



# IJEAST

INTERNATIONAL JOURNAL  
OF ENGINEERING APPLIED SCIENCE  
AND TECHNOLOGY



**VOLUME : 6    ISSUE : 7    Print / Issue Publication Date: 25-Feb-2022**



**ISSN : 2455-2143**



**DOI : 10.33564/IJEAST.2021.v06i07.038**

Indexed In



[WWW.IJEAST.COM](http://WWW.IJEAST.COM)

[editor@ijeast.com](mailto:editor@ijeast.com)



# A STUDY ON PERCEPTION AND USAGE OF ONLINE PHARMACY

Indu Kushwaha  
Sharda University  
Uttar Pradesh, India

Dr. Sneha Pattnaik  
Sharda University  
Uttar Pradesh India

**Abstract**—The internet has emerge as an popular way to buy product and offerings. searching for medicines online aren't any exception. An online pharmacy is an internet-primarily based totally trafficker that sells drugs and consists of every valid and illegitimate pharmacies. modern instances square degree witnessing a surge in E- commerce, collectively with online looking, and this consists of the sale of prescription and non-prescription drugs likewise.

This article concentrates at the utilization and notion of customer closer to the internet pharmacy. After survey is completed the end result conclude that people are still information deficit in regards to e-pharmacy however as lockdown become certainly one of the principle reason that a few people get aware of such service. As in line with pointers their still want development in the sector as still people don't feel reliable to buy medication online so there is need to be greater commercials related to e- pharmacy.

## I. INTRODUCTION

During the past 20 years, the net has become an accepted thanks to purchase product and services. shopping for medications on-line are not any exception. Besides its advantages, many patient safety risks square measure connected to the acquisition of medicines outside the normal offer chain. though thousands of web pharmacies square measure accessible on the net, the particular size of the market is unknown. Currently, there's restricted knowledge out there on the employment of web pharmacies, the number, and perspective of individuals getting medications and alternative health product from the net.

An online pharmacy is an internet-based trafficker that sells medicines and includes each legitimate and illegitimate pharmacies. modern times square measure witnessing a surge in E- commerce, together with on-line looking, and this includes the sale of prescription and non- prescription medicines likewise. The construct of on-line pharmacies and on-line sale of medicines has been trendy worldwide for quite 20 years. AN calculable 2986 on-line pharmacies were in operation globally within the year 2008, the numbers of which might have up as of nowadays.

Indian customers too have begun victimisation these on-line services within the recent times. Laws for E- commerce square measure unclear and subject to varied interpretations. varied laws like the data Technology Act, 2000; the Drug and Cosmetics Act, 1940; medication and Cosmetic Rules, 1945; Pharmacy Act, 1948; and therefore the Indian Medical Act, 1956, govern the net pharmacies in India. several of those, together with the medication and Magic Remedies Act, beneath that drug advertisements square measure regulated, were written once use of computers and therefore the web wasn't as current because it is currently. Laws do exist for on-line pharmacy stores in India. As per the Indian laws, medicines may be sold-out solely by a registered pharmacy that includes a retail license and a registered health care provider on payroll. A prescription for medicines ordered is obligatory, aside from sale of over-the-counter product. Orders for medicines may be taken solely from areas wherever the pharmacy retail license applies. All the medicines should be verified and authorized by the registered health care provider before delivery. However, there's AN ambiguity concerning shipping of medicines from one state to a different and whether or not a pharmacy is allowed to gather cash before delivery of medicines. commercialism medicines India on to the purchasers is very regulated. moreover, no provision exists to acknowledge the prescription written by a doctor World Health Organization isn't registered in India.

Schedule X medicines can't be sold-out to client while not prescription. it's imperative to take care of client records together with name of the patient, doctor, and address for each Schedule H and Schedule X medicines sold-out by the pharmacy. mercantilism medicines to minors (under age 18), mercantilism illegal medication, and mercantilism medicines at value|a value} over the utmost retail price square measure prohibited. further techno-legal needs associated with privacy, diligence to cyber laws, knowledge protection, and web advertising square measure needed to be complied with, by these pharmacies

### A. Why are online pharmacies popular?

Online pharmacies provide higher rating than offline stores, with inflated access, lower dealing and products prices, convenience and bigger obscurity for shoppers. They provide accessibility to folks with restricted quality and folks in remote areas. These offer MEd alerts (personalized



medication reminder service), discounts, doorsill delivery at intervals a brief time, and validation of prescription through authorised pharmacists. info regarding substitutes and adverse effects is conjointly out there on these sites. shoppers believe (perhaps rightly) that the medicines they receive from on-line pharmacies square measure adore medicines sold in the “brick-and-mortar pharmacies.” yet their quality, these pharmacies fancy a good share of controversies

The controversies gained media attention when the anthrax cases in 2001 that saw folks ordering antibiotic while not a prescription. Use of “cyber doctors,” the dispensing of medication while not prescriptions, and the import of prescription medications square measure simply the tip of the iceberg. “Cyber actors” measure patients through questionnaires and checklists and order medication supported this communication. These on-line consultations forgo the careful patient analysis and physical analysis that is taken into account necessary before providing treatment. It clearly promotes self-medication. Patients United Nations agency get these medications might suffer drug–drug interactions and adverse effects, regarding that they'll have no/inadequate previous warning or substance.

While on-line pharmacies may well be a boon for shoppers, these have noninheritable a not- so-commendable name because of varied reasons, the first of that is the unregulated manner of functioning. The scope of services offered by the on-line pharmacies isn't restricted to Republic of India alone. As per Associate in Nursing estimate, there square measure between thirty,000 and 50,000 on-line pharmacies operational within the USA. Most square measure primarily based aloof from the jurisdiction folks officers, in Russia, China, India, or Turkey. The Alliance for Safe on-line Pharmacies, a non-profit organization focuses on raising client awareness regarding on-line pharmacies, states that many of these commerce to yankee shoppers square measure illegitimate. Off-shore patrons will get pharmaceuticals like antidepressants, antianxiety medications, antihypertensive drug, medical termination of physiological state kits, weight loss pills, and anit-impotence drug turn containing product simply. Fatality and severe adverse reactions because of consumption of diet pills, counterfeit medicines, formulations contaminated with lead and different serious metals, wrong medicines or dose distributed on-line while not a prescription, and ill-gotten use of medicines that square measure far-famed to be habit forming are reported.

### **Role of Consumers**

Consumer awareness is the key to curb such deceitful practices; customers would like to be educated regarding the would like to verify the credibility of the service supplier as well because the product and to avoid sites that sell medicine while not a legal prescription. smart on-line

pharmacies have well-defined safety and quality benchmarks, uncomplicated privacy and security policies, a verifiable physical address and commissioned apothecary on roll. Clinicians ought to acquaint themselves with a few honourable and legitimate on-line pharmacies that they'll suggest to their patients. A mutual awareness of on-line purchase of medicines by the patient is critical for higher patient management and rejection of the results of self-medication. we'd like to mirror on the consumers' interests and inclinations for on-line pharmacies to boost a dependent the physician-pharmacist-patient relationship. These measures in addition to adequate observance from regulators will facilitate the shopper reap made edges of these pharmacies, sans the inherent risks concerned.

### **Understanding the definition of online pharmacy:**

The application of internet to access drugs and diagnostics which begin early in advent of information age has matured into portals or virtual drugs stores popularly known as “Internet pharmacy” or “Online pharmacy” or “Web pharmacy” or “Cyber pharmacy”.

E-Pharmacies are online platforms where consumers should buy medicines without having to visit “brick-and-mortar pharmacies”. This makes the process more convenient for consumers and has resulted in a rising demand for the model across the planet. additionally, increasing utilization of E- Prescriptions in the hospitals, globally, it

### **Regulation in India**

#### **Drugs and Cosmetics act 1940**

1. Sale of Schedule H and Schedule X medication.
2. Doesn't differentiate between medicines sold on-line or offline.

#### **• Indian Medical Council act 1956**

1. Pharmacists and doctors ought to work along. If e-pharmacies ar allowed, then this relationships are lost.
2. MCI code of ethics prohibits from giving or receiving any rebates or commissions. E-pharmacies might offer.
3. The health ministry and CDSCO ar operating along on performing on e-pharmacy regulation policy, that is predicted to contour the web sales of medicines.

#### **• The Pharmacy Act 1948**

1. “No person apart from a registered apothecary



shall compound, prepare, combine or dispense any drugs on the prescription of a medicative professional.”

#### • Information Technology Act 2000

1. Governs a number of the legal problems touching on on-line dealings however it's silent on the side of e-pharmacy.87yeu4ij458l,9519h also led to the expansion of this industry

## II. LITERATURE REVIEW

### 1) Public perception toward e-commerce of medicines and comparative pharmaceutical quality assessment study of two different products of furosemide tablets from community and illicit online pharmacies

E-commerce of medicines has been extensively spread worldwide. Many reasons influence consumers to buy their medical needs through the net, including low cost, availability, accessibility, and time saving. However, most of those medicines are substandard and counterfeit. The aim of this study is “To assess the perception of individuals within the UAE about purchasing medicines from online sources and to guage the standard of furosemide tablets from two different sources including illegal online source.”

The study was conducted on 28 participants within the UAE which include three parts of questionnaires to assess the general public perception and knowledge toward purchasing medicines from online sources. The survey results revealed that but 10% of participants have purchased their medicines from online sources and mostly they were nonprescription products (78%). commonest motives for online purchasing were either unavailability within the local pharmacies (43%) or lower cost compared to it in local market (43%). The opinion of participants toward purchasing of online medicines was negative. On the opposite hand, the experimental analysis showed that online furosemide had did not pass the chemical assay test (91.0% ± 0.8), which makes it a substandard product.

So, the study showed that few consumers had considered purchasing pharmaceutical products from online sources as a feasible thanks to economize and time. However, most of them were unsure about their quality, which inspires health-care providers to guide patients to government-supported websites if required. The study also showed that the standard of online medicines is questionable, indicating that these products don't seem to be equally effective because the medicines purchased from a neighborhood pharmacy.

### 2. Consumer and Community Pharmacists' Perceptions of Online Pharmacy Services in

### Uyo Metropolis, Nigeria

Online pharmacies profit client care expertise through affording convenience, efficiency, bigger confidentiality, and improved access to medicines. There ar many on-line pharmacies in Federal Republic of Nigeria, however, studies concerning their use furthermore as client and pharmacists' perceptions of the service ar lacking. The aim of this study is to judge community pharmacists' and client perceptions of on-line pharmacy services (OPS) in Uyo metropolis, Nigeria.

The study was a cross-sectional survey involving community pharmacists and shoppers. In total, sixty community pharmacists and five hundred shoppers replied to the survey. though the bulk (>85%) of the survey respondents reportable frequent net use, solely a few third (28%) of the shoppers and fifty seven of the pharmacists were responsive to the provision of on-line pharmacy services in Federal Republic of Nigeria. In general, majority of the shoppers were positive concerning victimization on-line pharmacies with some 2 thirds (67%) indicating that they'd think about getting medicines from the service in future. Also, eighty three of the shoppers indicated that access to on-line drug info and medication recommendation via the service are going to be valuable. There was a big ( $P<0.05$ ) association between consumers' on-line looking behaviour and their chance to use the service. Also, majority (92%) of the community pharmacists during this survey united that on-line pharmacies promote pharmaceutical care and this perceived want was related to their chance to supply the service in future ( $p=0.002$ ). client considerations concerning the service enclosed the chance of substandard and counterfeit medicines, net security, inconvenience of prescribed brands, possibilities of ordering wrong medicines and uncertainty concerning timely delivery. The study discovered that overall awareness of the provision of on-line pharmacy services in Federal Republic of Nigeria is proscribed within the survey population despite reportable frequent net use during this cohort. Generally, our findings recommend the potential for future uptake of on-line pharmacy services and highlight the requirement for a standardised approach to service provision furthermore as a regulative framework to boost client confidence and alleviate the considerations raised.

## III. RESEARCH METHODOLOGY

### RESEARCH DESIGN

It consists of a questionnaire survey. Research design is true experimental research design. It was a structured question technique. Questionnaire is used for data collection, which consist demographic profile i.e. e-mail, age, monthly income, education for the respondentS. The questionnaire contain 15 questions. The questionnaire consist of general



awareness among people about online pharmacy and their perception towards it.

**SAMPLING TECHNIQUE**

It was a convenient sampling technique. It is a type of non-probability sampling method in which the person select the respondent for the study on the basis of personal judgement. A total 250 responses were received.

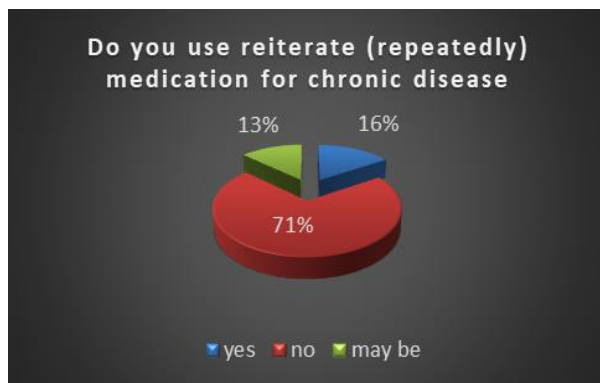
**DATA COLLECTION**

The data collection was done by google forms to study on general awareness among people or consumer about online pharmacy and their perception towards it. The respondent of the study were of different age group. It was done using convenient sampling techniques

**IV. DATA ANALYSIS AND FINDINGS**

THE QUESTIONNAIRE IS PREPARED TO KNOW THE AWARENESS AMONG PEOPLE / CONSUMER ABOUT THEIR PERCEPTION AND THE USAGE OF ONLINE PHARMACY.

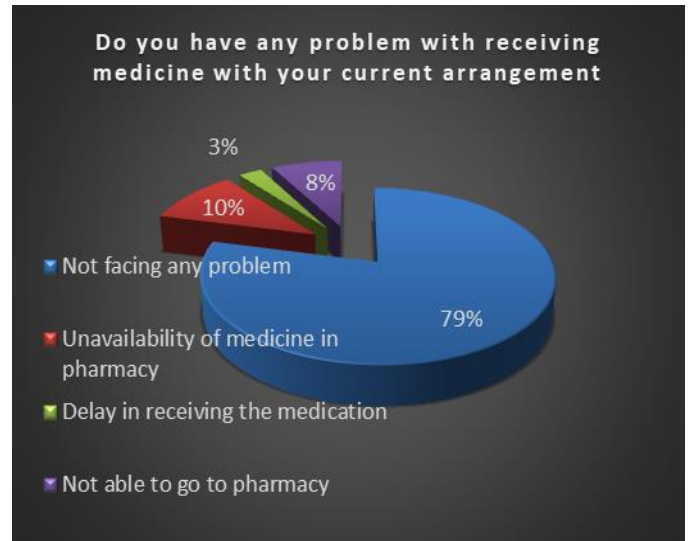
Do you use reiterate (repeatedly) medication for chronic disease?	Percentage
Yes	16%
No	71%
Maybe	13%



**FINDINGS-** 16% of respondents said yes that they repeatedly use medicine for chronic disease while 71% said no and 13% said maybe respectively.

Do you have any problem with receiving medicine with your current arrangement?	Percentage
Not facing any problem	79%

Unavailability of medicine in pharmacy	10%
Delay in receiving the medication	3%
Not able to go to pharmacy	8%



**FINDINGS-** As around lockdown time 79% respondents said that they did not face any problem while receiving medicine , but 10% said there was unavailability of medicine in pharmacy and around 8% responses came that they not able to go pharmacy.

Do you hear about online pharmacy?	Percentage
Yes	79%
No	13%
Maybe	8%



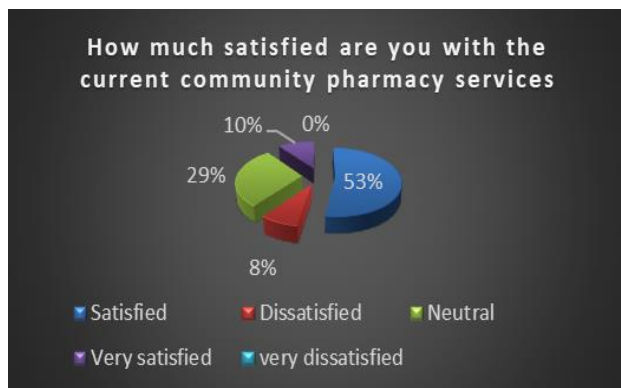


**FINDINGS-** Respondents are aware about online pharmacy 79% respondents said yes and 13% said that they are not aware of online pharmacy yet but 8% said maybe as they are not aware of e-pharmacy website.

How much satisfied are you with the current community pharmacy services?	Percentage
Satisfied	53%
Dissatisfied	8%
Neutral	29%
Very satisfied	10%
Very dissatisfied	0%



**FINDINGS-** Through survey it is seen that still people are not using much of online pharmacy as per result 61% said no they do not use any e-pharmacy but still there is still hope can be seen as 39% of respondents said yes.



**FINDINGS-** Consumer opinion on the pharmacy services they are 53% satisfied. 29% respondents are neutral that they do not want to take any side while 10% and 8% are very satisfied and dissatisfied respectively.

Have you ever used an online pharmacy?	Percentage
Yes	39%
No	61%

Would you like to buy medicines through an online pharmacy in the future?	Percentage
Yes	63%
No	8%
Maybe	29%



**FINDINGS-** Buying medicines through an online pharmacy in the future 63% responses are yes but still 29% respondents said maybe yet 8% said no.

Do you think purchasing medicine through online pharmacy would be safe?	Percent
Yes	47%
No	11%
Maybe	42%



**FINDINGS-** Purchasing medicine through online pharmacy would be safe asked in survey 47% respondents said yes and 42% said maybe as they are not sure but 11% respondents said no

Do you recommend this service (an online pharmacy) to others?	Percent
Yes	50%
No	16%
More likely	34%



**FINDINGS-** After taking opinion on whether they recommend this online pharmacy service to others the 50% respondents said yes and more likely are 34% still 16 % said no that they will not recommend e-pharmacy to others.

Which of these features would attract you to using an online pharmacy?	Percent
Most items delivered in less than 24hr	14%
Choices of delivery times and address	21%

Reduced visit to the hospital/pharmacy	35%
Easy telephone access to the pharmacist for drug information	13%
none of the above	17%



**FINDINGS-** In survey the features that attracts user for usage of e-pharmacy 35% respondents said it reduced visit to the hospital/pharmacy while 14% responses came for items delivered in less than 24 hr. 13% said it is easy telephone access to the pharmacist for drug information while 21% likes the choices of delivery times and address .still 17% choose none of the features which are mentioned.

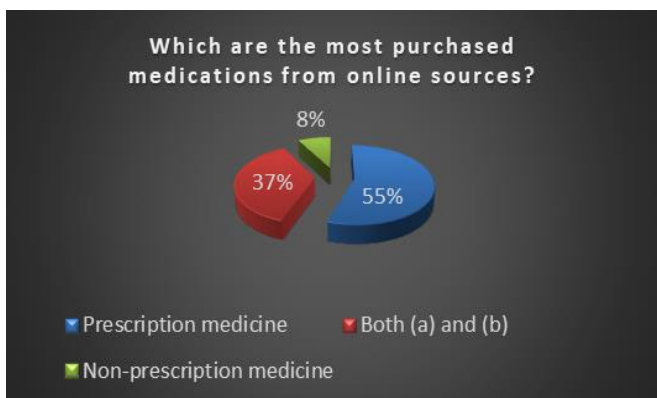
What is your perception towards the quality of online pharmacy medicine?	Percent
Reasonable quality	58%
Not sure	26%
High quality	11%
Very pure quality	5%

**FINDINGS-** The perception towards the quality of online pharmacy medicine 58% said that they have reasonable quality, around 26% are not sure about the quality. But still 11% respondents said that e-pharmacy have high quality and 5% said pure quality.

Which are the most purchased medications from online sources?	Percent
Prescription medicine	8%
Both (a) and (b)	37%



<b>Non-prescription medicine</b>	<b>55%</b>
----------------------------------	------------



**FINDINGS-**In response to the most purchased medications from online sources 55% said prescription medicine they prefer to order while 8% respondents chose non-prescriptions medicines while 37% prefer both options prescription and non-prescription medicine as well.

#### V. CONCLUSION AND RECOMMENDATIONS

B. The study concentrate on the usage and perception of consumer towards the web pharmacy. After survey is completed the result the conclude that individuals are still knowledge deficit with regard to e-pharmacy but as lockdown was one in all the main cause that some people get responsive to such service and tried, they sit down with others who are educated enough about buying medicine online specially young adults are seen using e-pharmacy as they feel it's more convenience to shop for rather to travel pharmacist.

C. Hence still people are very less aware to grasp the essential of e-pharmacy like what website they ought to use whether the medication quality is true or not. The laws and rights regarding to regulation of e-pharmacy their have to be more precise and government are taking action as they're trying to avoid such cyber frauds.

D. Furthermore, as per the study we conclude as people are accustomed online shopping and using internet so that they come through a number of online pharmacies like netmeds, 1mg and Apollo pharmacy and medlife.

E. As per recommendations their still need improvement within the services as still people don't feel secure to shop for medicine online so there should be more advertisement associated with e-pharmacy and other people should be at liberty to understand how such online pharmacy from where they will assure themselves that medicine quality is

correct for them to require. There should be some knowledge campaign fir to understand about drugs usage for people while they buying online the whether it's prescription or non-prescription medicine

#### VI. REFERENCES AND BIBLOGRAPHY

- (1) Ndem, E., Udoh, A., Awofisayo, O., & Bafor, E. (2019). Consumer and Community Pharmacists' Perceptions of Online Pharmacy Services in Uyo Metropolis, Nigeria. *INNOVATIONS in pharmacy*, 10(3), 18-18.
- (2) [Akram Ashames](#), [Richie Bhandare](#), [Sham Zain AlAbdin](#), [Tasnim Alhalabi](#), [Farah Jassem](#) Department of Pharmaceutical Sciences, College of Pharmacy and Health Sciences, Ajman University, Ajman, UAE
- (3) Bhatia, R., & Taneja, U. (2019). Factors Affecting Indian Consumers' Intention to Use eHealth Services. *Journal of Health Management*, 21(2), 258-278. [racxn.com/d/trending-themes/Startups-in-Online-Pharmacies](http://racxn.com/d/trending-themes/Startups-in-Online-Pharmacies)
- (4) Wiedmann, K. P., Hennigs, N., Pankalla, L., Kassubek, M., Seegebarth, B., & Reeh, M. O. (2010). Online distribution of pharmaceuticals: investigating relations of consumers' value perception, online shopping attitudes and behaviour in an e-pharmacy context. *Journal of Customer Behaviour*, 9(2), 175-199.
- (5) Alfahad, N. F., Albelali, M. T., Khurshid, F., Al-Arifi, M. N., Al-Dhawalie, A. A., & Alsultam, M. (2015). Perception and knowledge to online pharmacy services among consumers in Riyadh, Saudi Arabia: a pilot survey. *Lat Am J Pharm*, 34(6), 1113-1118.
- (6) Benetoli, A., Chen, T. F., & Aslani, P. (2015). The use of social media in pharmacy practice and education. *Research in social and administrative pharmacy*, 11(1), 1-46.
- (7) Nair, S. P., & Middha, A. A Study on Knowledge, Perception and Practice of Online Pharmacy among Young Adults in India.

# IJEAST

INTERNATIONAL JOURNAL  
OF ENGINEERING APPLIED SCIENCE  
AND TECHNOLOGY

## ABOUT IJEAST

International Journal of Engineering Applied Science and Technology (IJEAST) is a peer-reviewed, open access journal that publishes high-quality research papers in the field of Engineering, Applied Science and Technology.

IJEAST aims to provide a platform for researchers, academicians, and professionals to share their innovative ideas, research findings, and practical experiences with the global scientific community.

## FOCUS AREAS

- Engineering
- Applied Science
- Technology
- Innovation & Development
- Interdisciplinary Studies



### PEER REVIEWED

All submissions are rigorously peer reviewed to ensure quality.



### OPEN ACCESS

Free and unrestricted access to research for all.



### GLOBAL REACH

Connecting researchers and professionals worldwide.



### TIMELY PUBLICATION

We ensure a swift and efficient publication process.



For more information, visit our website

[www.ijeast.com](http://www.ijeast.com)



INTERNATIONAL JOURNAL  
OF ENGINEERING APPLIED SCIENCE  
AND TECHNOLOGY

✉ [editor@ijeast.com](mailto:editor@ijeast.com)

🌐 [www.ijeast.com](http://www.ijeast.com)

📍 India



2455-2143