

## E-PHARMACY (Online Medical Store)

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**Abstract** – Our project E-pharmacy operates over the internet by selling prescribed drugs or medications online and sends orders to customers via the mail or other means. One of the technological advances that is set to create a significant demand in the next days is online pharmacy. When customers have a favorable opinion regarding online purchasing, it does not always transfer into regular purchase activity. The goal of this study is to look into the relationship between customer perceptions of values and dangers, as well as online buying attitudes and behavior, in the context of online pharmacy shopping. The convenience of purchasing medicines online has made it quite popular all over the world. Companies sell everything from prescriptions to other healthcare supplies on their websites. The Indian healthcare market is expanding rapidly, and both online and offline pharmacies are now operating equally.

**Key Words:** E-Pharmacy, Online Pharmacy, Online Medical Store, Medication, Medicine Stores online, Pharma store.

### 1. INTRODUCTION

An E-Pharmacy is a pharmacy that operates through the internet, providing pharmaceuticals and medicines and delivering them to clients' homes! As we can see, travelling out when we're sick to acquire prescriptions, or in circumstances where one medical store doesn't have all the meds we need, forcing us to search for another medical store, is a huge burden that takes time and energy. So, project E-Pharmacy aims to reduce this amount making things easy and convenient with the use of internet. Shopping of medicines and other medical products online is a good deal because it saves time, money, fuel and lots of other problems including traffic jam, natural disasters etc. (Kapil Sharma, Rinku Sharma, Feb 2016). Online medical shopping web application is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing online medicine shopping over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace. This web application is to reduce hardships faced by this existing system, also offers low cost ownership. Moreover, this system is designed by the particular need of the all users to carry out operations in a smooth and effective manner (Ashita S. Patil<sup>1</sup>, Rutuja S. Patil<sup>2</sup>, 2019). As many cases are seen where illegal selling of drugs is being reported (Brijnath, B. 2012) so to reduce this

we will be supervising each of the order placed and ensure that the prescription will be properly analyzed by the doctor then only customer will be able to receive order, in addition all the medicines will be verified and certified by the pharmacist before delivery.

### 2. OBJECTIVE

The study's goal is to look at and analyze the current situation in terms of the following two points:

- a) Conventional and online pharmacies
- b) The role of the government in this regard.

### 3. METHODOLOGY

The method for the preparation of paper is mainly used by reviewing the review article, various references etc. that are being resulted after referring to various articles and papers.

### 4. CASE STUDY

The Pharmaceuticals and Cosmetics Rules, 1945 govern the sale and distribution of drugs in the country. However, the rules make no distinction between offline and online drug sales. As a result, the issue is still controversial after more than seven decades. There are primarily two types of medications available in India:

- a) Prescription
- b) Non- Prescription

The problems stem from the sale of prescription medications over the internet. The following are the causes behind this debate: The Drugs and Cosmetics Rules of 1945 define some drugs that can only be sold with a prescription signed by a Registered Medical Practitioner (RMP).

Online pharmacies must accept prescriptions through scanned or electronic form to process purchase orders of prescription drugs otherwise it will be difficult to adhere the rules. (Antani & Shukla, 2015). According to the Information Technology Act 2000 "if a document is required to be signed under law, the document would be deemed to be in compliance with the law only if such information or matter is authenticated by means of an electronic signature." (Antani & Shukla, 2015).

As a result, if the RMP signs it with his electronic signature, a scanned copy of the prescription or a prescription in electronic form is valid. Because just about 1% of RMPs use electronic signatures, this is a huge task for these online

pharmacies. Apart from that, by the Drugs and Cosmetics Rules 1945, the drug must be distributed under his supervision, and he must create a note indicating the substance was supplied based on the prescription by the registered pharmacist. The concern now is how such a note can be written on a prescription that has been scanned or emailed. The location of sale is another issue that these internet pharmacies face. A license for the sale of a drug is provided to the license holder for a specific premise under the Drugs and Cosmetics Rules, 1945.

The advantages of online pharmacies are privacy, avail great choice, lower prices and convenience mainly. Similarly the disadvantages include lack of physical evaluation in place, some do not dispense drugs through licensed pharmacies, some online pharmacies do not adequately safeguard patient's health, some do not adequately protect personal and financial information, some do not give their address and /or telephone number, prices may change quickly, some may sell drugs which are dangerous if not taken under medical supervision(Jain et al. 2017).

Consumers may place orders over the Internet without first consulting a doctor or pharmacist, which is exceedingly dangerous. They may be unable to discern between legitimate online pharmacies and illicit commercial sites offering any type of medical medication due to a lack of knowledge. The United States National Association of Boards of Pharmacy (NABP) has developed the Verified Internet Pharmacy Practice Sites (VIPPS) programmed in this context to acquire customer confidence and to clearly distinguish between legitimate and unlawful sites. To get VIPPS certification, pharmacy must comply with the licensing and inspection requirements of their State and each State to which they dispense products. The pharmacy will display the VIPPS hyperlink seal on its website if they follow NABP compliance with VIPPS criteria. The criteria of VIPPS include patient rights to privacy, authentication and security of prescription orders, adherence to a recognized quality assurance policy, and revision of meaningful consultation between patients and pharmacists (Ovaskainen, 2001).

## 5. LITERATURE REVIEW

[1] International Journal of Advanced Research in Computer Science. May/Jun2017, Vol. 8 Issue 5, p1231-1235. 5p.

The e-pharmacy practices will provide a stepping stone for the growth of online pharmacy in the kingdom. As per P. Kumari and R. Nandal. This research paper discussing the various useful tools and techniques that are used in a development of a website. They also discuss about the procedure follow in a website, mostly focused on a local host named XAMPP tool. Next, we compare different development frameworks web application. In addition, we discuss life cycle model and framework development of web application.

[2] European Journal of Clinical Pharmacology, 58(9), 567–572. doi:10.1007/s00228-002-0519-5

In this article it is mentioned that a survey of public information published on global e-pharmacy web sites was conducted between July and September 2001. They used a meta-search engine, Copernic, and the search terms of 'online' or 'internet', and 'pharmacy', 'pharmacies' and 'medicines' to identify a sampling frame of global pharmacies. The aim of this study was to examine the quality of global e-pharmacies, defined as web sites selling controlled (drugs with the potential for addiction or abuse), prescription-only, pharmacist-only or pharmacy-only medicines.

[3] Pills, pluralism, risk and citizenship: Theorizing e-pharmacies. *Bio Societies*, 7(3), 294–307.

doi:10.1057/biosoc.2012.11

In this article the author has given theoretical concepts of risk, imagination and pharmaceutical citizenship to understand the growing popularity of e-pharmacies and online health-seeking. This article explored the interstices between medical pluralism, the social imagination, risk and the rise of the pharmaceutical citizen and how these theoretical ideas could determine online health seeking. The Three points were highlighted: first, the overlap in marketing techniques between e-pharmacies and drug-purchasing practices in low-income, second, the irony of pluralism and hybridism; and, third, the irony of risk and the role of the state.

[4] Web Application for Online. International Research Journal of Engineering and Technology (IRJET), Volume: 06 Issue: 04 | Apr 2019.

In this article it is discussed that how nowadays, many more online medicines shopping web applications are present and how consumers will order medicines whose sale is no mandatory without prescriptions. They have tried to overcome this problem by adding some authenticated online sale of medicines. First of all, consumer will upload the prescription of required medicines, in second stage that prescription will be analyzed by the Doctor on the site, at the end only approved prescription will be able to proceed forward to place the order. This will reduce the risk of illegal sale and also protect consumer from side effects due to the self-medication.

[5] Online Medical Store Finding and Availability of Medicine. Volume 7, Issue 3, Pages 2220-2226.

In this article it is discussed that how Cloud computing services provide the various services for healthcare applications. It has various benefits than other computing techniques like high storage space, flexible level and low cost. Cloud computing techniques are increases healthcare facilities for the affected people. Lading Wang et al., 2014 classified the various services of cloud computing in medical domain. The authors also have presented about privacy and security issues related with the healthcare applications.

[6] Online Medicines and Medical Products Shopping- A Brief Study. International Journal of Management and Applied Science, ISSN: 2394-7926 Volume-2, Issue-2, Feb.-2016.

Here the authors have described about how the shopping of medicines and other medical products online is a good deal because it saves time, money, fuel and lots of problems like traffic jam. Also, one medical may not provide all the medicines. So may go to another medical it wastes lots of time, money etc. will be saved. This will lead profit in the Government money also and it is environment friendly.

[7] Quality of global e-pharmacies: can we safeguard consumers? Published online: 29 October 2002. DOI 10.1007/s00228-002-0519-5.

They have discussed here about the selling of medicines by the internet which is a global issue. National pharmaceutical budgets are increasing around the world. Subsequent economic restraints may limit consumer access to medicines and encourage consumers to buy medicines in a price-competitive market via the internet. Safeguarding consumers and improving the quality of web sites that sell medicines across state and national boundaries is both complex and difficult. The challenge is to discourage fraudulent and misleading web sites but permit the development of innovative, ethical pharmacy services.

[8] E-pharmacies in India: Can they improve the pharmaceutical service delivery? J Glob Health. 2019;10(1):010301. doi:10.7189/jogh.10.010302.

By weighing the life-threatening risks of self-medication and dosing errors against the benefits of e-pharmacy, we propose – as a matter of public interest – that on-call pharmacists be made available to ensure validity of prescriptions as well as counsel e-pharmacy customers during drug purchase. An abundance of literature on the internet portrays pharmacies as a digital danger, and contributes to its longstanding negative perceptions. Considering India's growing burden of communicable and non-communicable diseases, we aim to establish that e-pharmacies can help improve India's unresolved medication access crisis. However, further research is warranted to confirm this and develop evidence-based policies for e-pharmacies.

[9] Health ministry issues draft rules to facilitate sales of drugs online.

This article contains the details of the act of government over the online drugs medications under section 12 and section 33 of the Drugs and Cosmetics Act, and other various laws. The draft comprises of six chapters covering process to obtain drug selling license, regulation of sale of drugs through e-pharmacy, roles of licensing authority, essentials of prescription, submission of data on electronic platform, inspection for verification of compliance, conditions for

grant of license to sell drugs by wholesale or distribute the same by a motor vehicle, suspension or cancellation of licenses, digitalization of forms etc. Supply of drugs by any e-pharmacy shall be made only through the electronic platform specified in rule 20. The e-pharmacy registered under rule 32

shall supply drugs within the state or states where it got registered. The applicants seeking registration of e-pharmacy need to furnish details of identity proof, registered pharmacists, compliance to good distribution practice, helpline facility for counselling the patient with respect to drug usage.

[10] Online pharmacies: desirable characteristics and regulations. Drugs & Therapy Perspectives. doi:10.1007/s40267-020-00727-9.

It is discussed that the online pharmacies sell product including prescript and non-prescript medicine also include herbal supplements. Online product of pharmaceutical offers lower prices than offline stores and are very convenient. It is useful for people residing in remote area, here it provides doorstep delivery and it is dispensed by licensed pharmacist. Some online pharmacies require a questionnaire to be completed before a purchase can be made, which helps them store consumer information. They say, Individuals ordering medicine online should receive proper supervision from trained healthcare professionals, perhaps by initially consulting with them before the online purchases are actually made. In order to combat all these issues, stricter regulation and implementation should be imposed, together with frequent monitoring of the licensing system, and verification of every online pharmacy and website.

## 6. CONSULTATION

Both online and offline pharmacies are licensed in the United States, but online pharmacies are only authorized to operate under particular conditions. At the same time, the Food and Drug Administration (FDA) is running a public awareness campaign about the risks of buying prescription medications online. They also explain the dangers of buying from a bogus online pharmacy, how to spot a bogus online pharmacy, and how to select a trustworthy online pharmacy. In this way, India may learn from the United States. In the case of internet pharmacies, the Indian government must consider patient privacy and security.

They can teach ordinary people about the safest ways to buy drugs online. In the future, they may be able to give a list of approved/accredited online pharmacies. Without a doubt, E-Pharmacy improves consumer convenience and access, which will benefit senior patients with chronic illnesses who must visit a pharmacy to purchase medications. There is a lot of confusion concerning e-pharmacies right now, especially among individuals who run offline business in this sector. E-commerce is nothing more than a movement in business

from the conventional mode to how business will be done in the future, and everyone will have to adapt to the changing trends (FICCI, 2016). E-Pharmacy is merely a technological innovation, according to (FICCI, 2016), hence it should be allowed and its benefits should be provided

to Indian consumers by safeguarding and enforcing rigorous regulatory controls to protect consumers' interests. They also proposed that the sale of narcotic pharmaceuticals and other habit-forming drugs be limited to an e-Pharmacy model.

## 7. ADMINISTRATIVE IMPLICATIONS

This research has a lot of administrative consequences:

Firstly, it focuses on the current state of India's retail pharmacy business. Because it involves patients' health, the pharmaceutical retail industry is a sensitive area.

Second, we looked at the benefits and drawbacks of the pharmaceutical retail industry. Third, there are no such norms, particularly at the government level. As a result, the government should pay close attention to the situation.

Fourth, as retail pharma chains emerge (offline) and a slew of new businesses emerge, the question of how to reach a larger number of customers, create income, and develop a brand is critical, as are strategy formulations. This study offers useful information on the sector, and the findings and conclusions will have significant implications for service providers and individuals considering a career in this field.

## 8. CONCLUSION

As of today- 1mg, Net medicines, MChemist, Myra, Midlife, and others are currently the major E-Pharmacy players. Currently, over 250 companies are working as online pharmacies. In this regard, India requires an effective regulatory structure. The goal should be implemented as soon as possible because any delay will be detrimental to these service providers and their clients. The AICOD and the IPA both have the right to demand. The government should come up with a proper solution that benefits all parties. Because India is such a large country, online pharmacies must be able to function. In India, e-pharmacy is still in its early stages, but it has a lot of potential in the near future. The causes driving the need for e-Pharmacy in India are mostly unmet medical demands as a result of the country's growing population and increased internet usage. Because consumer behavior in India is rapidly changing, there is a high demand for a wide selection of products available at competitive costs at the touch of a mouse. However, we must keep in mind that most rural areas lack internet access even now.

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