

## E-Pharma in India

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### Abstract

In the world of IT there has been a great impact on the usage of E-Pharmacy. The purpose of this research is to identify and empirically validate the various factors for adoption and usage of e-pharmacy for purchasing medications by consumers. The idea of electronic pharmacy and the selling of drugs online has been in vogue around the world for more than two decades.[7]

Online Pharmacy or E-Pharmacy has become an easier way to get medicines, bookings of certain lab test done at home because rather than going outside for purchasing medicines, getting health check-up done, it is an easier method to get these things completed just with few clicks. Ensuring the privacy and safety of user and their demands, this industry is booming up very fast.[4] Many of these industries offer overnight delivery to avoid delay. Prescriptions are also checked for medicines ordered by verified doctors. The recent worldwide pandemic has prompted several companies to turn to the online market. The pharmaceutical industry is one such significant and crucial in India. There has been an upsurge in online pharmacies throughout the Indian subcontinent over the last 3–5 years.

### Keywords:

*E-Pharmacy, Privacy, Safety, Prescriptions, Verified Doctors*

### Introduction:

One of the recent innovations of the industry in the health sector, which is still in the nascent stage is e-pharmacy. E-pharmacy or online selling of medicines, help the patients and the consumers get their medicines delivered at their doorsteps without having to leave their home. As the patients suffering from chronic diseases depends on the medicines for the rest of his life, the retailers sometimes due to shortage of medicines fail to satisfy the interests of the patient, which makes the patient to run from one pharmacy to another.

Online pharmacies are passing this mileage of operational efficiency to consumers in terms of price discounts. Online pharmacies can ensure the timely delivery of medicines to semi-urban and rural areas for chronic disease patients. The emergence of online pharmacy has created a big challenge for conventional retail pharmacies in India as online pharmacy offers certain benefits to consumers. The privacy of information given by the customer while purchasing medicine online is a matter of great concern for the customer. Online pharmacy is preferred by patients with chronic diseases as they receive a 20 to 30% discount on medicines purchased in bulk or refilled for monthly consumption. The online pharmacies have various advantages over conventional pharmacies because access to medicines became easy, especially for elderly or physically challenged or housebound patients. Anytime, anywhere access, availability of multiple brands of medicines, privacy in consultancy and information search on embarrassing medical conditions and price discounts on the purchase of medicines are some reasons that make online pharmacies acceptable in Indian consumers. Online pharmacy provides services to patients 24\*7 throughout the year where patients can compare prices of different brands or can find a better generic option which can further lead to substantiate savings for patients. Customers may get medications from online pharmacies and have them delivered safely and comfortably to their homes. Customers may easily download these apps to their smartphone, add things to their basket, and then check out because the majority of them feature a vast selection of healthcare products. Real drugs can be quickly delivered to customer's doorway with only a few

clicks and perhaps online savings. In India, applications such as Netmeds, 1mg, Practo, PharmEasy, Apollo Pharmacy, and Medlife are becoming more popular. [8]

In the times of pandemic, online shopping has gained a lot of popularity. This is because it is more convenient to get products delivered at home, while abiding the lockdown restrictions. Online shopping for essentials and medicines is growing at a fast pace.[8]

**Working Model of E-Pharmacy [3]**

- I. Mobile-based application for consumers to upload the scanned copy of their prescriptions and place requests for medicines.
- II. Every order that is received to be verified and checked by a team of registered pharmacists.
- III. The registered pharmacists to forward the validated prescriptions to the pharmacy store from where the medicines are dispensed.
- IV. The web or mobile-based platform to be governed under the IT Act 2000 and only act as a platform to facilitate connection between consumer and pharmacy store. The IT Act 2000 applies to companies that do business in India. This includes entities registered in India, outsource there, and maintain servers with in the country’s borders. The act covers all activity involving online exchanges and electronic documents. If your only connection with India is having customers there, you are not held to the IT Act.

**Data Analysis [2]**

In the process of analysis respondents are classified according to demographic factors. Information of classification of data is presented in the Table 1

Demographics		Frequency	Percent
Gender	Male	116	52.7
	Female	104	47.3
Age group of respondents	Up to 25 years	122	55.5
	26 to 40 years	41	18.6
	40 to 60 years	57	25.9
Qualification of respondents	Undergraduate	49	22.3
	Graduate	92	41.8
	Postgraduate	68	30.9
	Professional	11	5.0

Table 1: Demographics [2]

Table 1 indicates that there is total 220 respondents from which for gender there are 116 are male respondents and 104 are female respondents. For age, there are 122 respondents of up to 25 years of age group while 41 respondents are between 26 to 40 years and remaining 57 are between 40 to 60 years of age group. It also indicates that 49 respondents are undergraduate, 92 respondents are graduate while 68 are postgraduate and remaining 11 respondents are professional.

## How is E-Pharmacy disrupting pharma retail?

Traditional pharma retail in India is highly unorganized and fragmented with close to 8.5 lakh unorganized retailers contributing more than 90 per cent of sales. The unorganized nature of the space tends to a host of issues – frequent stockouts, sale of spurious and substandard drugs, and limited access. e-Pharmacies look to disrupt the market while addressing these issues –

- I. **Ensuring safer drugs** – A report by the WHO found that about 10.5 per cent of medicines sold in low and middle-income countries, including India, are substandard and falsified. e-Pharmacies ensure a genuine drug supply, sourcing it directly from manufacturers and licensed resellers.
- II. **Improving access** - The medical needs of rural India are underserved due to limited access to pharmacies. With an ever-expanding logistics network propelled by e-commerce over the past decade, e-pharmacies have an edge in serving the unmet medical needs of a vast population. At the moment, e-pharmacies are catering to 20,000+ pin codes, a number expected to increase further going forward.
- III. **Making drug affordable** - Conventional pharma supply chains are not optimised and have several gaps, causing wastage and greater costs for consumers. e-pharmacies save costs with better purchasing margins, efficient supply chains and inventory management leading to reduced prices for the end consumer.
- IV. **Ensuring drug availability** - An average offline pharmacy is limited to 6,000-8,000 SKUs in contrast to an online pharmacy which can cater 50,000+ SKUs, giving e-pharmacies a significant advantage. Powered by a digital backend, analytics and AI/ML e-pharmacies can better manage their supply chain – ensuring high fill rates of 95 per cent and avoiding stockouts common in traditional offline pharmacies.
- V. **Ensuring Health Check-up at Lower Cost** – Nowadays the cost of health check-up has been increased. But E-Pharmacies provide certain health check-ups with certain discounted rates and also there is no need of going to labs for getting the sample collected and also for collecting the reports[5].

## Benefits & Risks of E-Pharmacy [10]

Benefits	Risks
<ul style="list-style-type: none"> <li>• Lower Prices &amp; Discounts</li> <li>• Privacy</li> <li>• Convenience</li> <li>• Medical Information</li> <li>• Round the Clock Availability</li> <li>• Price Comparison</li> <li>• Availability of Generic Brands</li> </ul>	<ul style="list-style-type: none"> <li>• Unlicensed Dispensing</li> <li>• Counterfeit Drugs</li> <li>• Unknown Geographical Locations</li> <li>• Hidden Charges</li> <li>• Prices Fluctuations</li> <li>• Dispense medicine without valid Prescriptions</li> </ul>

**Comparison between E-Pharmacy & Offline Pharmacy [1]**

<b>E-Pharmacy</b>	<b>Offline Pharmacy</b>
<ul style="list-style-type: none"> <li>• <b>Ease of use and doorstep delivery of medicines within a short time. Beneficial to geriatric and physically disabled groups with chronic medication.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Physical movement is needed to procure medication. [9]</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Offer better pricing with added discounts. [9]</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Medicines are sold at MRP price.</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Offer a wide range of medicines and services because they integrate several retail pharmacies into a single platform.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Limited range of products and stock unavailability is a common problem. Customers have to visit several stores to purchase the desired item.</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Since patients have to provide personal information such as their contact number, address, and disease profile, data security can be a problem.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Customers do not have to provide any personal information at the time of purchase.</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Apart from the sale of medicines, E-pharmacies also provide value-added services such as E-consultation, E-diagnostic services.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Offline pharmacies only deal with the sale of medicines.</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Since a network of pharmacies is integrated into one platform, working capital and overhead costs are reduced, thereby increasing margins.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Due to increasing competition amongst brick-and-mortar stores, offline pharmacies suffer from poor industry margins.</b></li> </ul>

**E-Pharmacy Draft**

The Union Health Ministry of India has come out with draft rules on sale of drugs by online / e-pharmacies with an aim to regulate online sale of medicines across India and provide patients access to genuine drugs from authentic online portals. The draft rules on "sale of drugs by e-pharmacy" states the following points:

- a. No person will distribute or sell, stock, exhibit or offer for sale of drugs through e-pharmacy portal unless registered.
- b. Any person who intends to conduct the business of e-pharmacy shall apply for the grant of registration to the Central Licensing Authority in Form 18 (AA) through the online portal of the Central Government.
- c. The application of registration of e-pharmacy will have to be accompanied by a sum of INR Rs. 50,000 while asserting that an e-pharmacy registration holder will have to comply with provisions of Information Technology Act, 2000 (21 of 2000).
- d. The details of the patient shall be kept confidential and not be disclosed to any person other than the central government or the state government concerned, as the case may be.
- e. The supply of any drug shall be made against a cash or credit memo generated through the e-pharmacy portal and such memos shall be maintained by the e-pharmacy registration holder as a record.

- f. New e-pharmacies have to be registered with the Central Drugs Standard Control Organization (CDSCO), India's apex drug regulator and central licensing authority.
- g. E-pharmacies have to take only one license in any state and can sell drugs all over the country even if they have one license.
- h. The sale of tranquilizers, psychotropic drugs, narcotics and habit-forming drugs has been prohibited through e-pharmacies portals.
- i. The premises of e-pharmacy shall be inspected, every 2 years by a team of officers authorized by the Central Licensing Authority, with or without the experts in the relevant field or the officers authorised by the concerned State Licensing Authority.
- j. The registration issued to any person for e-pharmacy will remain valid for a period of 3 years from the date of its issuance and a renewal of registration will have to be done in case it wants to continue.
- k. No e-pharmacy shall advertise any drug on radio or television or internet or print or any other media for any purpose.
- l. The e-pharmacies portals are mandatory required to have at least 12 Hours and all seven days a week customer support and grievance readdress of all stakeholders. The customer support should have a registered pharmacist in place to answer the queries of customers through such customer helpline [6].

## Objective & Conclusion of the Research

The objective for conducting the Research on this topic was to find that how many people are using E-Pharmacy and what are their views or concerns while using the E-Pharmacy apps.

Demographic data is used as a Secondary source of data in which one can see that how many users of different age groups are using it and why there are less no. of people in the age group of 40-60 are making less use of E-Pharmacy as compared to people up to age of 25.

After conducting the Research on this topic I would like to conclude that the people should be made aware about the Rules and Regulations imposed and the steps taken by the government so that they can overcome their doubts on medicines delivered to them are real or fake.

At the moment, top E-Pharmacy players are 1mg, Netmeds, PharmEasy and others. Approx 150 start-ups are presently functioning as online pharmacies. In this regard, India needs a more efficient regulatory structure.

Also, the Government should work on minute loopholes – capping on the quantity of the medicine purchased online at a time so that the E-Pharmas can supply only that much medicines after referring the Prescriptions being verified.

Recognizing the potential of the online pharma market in the future(post Covid-19) major e-commerce companies such as Amazon, Reliance Retail have begun investing in E-Pharma business.

## References

1. The rise of E-pharmacy in India: Benefits, challenges, and the road ahead - PMC (nih.gov)
2. Journal of Pharmaceutical Negative Results |Volume 13|Special Issue 10
3. <https://www.researchgate.net>
4. <https://amity.edu>
5. <https://www.investindia.gov.in/team-india-blogs/e-pharmacies-bridging-gap-indian-healthcare>
6. [https://en.wikipedia.org/wiki/Online\\_pharmacy\\_laws\\_in\\_India](https://en.wikipedia.org/wiki/Online_pharmacy_laws_in_India)
7. <https://blog.ipleaders.in/regulation-e-pharmacies/>
8. <https://startuptalky.com/online-pharmacy-industry-india/>
9. Advantages of Buying Medicine from Online Pharmacy. [Last accessed on 2020 Oct 12].
10. from: <https://www.medlifecom/blog/advantages-buying-online-medicine-online-pharmacy/>
11. [www.jeitr.org](http://www.jeitr.org)(ISSN-2349-5162)