</u>	<u>59</u>	<u>51.3</u>
<u>2</u>	<u>NO</u>	<u>56</u>	<u>48.7</u>
		<u>115</u>	<u>100</u>

Table 2

Interpretation

Among the 115 respondents, we analyzed those 59 respondents i.e. 51.3% of all respondents used E-PHARMACY after Covid-19 and 56 respondents i.e. 48.7% has still not used an e-pharmacy app/website after Covid-19 but still the percentage has increased as compare to the pre-COVID era.

6. Respondents Preferred Source of Obtaining Medicines

<u>S.NO.</u>	<u>Source</u>	<u>No. of respondent</u>	<u>Percentage</u>
1	Online	32	28.3
2	Retailer	65	56.6
3	Central Market	14	12.4
4	Others	4	2.7
		115	100

Table 3

Interpretation

Out of all 115 respondents, we found their preferred source of purchasing medicines – 28.3% of them prefer online shops, 56.6% of them prefer retail shops, 12.4% of them prefer central markets and 2.7% of them prefer other places such as Government supplies and local shops.

7. Respondent's Frequency to Purchase Medicine From E-Pharmacy Application

<u>S. No.</u>	<u>Frequency</u>	<u>No. of respondent</u>	<u>Percentage</u>
1	Weekly	3	2.6
2	Monthly	22	19.2
3	Yearly	51	44.3

4	Rarely	39	33.9
		115	100

Table 4

Interpretation

From all 115 respondents we found about their frequency of purchasing medicine online. 2.6% of respondents purchase medicines online Weekly, 19.2% of respondents purchase medicines online Monthly, 44.3% of respondents purchase medicines online Yearly and 33.9% of respondents Rarely purchase medicines online.

8. Factors Attracting Respondents towards E-Pharmacy

<u>S. No.</u>	<u>Factors</u>	<u>No. of respondent</u>	<u>Rank</u>
1	Easy to use	45	3
2	Less Expensive	34	4
3	Saves Time	62	1
4	Easily Available	58	2
5	No Contact Services	24	5
6	Others	2	6

Table 5

Interpretation

From above table we concluded the factors that attracted the respondents to venture into e-pharmacy. It was calculated on the basis of weighted average method. We can see that Saves time is the most popular factor that attracted respondents toward e-pharmacy, while No contact service is the least popular among the respondents. Other than those there are other factors too that the respondents considered while purchasing medicines online. Those are easily available, easy touse, less expensive and other factors.

9. Respondents Belief in Originality of Medicines Delivered

<u>S. No.</u>	<u>Observation</u>	<u>No. of Respondents</u>	<u>Percentage</u>
1	YES	57	49.6

2	NO	5	4.4
3	MAYBE	53	46.0
		115	100

Table 6

Interpretation

Among 115 respondents, we collected data regarding their belief in the originality of the medicines being delivered. 57 respondents believe that medicines being delivered are original, 5 respondents believe that e-pharmacy applications do not deliver original medicines while 53 respondents are not sure about whether e-pharmacy's medicines are original or not.

10. Respondent's Preferred E-Pharmacy Application

<u>S. No.</u>	<u>Application</u>	<u>No. of respondent</u>	<u>Percentage</u>
1	Netmeds	31	27.4
2	Pharma easy	36	31.0
3	ePharmacy	23	20.4
4	Medlife	12	10.6
5	1mg	13	10.6
		115	100

Table 7

Interpretation

Among 115 respondents, we collected data regarding their belief in the originality of the medicines being delivered. 57 respondents believe that medicines being delivered are original, 5 respondents believe that e-pharmacy applications do not deliver original medicines while 53 respondents are not sure about whether e-pharmacy's medicines are original or not.

11. Respondent's Attitude toward E-Pharmacy's Services

<u>S. No.</u>	<u>Attitude</u>	<u>No. of respondent</u>	<u>Percentage</u>
1	Very Satisfactory	22	19.5
2	Satisfactory	42	36.3
3	Neutral	47	40.7

4	Unsatisfactory	3	2.6
5	Very Unsatisfactory	1	0.9
		115	100

Table 8

Interpretation

In above data, we were trying to find out the respondent's attitude towards the services provided by the e-pharmacy application. Among 115 respondents, we found that 19.5% are very satisfied, 36.3% are just satisfied, 40.7% are neutral about their services, 2.6% are unsatisfied and 0.9% are very unsatisfied.

12. Respondents Willingness to Continue Buying Medicines Online

<u>S. No.</u>	<u>Observation</u>	<u>No. of Respondents</u>	<u>Percentage</u>
1	YES	48	42.1
2	NO	8	6.7
3	MAYBE	59	51.2
		115	100

Table 9

Interpretation

In above data, we tried to find out the respondent's willingness to continue their trade of purchasing medicines online. We found that, 48 respondents are willing to continue buy medicines online, 8 respondents have decided to end their venture to e-pharmacy and 59 respondents has yet to decide.

FINDINGS OF THE STUDY

From the survey questionnaire and interpretation of data, the major findings:

1. From demography of the respondents we find that the major i.e., 81.4% of respondents were of age group 15-25. In terms of gender, most of the respondents were female i.e., 60.5%. Most of the responses came from students while there were responses from people of different occupation also. And out of all respondents, most of them spend between Rs200 to Rs500 on their monthly internet expenditure.

2. Before Covid-19 only 22.6% of sample population used e-pharmacy application but after Covid-19, 51.3% of sample population has started using e-pharmacy application. This shows an increment of almost 127% of sample population using e-pharmacy application.

3. While finding out the respondent's preferred source of purchasing medicines, most of the sample population i.e., 56.6% of them still prefer retail shops for purchasing medicines. Still there were 28.3% of them that prefer online shops.

4. The frequency of purchasing medicines online were analysed as follows: 2.6% of respondents purchase medicines online Weekly, 19.2% of respondents purchase medicines online Monthly, 44.3% of respondents purchase medicines online Yearly and 33.9% of respondents Rarely purchase medicines online.

5. The most preferred factor for attracting respondents towards e-pharmacy was **Saves time**, while **No contact service** was the least popular among the respondents.

6. Other than those there are other factors too that the respondents considered while purchasing medicines online. Those are **easily available, easy to use, less expensive, etc.**

7. For the belief of sample population towards the originality of medicines delivered, 49.6% of respondents believe that medicines being delivered are original, 4.4% of respondents believe that e-pharmacy applications do not deliver original medicines while 46.0% of respondents are not sure about whether e-pharmacy's medicines are original or not.

8. While analysing the most preferential e-pharmacy site/app for purchasing medicines online it was interpreted that most of the sample population i.e., 31.0% prefer **Pharma easy**. While **Medlife** is the least preferred application. The respondents also preferred other application such as: **ePharmacy, 1mg and Netmeds**.

9. While trying to find out the respondents attitude towards the services provided by the e-pharmacy application. We found that 19.5% are very satisfied, 36.3% are just satisfied, 40.7% are neutral about their services, 2.6% are unsatisfied and 0.9% are very unsatisfied.

10. Respondent's willingness to continue their trade of purchasing medicines online was interpreted. We found that, 42.1% of respondents are willing to continue buy medicines online, 6.7% of respondents have decided to end their venture to e-pharmacy and 51.2% of respondents has yet to decide whether they will continue purchasing online or not.

Conclusion

With the help of study done, we can conclude Covid-19 has increased the chances of E-pharmacy in our nation. There has been a great growth of the customer base of e-pharmacy after covid-19 as most citizens shop online because they do not want to get affected by novel corona virus. The chances of continuity in use of e-pharmacy even after lockdown have also increased. But still there are many blocks which has become a hindrance in the growth of e-pharmacy. Factors like fraud, unethical practices, duplication, late delivery, stealing of personal information, etc. has become a kind of block chain.

Hence, it is important that Indian Government must think about the better regulation as it can be boon for the society as well as pharmaceutical industry in upcoming years. New laws should be implemented and strict actions should be taken against those who breaks such law.

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