

## Perception of Community Pharmacy Owners Regarding Online and Chain Pharmacy Services

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**Abstract:** *Background: Community pharmacies, also known as retail pharmacies, is the last point of contact for patients to get access to their medications. Retail pharmacies are an integral component of India's health care ecosystem and are thriving now. The Community pharmacies are considered a "Chain community pharmacies" if the organization consists of four or more stores in which an individual consumer may have a prescription order filled. Online pharmacies are an internet-based vendor and includes both legitimate and illegitimate pharmacies. It is a business model that deals with the preparation and sale of prescription and non-prescription medicines as in the traditional pharmacies.*

**Methodology:** *This was a prospective questionnaire-based study in which 250 Community pharmacy owners were enrolled. The survey instrument was a structured, self-administered questionnaire.*

**Result:** *Out of 250 surveyed Community pharmacy owners, 96% reported serving less than 100 customers daily. Most pharmacies offer discounts and home delivery. 99% were aware of both chain and online pharmacies, with high familiarity with Apollo (98.4%), MedPlus (98.4%), and Aster (87.2%). 87.2% reported 25-50% sales reduction due to the rise of chain pharmacies. 68% are willing to provide online pharmacy services and 98% believe chain and online pharmacies will disrupt working of independent pharmacies. 83.6% reported that delivery impacting potency of medicines were the drawbacks of online pharmacies to the public.*

**Conclusion:** *Our study highlights the need for standardized approach to improve quality of services in independent pharmacies as well as to enforce stricter regulatory framework for*



*online and chain pharmacies to improve customers confidence and to alleviate from the concerns raised about online and chain pharmacies. Independent pharmacies can provide value added services such as patient counselling, screening of blood pressure/diabetes etc to attract the customers.*

*Aim: To understand the perception of owners of independent pharmacies regarding online and chain pharmacy services.*

**Keywords:** *Community Pharmacies, Online Pharmacies, Perception of Community Pharmacists, Drawbacks of Online Pharmacies.*

## **1. INTRODUCTION**

The most typical kind of pharmacies that gives the general people access to their prescriptions and health advice is a Community Pharmacy, commonly referred to as a Retail pharmacy. Community pharmacists are the most accessible health professional to the public, as they are available to provide personalized advice about health and medicine on a walk-in basis, without the need for an appointment [1].

An Online Pharmacy system is the one that gives clients a place to buy prescription medications and E-services online, enabling the customer to receive the medications or services in the convenience of their homes in a short amount of time [2]. There are numerous major e-pharmacy players operating in this market at the moment, including Netmeds, 1MG, mChemist, Medidart, Medlife, Pharomeasy, etc. During the years 2021-2026, the Indian e-Pharmacy is expected to increase at a compound annual growth rate (CAGR) of 44.99% [3]. Chain pharmacies refer to those large, nationwide drugstores that connect street corners around town. In addition to picking up prescription at this type of pharmacies, we can also purchase a random assortment of goods-ranging from seasonal medicines, at a marked-up price. One of the retail chain pharmacy in India, Apollo Pharmacies operates over 1,800 stores across the country and offers a wide range of products and services, including prescription drugs, over the counter medications, and health and wellness products.

The Indian pharmaceutical market is anticipated to grow to \$65 billion by 2024 and \$130 billion by 2030. India's pharmaceutical marketplace is currently valued at \$50 billion. With nearly 2 hundred countries receiving Indian pharmaceutical exports, India is a considerable pharmaceutical exporter. India provides approximately 50% of the generics needed in Africa, around 40% of the generics needed in the US, and over 25% of all the medicines needed in the UK. India is a chief supply of the DPT, BCG, and measles vaccines and bills for over 60% of the world's vaccine demand. According to the WHO's advocated vaccination schedule, 70% of the organization's vaccinations come from India [4].

### **Independent Pharmacies**

Community Pharmacies are found on main thoroughfares, in neighborhood centers, in supermarkets, and right in the middle of the poorest neighborhoods. When other healthcare experts are not available, many stay open late. Community pharmacies can range from huge



chains with locations on all High Streets or in supermarkets on the outskirts of towns to small independently owned pharmacies. The community pharmacist's traditional function as the medicine provider who fills prescriptions issued by doctors has evolved to improve teamwork and interaction with the community and community pharmacists have recently developed pharmaceutical care services in addition to the usual dispensing position. To fulfill the requirements of their local population, community pharmacists can also offer a variety of regional services.

#### **Advantages of Independent Pharmacies:**

- The pharmacist confirms that the prescription is valid, safe, and appropriate.
- The pharmacist makes sure that the right dosages of the medication are used along with the right counselling.
- The pharmacist clarifies the patient's understanding of the intended dosage and informs the patient of any drug-related precautions.

#### **Disadvantages of Independent Pharmacies:**

- Local pharmacies take a lot of time due to the high number of people visiting the pharmacy. It is more expensive to buy from offline stores compared to online/chain pharmacies.
- Due to the limited options available, you can't choose the recommended drugs if you want a cheaper one.
- If the patient is alone and sick, it becomes difficult for him/her to buy the medicines. There are no savings on medications at pharmacies that are not online. You have much less access to high-quality medications [5].

#### **Challenges of Independent Pharmacies:**

##### **Market Competition**

Market competition is very high because of the increasing of new Community pharmacies especially those opened by inexperienced pharmacists are of major concern.

Emergence of government-supported competitors the permission given by the government for opening Community pharmacies in the surroundings of public hospitals was another source of dismay. (Eg; Janoushadi)

##### **Economic Impacts**

Many of the Community pharmacies experience a slowdown in business due to increasing Goods and Service Tax [GST], high foreign exchange rates, and uneconomic fluctuation.

##### **Decreasing Sale**

Due to shift of customers to online pharmacies as they offer more discounts and doorstep services has impacted the sales of Community pharmacies.



### **Staffing Problems**

In most of the pharmacies the respondent work as sole pharmacist in their community pharmacy which lead them to be mentally tired over long hours and have less time to spend with family and have difficulty in recruiting and retaining staff for a longer time.

### **Online Pharmacies**

In 2015, 11 early start-up E-drug store organizations, including 1MG, Netmeds, BookMEDS, mChemist, Medlife, PharmEasy, Medi-Dart, MedStar, Ziggy, SaveOnMedicals, and Savemymeds, established the Indian Internet Pharmacy Association [6]

### **Advantages of Online Pharmacies:**

- The benefits of using online pharmacies are clear to patients.
- A practically infinite number of items are available, accessibility 24 hours a day, accessibility for the disabled or housebound, relative anonymity, which may encourage patients to express concerns about uncomfortable topics, and more inexpensive rates.
- Free information available, comparative shopping.

### **Disadvantages of Online Pharmacies:**

- Absence of meaningful communication between doctors and pharmacists.
- The quality of medicines is questionable.
- Misdiagnosis and inappropriate use of medications. It is challenging to tell whether a website is real or not because it is difficult to tell whether drugs acquired online are fake, unapproved, or illegal.
- When dealing with unregistered and illegally internet pharmacies, these drawbacks and risks are amplified even more [7]

### **Challenges of Online Pharmacies:**

#### **Dispensing Scheduled Drugs**

Online drug sales provide a significant danger of selling Schedule X and Schedule H drugs to clients without a prescription which is illegal. An accurate customer record must be kept as a record of each Schedule H and Schedule I patient, including name, address, and medical practitioner. The online drugstore deliveries Scheduled X medications and multiple medicine deliveries can also be made with just one prescription. through several online pharmacies. The urgent need for a proper regulatory framework to resolve this complex issue is important since it may increase the prevalence of drug usage in India [8,9].

#### **Selling Drugs without a Registered Medical Practitioner**

It is extremely apparent from the Drugs and Cosmetics Act and Drug and Cosmetics Rule that the drugs are not to be marketed unless they have been examined by a Registered Medical Professional (RMP). If there are medication orders placed online, trying to determine whether they are from an RMP will be quite challenging [10].



### **Chain Pharmacies**

When a pharmacy store organization consists of four or more pharmacy stores, it is known as Pharmacy Chain Stores. In simple words, when an organization or individual set-up/open more than four medical stores or pharmacies, it comes under Pharmacy Chains.

Chain pharmacy organizations expand their business through by opening more own medical stores, providing franchise of their brand to existing or new pharmacy owners, opening hospital pharmacies and selling through online pharmacies etc. Chain pharmacy stores are small percent of highly fragmented with over seven lakh retail stores across the country under pharmacies. [11]

### **Challenges of Chain Pharmacies:**

- Reimbursement Rate
- Adapting to Digital Technologies.
- Ever Changing Regulations and Compliance Requirements.
- Maintaining a Strong Patient Base

## **2. RELATED WORK**

1. Environmental and personal barriers encountered in Online and community pharmacies(Al-Azayzih, Ahmad, et al 2023): have a significant impact on the public. Community pharmacies face environmental and personal barriers that could affect the quality of pharmaceutical services provided. The benefits of online pharmacies for patients include increased access to medications, convenience, and potential cost savings. Online pharmacies can provide access to a wide range of medications and healthcare products, particularly for individuals with limited mobility or those living in remote areas.
2. Investigating Community Pharmacy Take Home Naloxone Dispensing during COVID-19(Daskalakis, George, et al 2021):During the COVID-19 pandemic, community pharmacies played a crucial role in dispensing naloxone to prevent opioid-related deaths
3. Evaluating UK Pharmacy Workers' Knowledge, Attitudes and Behaviour towards Antimicrobial Stewardship and Assessing the Impact of Training in Community Pharmacy(Seaton, Donna, et al. 2022): The Antibiotic Guardian campaign, an online pledge approach to engage health workers and the public about antimicrobial resistance, has impacted UK pharmacy workers' knowledge, attitudes, and behavior towards antimicrobial stewardship
4. The Impact of COVID-19 Pandemic on Administration and Economics of Community Pharmacies in Egypt(Emad, Mena, Mahmoud El-Badry, and Sahar B. Hassan 2022): COVID-19 pandemic has negatively impacted the administration and economics of community pharmacies in Egypt
5. What pharmacy can learn from other professions(Albert, Erin. 2007): Community pharmacy owners have several concerns regarding online and chain pharmacy services. One of the main concerns is the potential loss of business to online and chain pharmacies, which may offer lower prices and greater convenience. Additionally, community pharmacy owners may be concerned about the quality of care provided by online and



chain pharmacies, as they may not have the same level of personal interaction with patients as community pharmacies.

6. Impact of internet use on business functions in independent community pharmacies (2003): Loss of business: Community pharmacy owners may be concerned about the potential loss of business to online and chain pharmacies, which may offer lower prices and greater convenience, Quality of care: Community pharmacy owners may be concerned about the quality of care provided by online and chain pharmacies, as they may not have the same level of personal interaction with patients as community pharmacies
7. A Survey on Community Pharmacists' Interest in Providing Online Pharmacy Services (ABU BAKAR A1,2, ONG SC12022) Adoption of e-commerce: Community pharmacy owners may be concerned about the adoption of e-commerce and the potential impact on their business, as well as their readiness to comply with e-pharmacy regulatory requirements

### **3. METHODOLOGY**

**Duration of Study:** 6 months

**Study Site: Community Settings:** Independent pharmacies, Bangalore, India.

**Study Design:** Prospective questionnaire-based study.

**Sample Size:** A total of 250 community pharmacists in Bangalore and who fulfilled the inclusion and exclusion criteria.

Inclusion criteria: Owners of Independent Community pharmacies in Bangalore.

Exclusion criteria: Chain pharmacies and Online pharmacies and Hospital pharmacies.

**Source of the Data:** Filled Questionnaire forms/Google forms.

**Study Procedure:** Participants were enrolled based on inclusion and exclusion criteria. Structured questionnaire forms were used for collecting data. The questions were pertaining to demographic details, general practice in pharmacies, awareness and perception about online and chain pharmacies. The data was collected from the independent pharmacy owners either through hard copy or through google forms. Confidentiality was maintained, the identities/pointers to personal information of respondents were anonymized, all the data were stored password protected. The collected information was documented and analyzed.

#### **Analysis of Data**

Descriptive statistical analysis has been carried out in the present study. The results of categorical measurement are presented in numbers, percentage (%). Microsoft word, and excel have been used to generate graphs, figures, tables etc.

### **4. RESULTS**

#### **Demographic Details**

The number of Community pharmacy owners who participated in the study was 250. Majority of them (97.6%) were less than 50 years of age and only 2.4% were above the age of 50 years. Among the respondents, 89.2% were male and 10.8% were female. About 75%



of the respondents were diploma holders, 23% were B Pharm graduates, 1 had done post-graduation and one was a Pharm D qualified. About 72.8% of the respondents had 1-10 years of retail pharmacy experience, 15% had 11-20 years of experience and 1% had 30 years of experience. 95.6% of them owned only 1 Pharmacy, 2.8% owned 2 pharmacies and 1 person owned 3 pharmacies.

### General Practice in Pharmacies

Details about the number of customers per day served by the participating pharmacies are summarized in table 1. Majority of the respondents (94.80%) agreed to give discounts on purchase of medicines. 86% of the respondents were giving discounts in the range of 8-10%. More than half of the participants (79%) were able to afford to give discounts and 84% of the respondents were offering home delivery services to their customers. Among the respondents, 79.6% were providing home delivery for their regular customers.

Table: 1 Number of Customers per Day

No. of customers/day	Number	Percentage
<100	240	96%
100-200	10	4%

### Awareness about Chain Pharmacies and Online Pharmacy Service

In total of 250 respondents, most (99.6%) of the respondents were aware about the availability of online pharmacies and 99.2% were aware about chain pharmacies. Majority of them were familiar about chain pharmacies like Apollo (98.4%), MedPlus (98.4%) and Aster pharmacy (87.2%) and small percentage were aware about wellness forever and other local chains (Figure 1).

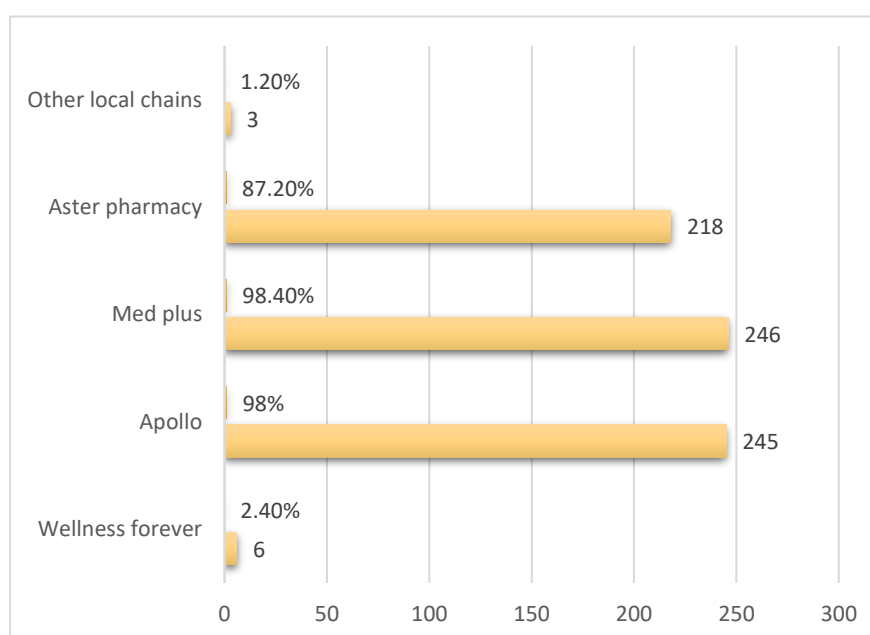


Figure 1: Awareness about popular Chain Pharmacies

### Perception about Chain Pharmacies

Majority (87.20%) of the community pharmacies owner's perception is that the sales has reduced up to 25-50% due to raise in chain pharmacies in the market (Figure 2). About 82% of the respondents reported that customers are interested towards chain pharmacies for their huge discounts and only few responded that the customers are interested in their advertisements and good ambience (Figure 3)

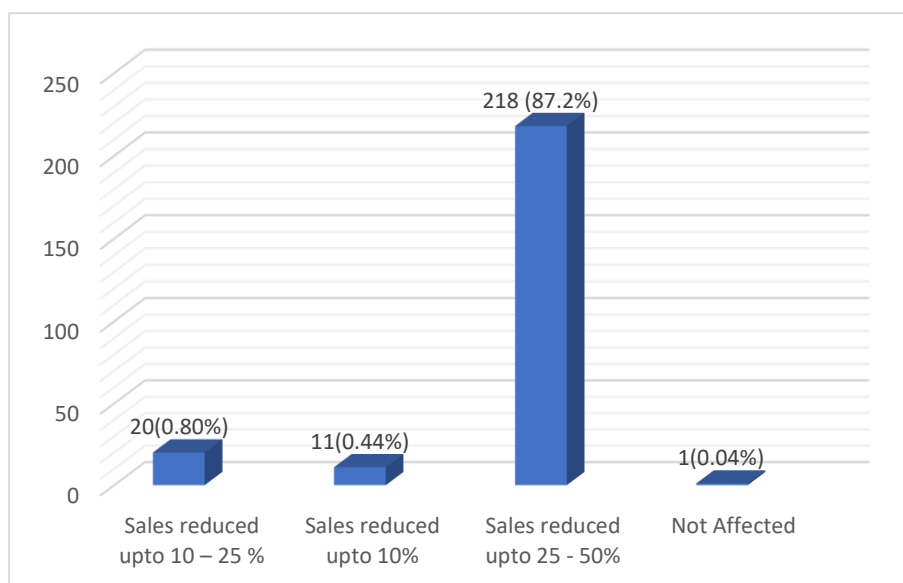


Figure 2: Effect of Chain Pharmacies on Sales

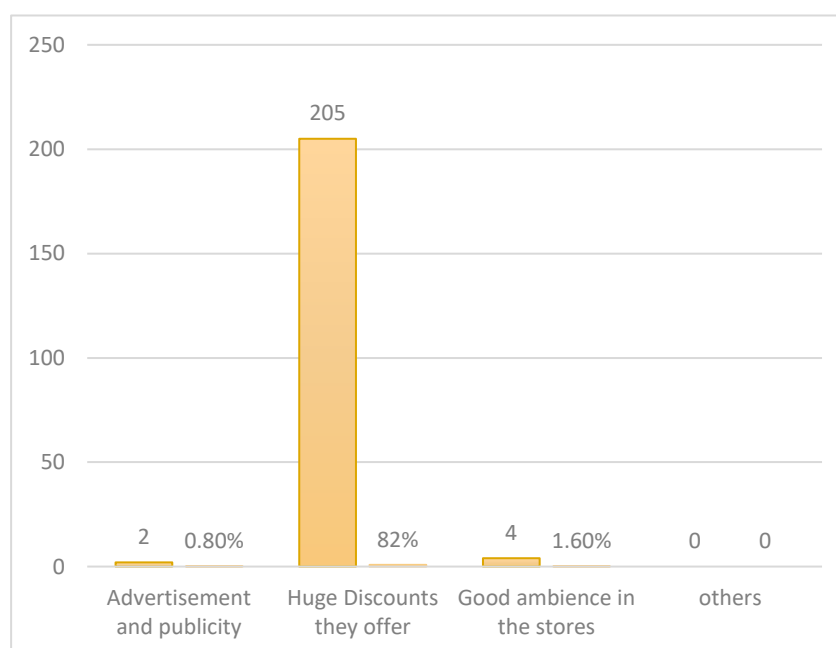


Figure 3: Reasons to be interested towards Chain Pharmacies



### Perception about Online Pharmacy Services

Most (87.2%) of participants responded that their sales were reduced upto 25-50% (Figure 4) and they perceived that the reason for customers to get drawn towards online pharmacies are for their huge discounts (Figure 5). Among the respondents, 89% opined that online pharmacies are operating legally in India. Majority (68%) of the respondents in the survey indicated their willingness to offer online pharmacy services.

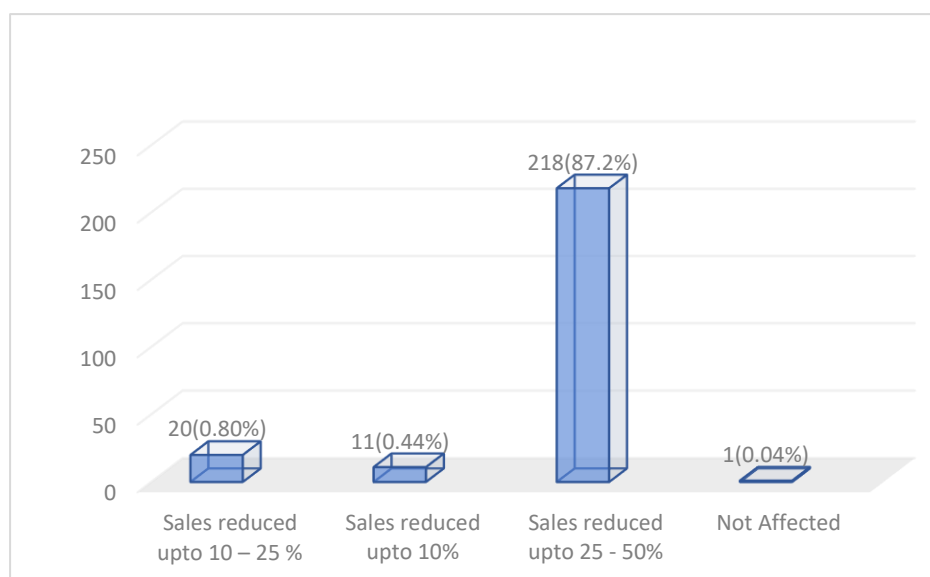


Figure 4: Effect of Online Pharmacies on Sales

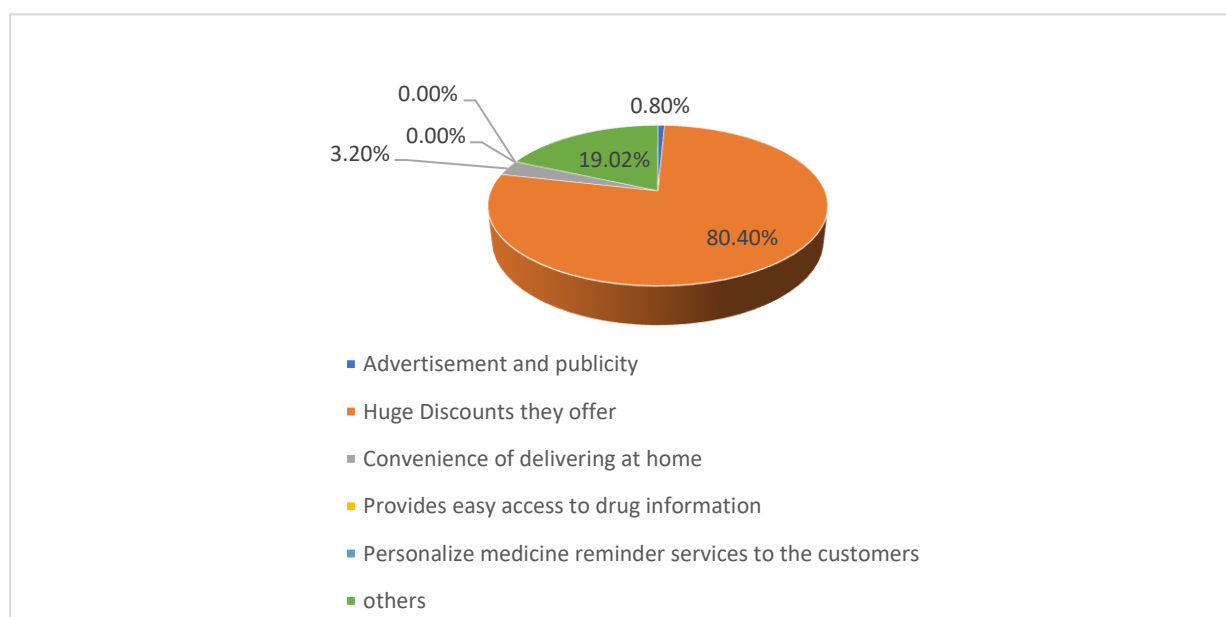


Figure 5: Reason to be drawn towards Online Pharmacies

### Concerns about Chain Pharmacies and Online Pharmacy Services

In our study, Majority (98%) of respondents were concerned that Chain Pharmacies and Online Pharmacy Services will further disrupt the working of existing Independent Pharmacies. Greater part (92.40%) of the respondents reported that online pharmacies are very big threat for existing independent pharmacies. 83.60% of participants are of the opinion that loss of potency due to delivery/ transportation are the drawbacks of online pharmacies to the public (Figure 6).

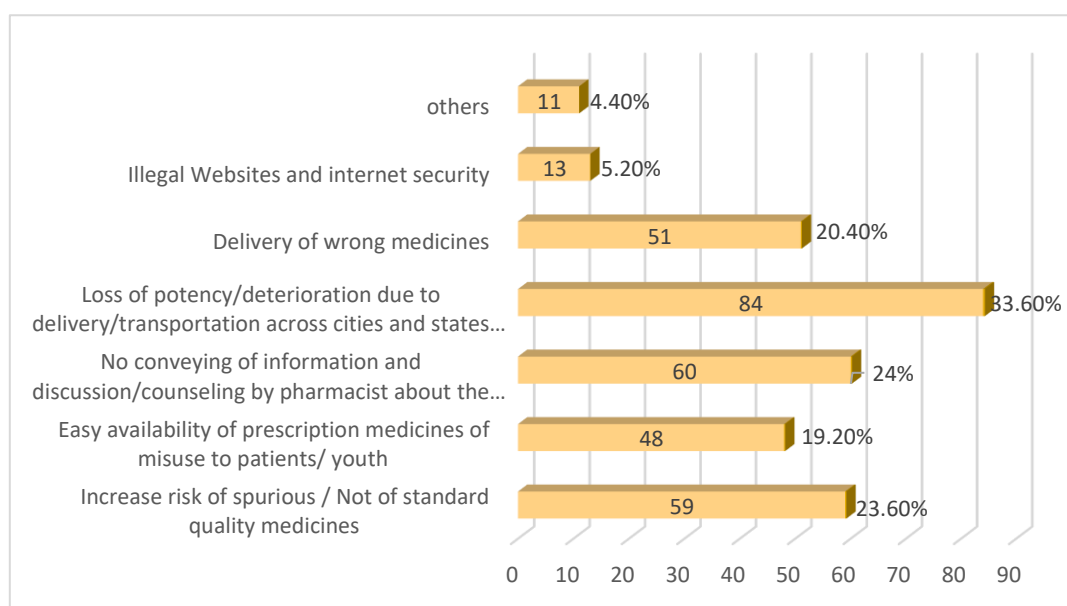


Figure 6: Drawbacks of Online Pharmacies to Public

## 5. DISCUSSION

The rise in online purchase and purchase from chain pharmacies of customer items including medications and other health commodities is likely to proceed with increasing digitalization and access to internet usage globally. This revolution provides opportunities for growth in innovation and technology. Although some of the emerging studies show the use of online and chain pharmacies in growing healthcare, it impacts the business and line of working of independent pharmacies. The study was taken up to understand the perception of owners of independent pharmacies on chain pharmacies and online pharmacies services after obtaining the Ethical committee Clearance. Community based pharmacy practice is evolving from focus on product preparation and dispensing to becoming a healthcare destination beyond the four walls of the traditional community-based pharmacy to provide care to patients where they needed [12]. A total of 250 respondents, 223(89.2%) Male and 27(10.8%) Female were working as pharmacists in independent pharmacies. Among them, 244 (97.6%) belonged to the age group of <50 years and 6(2.4%) belonged to the age group of >50 years. The majority of the pharmacists were D Pharm holders 189 (75.6%) and 59(23.6%) were B Pharm graduates. Our results were different to the study carried out by Rayes IK et.al where it was reported that 34(17.2%) were D Pharm holders and 144(72.7%) were B Pharm



graduates [13]. About 180 (72%) respondents have 1-10 years of working experience and 39(15.6%) had 11-20 years of experience and 3(1.2%) had 21-30 years of experience. The study which was conducted by Miller R et.al stated that individuals with several years working experience in independent pharmacies were viewed by some as more knowledgeable than qualified pharmacists and few interviewees cast out over the quality and appropriateness of pharmacy education and experience was occurred through various means, including learning from senior pharmacists, doctor's prescriptions and customers request for medicines. Both qualifications and years of experience add value to getting expertise in profession and help in assisting the patients regarding their medications and health related problems. The role of pharmacists is to make sure customers get the best possible treatment with their medicines and to ensure that they understand how to take them. Majority of respondents, 240(96%) reported that on an average approximately they serve < 100 customers everyday whereas 10(4%) responded that they serve 100-200 customers every day. This may be due to a rise in competition among pharmacies in local areas and the establishment of online and chain pharmacies. Our study results were different from the study conducted by Rayes IK et.al who reported that 82(41.4%) of the respondents dispense 10-50 prescriptions to the patient and 54(27.3%) dispensed more than 100 prescriptions in a week. Almost 197(79%) respondents are willing to give discounts to their customers and about 215 (86%) pharmacies are willing to give discounts in the range of 8-10% and 211(84%) set to offer home delivery for customers. 199(79.6%) pharmacies offer home delivery on regular customer basis. Chain pharmacies are defined as an organization where two or more pharmacies are operating under the same name and business used distinctive branding across all outlets. Almost all (N=248, 99.2%) were aware of chain pharmacies and 2(0.8%) were unaware of chain pharmacies. These pharmacists are familiar with chain pharmacies namely Apollo 245(98%), MedPlus 246(98.8%), Aster pharmacies 218(87.2%) and a small percentage of them are familiar with wellness forever 6 (2.4%) and other local pharmacies 3(1.2%). One of the studies conducted by Miller R et.al showed that there were 13 chains operating in Bangalore city and between them, they accounted for 529(9%) of Bangalore's 5664 retail pharmacy outlets. Chain ranged in size from having 2 outlets in city to 200 plus [10].

## 6. CONCLUSION

The findings of our study demonstrated an overall reduction in the sales of 10-25% due to a rise in chain and online pharmacies in the market. Customers are attracted towards online and chain pharmacies for their huge discounts, advertisements, and good ambience (chain pharmacy) which are not affordable for independent pharmacy owners. Although these chain and online pharmacies offer the above services, they lack a structured regulatory framework whereas regulations are stricter for independent pharmacies. There is no doubt that online pharmacies can also increase the convenience of purchase of medications and are economically beneficial for many customers. But on the other side substandard quality pharmaceuticals may be sold through online pharmacies compared to the independent pharmacies. Additionally, the pharmacist-patient interaction is restricted (chain pharmacy) or doesnot happen (online pharmacy) which could subsequently result in no information about how to take medications and medication errors. Independent pharmacies have direct access to



the patient wherein they can counsel the patient about their medications, adverse effects, route of administration and so on. However, there are also challenges like marketing competition, economic impacts, decreased sales etc to overcome which can be fixed through adequate education and training, enforcing rules and policies, collaboration and implementing newer technologies. This study highlights the need for standardized approach to improve quality of services in independent pharmacies as well as stricter regulatory framework for online and chain pharmacies to improve customers confidence and to alleviate from the concerns raised about online and chain pharmacies. Independent pharmacies can provide value added services such as patient counselling, screening of blood pressure/diabetes etc. in order to attract customers.

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