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A comparative cross sectional descriptive study of individual pharmacy Vs mall pharmacies to evaluate customer satisfaction as well as purchasing behavior

Amit D. Kandhare¹, Kiran S. Raygude¹, Pinaki Ghosh¹, Tejas P. Gosavi*², Subhash L. Bodhankar¹

¹Department of Pharmacology, Poona College of Pharmacy, Bharati Vidyapeeth Deemed University, Pune, Maharashtra, India

²Department of Homeopathic Pharmacy, Homeopathic Medical College, Bharati Vidyapeeth Deemed University, Pune, Maharashtra, India

ABSTRACT

The present study was designed in order to measure the level of customer satisfaction and also their purchasing behavior when shopping in retail pharmacies i.e. independent pharmacies and in chain or shopping mall pharmacies. The study design is in the form of cross-sectional descriptive study using convenience sampling methods. A questionnaire was developed to evaluate the level of customer satisfaction as well as customers purchasing behavior in retail pharmacies. The questionnaires were distributed in the 106 individual customers, 21 Chemist in Mall pharmacy, 27 Chemist in retail drug store and 12 numbers of doctors. Then the correlation between personal satisfaction and customer purchasing behavior in both pharmacies was determined on the basis of various quality of service provide by the pharmacy and the product range along with their availability in the pharmacy shop. It was found that pharmacy store choice behavior among consumers indicates that image and perceptions along with individual characteristics have significant impact on the final outcome.

Key Words: (CRM) Customer Relationship Management, Medication therapy management, Purchase behavior, Retail pharmacy, Shopping mall pharmacy.

INTRODUCTION

Pharmacy is the health profession that links the health sciences with the chemical sciences and it is charged with ensuring the safe and effective use of pharmaceutical drugs. The scope of pharmacy practice includes more traditional roles such as compounding and dispensing

medications, and it also includes more modern services related to health care, including clinical services, reviewing medications for safety and efficacy, and providing drug information. Pharmacists, therefore, are the experts on drug therapy and are the primary health professionals who optimize medication use to provide patients with positive health outcomes. In the coming decades, pharmacists are expected to become more integral within the health care system. Rather than simply dispensing medication, pharmacists will be paid for their patient care skills [1].

Medication Therapy Management (MTM) includes the clinical services that pharmacists can provide for their patients. Such services include the thorough analysis of all medication (prescription, non-prescription and herbals) currently being taken by an individual [2]. The result is a reconciliation of medication and patient education resulting in increased patient health outcomes and decreased costs to the health care system.

The businesses not only have the economic responsibility of being profitable and the legal responsibility to follow the laws or ground rules that guide their ability to achieve their economic requirements. They also have ethical responsibilities that include a range of societal norms, or standards [3].

The Indian pharmaceutical industry is continuing its high growth rate at 13% for the last six years. From foreign control, to domestic grass-roots growth, the Indian pharmaceutical segment has evolved over the last three decades. This rapid growth has yet to create radical changes in the Indian distribution system. The main hurdles include the highly fragmented nature of the distribution network, limited advancement in regulatory reforms, and presence of strong resistance from lobbies of traders involved in the supply chain of pharmaceutical products.

In 2006, the market size of India's pharmaceutical logistics segment (distribution) was valued at around \$200 million and the logistics/distribution industry has been growing at an average annual growth rate of 4% since 2002. According to the Indian Retail Druggists and Chemists Association, in 1978, there were roughly 10,000 distributors and 125,000 retail pharmacies in India. Today, the total number of stockists in India is around 65,000 and the number of pharmacies is about 550,000, an increase of around 6 and 4fold, respectively [4].

It has been suggested that retailers could make a significant impact on corporate social responsibility (CSR)-related issues through their unique relationship with consumers³. Indeed, the retail industry has been reported to display higher rates of social responsibility when compared to those in other sectors [5]. The retail industry has also become a focus of attention in the burgeoning literature on CSR [6-10].

Shopping centers provide the micro-environments for retail outlets and a substantial amount of retail trade takes place through shopping centers. Shopping centers, including malls, strips and town centers, are increasingly managed and branded as complete entities. Attributes in models of shopping centre choice mostly have concerned choice range features, such as the number of stores, centre ambience and layout features, and convenience features, for example parking facilities [11-13].

The present study was designed in order to measure the level of customer satisfaction and also their purchasing behavior when shopping in retail pharmacies i.e. independent pharmacies and in chain or shopping mall pharmacies.

➤ **Pharmacy Chain Formats:**

1. **Hospital Pharmacies:** They catered mainly to the requirements of patients admitted in the hospital. They were housed in the hospital building and dispense a limited number of medicines. The average size of such stores is 150-200 sq. ft.
2. **Retail Stores/Standalone stores:** The second category of stores, near the residential areas, provides the benefits of proximity to consumers. Some of these stores offered home delivery. The target customers of the store were the educated middle and upper class households.
3. **Malls/Shop-in-shops:** The biggest advantage, most retailers say, of having in-store outlets at supermarkets or departmental stores is the fact that popularity of either brand rubs off on the other. Guardian pharmacy recently signed an agreement to open outlets at Spencer's stores in east India and is negotiating rights for northern India too. Spencer's has tie-up with LifeKen Medicines for store-in-stores at its Daily stores in the South. New-u, retail outlet of H&B Stores Ltd. are located in Malls.
4. **Townships:** Many pharmacy chains are planning to set up their pharmacy chain in townships. Apollo is planning to set up Medicity near Pune. Apollo has signed an agreement with Hindustan Construction Co (HCC) to set up the medicity inside the upcoming project named Lavasa near Pune.

➤ **Organized chain or mall pharmacy:**

The first chain pharmacy was started by the Subiksha Retail Services Pvt. Ltd. The Medicine Shoppe, one of the largest chain pharmacy drug stores in the US, opened two chain pharmacy outlets in Mumbai and Reliance that has set up units under the brand name of Reliance Wellness.

The current pharmacy market size is estimated to be of US\$ 4.5 billion and it is expected to grow to US\$ 8.7 billion. Pharmacy retail is growing at the rate of 20-25 per cent annually. The organized pharmacy retail chain is dominated by 12-15 big players. There are more than 3500 organized chain pharmacy outlets in India [14].

The organized chain pharmacy market is dominated by big industrial houses like Ranbaxy's (Fortis), Pantaloon (Tulsi) and Reliance Retail's (Reliance Health and Pharma) as well as health care players like Apollo Hospitals Group's (Apollo Pharmacy), Medicine Shoppe, Zydus Cadilla's (Dial for Health), Sagar Drugs & Pharmaceuticals' (Planet Health), Morepan's (Life Spring), Lifetime Healthcare's (LifeKen), Global Healthline (98.4), Guardian Lifecare's (Guardian Pharmacy), MedPlus to name a few.

➤ **Modes of Operation of Mall pharmacy:**

They are operates on the following ways:

1. **Company Managed Stores:** Company owned pharmacy outlets are owned and manage by company itself. Major pharmacy chains in India like Fortis, Apollo, Alchemist, Subhiksha and Dial for Health have their own pharmacy chains.

2. **Franchisee:** Medicine Shoppe, MedPlus, Medicine Shoppe operates through the model of franchisee stores in India.

➤ **Operational Pharmacy Chains in the Indian Market:**

1. **Apollo Pharmacy:** A division of Apollo Hospitals Enterprises Ltd., is India's first and largest branded pharmacy network, with over 720 outlets in 17 states. Apollo pharmacy is accredited with - International Quality Certification and is open for 24 hours. Apollo will have 1000 pharmacies by the end of financial year 2008-09. It is giving free health insurance on purchase of above Rs. 6000 in a year.

2. **Fortis Healthworld:** Pharmacy chain promoted by the Singh family of Ranbaxy. It operates under two models - Company owned and operated stores and Franchisee owned stores. Currently Fortis has around 40 stores and planning to expand its presence to over 100 cities.

3. **MedPlus Health Services:** Hyderabad based pharmacy chain, MedPlus was launched in 2006 currently operates more than 500 stores in Andhra Pradesh, Maharashtra, Karnataka, Tamil Nadu, Gujarat and Rajasthan and plans to increase it to 1000 by March 2009. Mauritius based iLabs Management LLC has invested \$5.2 mn in MedPlus.

4. **Tulsi:** Tulsi is a pharmacy retail chain of Future Group. Most of the Tulsi outlets are located in Big Bazar. Future Group currently has over 35 Tulsi outlets across the country.

5. **LifeKen:** promoted by Lifetime Healthcare Pvt Ltd is a leading Pharmacy Retail chain in Bangalore and Chennai. LifeKen operates in total 82 Stores in Bangalore, Chennai and Mumbai. The list comprises 37 LifeKen Stores, 11 Pill and Powder Stores and 7 stores in Spencer's Stores in Bangalore. LifeKen is planning to open new retail pharmaceutical chain in the cities of Mumbai, Pune, Hyderabad and Kochi and is also set to expand to other cities in the South and West and then to North and East.

6. **Guardian Lifecare Pvt. Ltd** is North India's largest retail chain of Pharmacy, Wellness, Health and Beauty Retail outlets. The company has 149 outlets in 16 cities. Guardian Lifecare plans to open another 150 new stores across India by March 2009 and Guardian chain will grow to 400 stores by March 2010 and will be investing Rs.100 crore to fund our expansion.

7. **98.4:** a pharmacy chain operating in Delhi and NCR is a brand of Global Healthline. Parent company has presence in Europe and the Middle East. 98.4 has 27 stores in India and is expected to ramp up the count to 300 by 2011.

8. SAK CRS: SAK Consumer Retail Services Ltd is a subsidiary of Delhi based business group, SAK Industries. Its store brand, CRS Health- The Wellbeing Place, is one of India's premier Retail Pharmacy brands. The CRS Health stores have representation in all major centres in India to include Delhi, Noida, Gurgaon, Pune and Chennai. There are more than 30 CRS Health stores in India.

Purchasing or shopping behavior is a set of responses that people make in the presence of stimuli that leads to the purchase or non-purchase of products. It involves several processes that customers use to select, acquire, utilize and dispose of goods and services that satisfy their needs. This process will include questions on what, where, when, and how patients buy the desired product or service. The purpose of this study is to determine the effect of customers' satisfaction on their behavior when shopping in retail pharmacy.

MATERIALS AND METHODS

Research Methodology:

➤ **Objective:**

1. To understand the psychology of the consumer towards Mall pharmacy drug stores.
2. To understand the Viability of the consumer in Mall pharmacy.
3. To study the storage structure & pricing structure of medicine in mall pharmacy.

➤ **Scope:**

1. To analyze the service provided by the mall pharmacy drug store.
2. To analyze the existence market of the Medicines in mall pharmacy drug store.
3. To assess potential for launching of a new drug in mall pharmacy structure.
4. To analyze the competition of the product in mall pharmacy drug store.

➤ **Research Design & Methods:**

Type of Research: Buyer decision processes research

Sample Size: The experiments were carried out in the region of Pune. The questionnaires were distributed in the 106 individual customers, 21 Chemist in Mall pharmacy, 27 Chemist in retail drug store and 12 numbers of doctors.

Method of Sampling: Non probability and Convenient Sampling

Research instrument:

1. Primary Sources: Feedback form (Questionnaire)
2. Secondary sources: Websites, books and magazines

Table 1 Demographic details

Total individual customers (n)	106
Sex	
Male	68 (64.15%)
Female	38 (35.84%)
Age	
Mean age \pm SD	34.58 \pm 6.8
Age between 20-55	86
Above 55	20
Chemist (n)	48
In Mall pharmacy	17
In retail drug store	31
Doctors (n)	12

Questionnaires:

A questionnaire was developed based on the instrument formulated by Buurma et al., 2008; Oparah and Kikanme, 2006 [15,16].

➤ The following is the questionnaire that was administered to the customers:

Name of the customer:

Address:

Contact Number:

1. From where you will like to purchase your medicine from retail drug store or Mall pharmacy drug store?

If retail drug store, then why:

If Mall pharmacy drug store, then why:

2. Would you get the all your required medicines form Mall pharmacy drug store?

Yes/No

3. From which drug store chemist you will get more respect?

Retail drug store/Mall pharmacy drug store

4. Will you get any special service from mall pharmacy drug store?

Yes/No

If yes then, please specify:

5. Are you facing any incident or problem during the retuning of medicines in mall pharmacy drug store?

Yes/No

If yes then, please specify:

6. During the purchase of drug, will you get proper counseling about administration of medicines in Mall pharmacy drug store?

Yes/No

7. Do you fill that status of mall pharmacy is satisfactory or they require any improvement?

Satisfactory/require improvement

If any modification required then please suggest:

8. What you feel about the Pharma sector related to the sale of drug is:

Profit oriented/service oriented

9. As per the service provided by the Mall pharmacist, can you please rate them as per the following scale:

Excellent (1), Good (2), Average (3), Bad (4), Poor (5)

➤ The following is the questionnaire that was administered to the chemist:

Name of the Shop:

Name of the owner:

Address:

Contact Number:

1. The OTC drugs are easily assessable on your counter to consumer?

Yes/No

2. Can you provide the home delivery services to your customer?

Yes/No

3. What type of action you will take during the shortage of any medicines in your drugs store?

4. Will you accept any medicines that are return by customer due to some problems?

Yes/No

If No, any difficulty in it:

5. Are there is any scheme or benefits offered on the punches of medicine?

Yes/No

If yes, then please specify:

6. Are there is any scheme or offered for the senior citizens?

Yes/No

If yes, then please specify:

7. Do you sale any goods or material other than medicine or drug?

8. Are there is any facility for data storage of Patient Medication Record?

9. Will you give proper counseling to the customer about administration of medicines?

Yes/No

10. Do you fill that status of mall pharmacy is satisfactory or they require any improvement?

Satisfactory/require improvement

11. If any modification required then please suggest:

➤ The following is the questionnaire that was administered to the doctors:

Name of the doctor:

Qualification:

Address:

Contact Number:

1. Would you like that your patient purchases the medicines from retail drug store or from Mall pharmacy drug store?

Retail Drug Store/Mall Pharmacy Drug Store

2. Will you come across any incident that pharmacists are ask to change the medicines that you have prescribe?

Yes/No

3. Do you feel that status of mall pharmacy is satisfactory or they require any improvement?

Satisfactory/require improvement

If any modification required then please suggest:

1. Statistical analysis:

Distribution of responses to question was examined across subgroups based on demographic variables. An analysis of variance was used to evaluate the purchasing tendency of the customer in between mall pharmacy and retail drug store. p values are marked when significance remains after Fischer exact test for independence variable for chance significance, (i.e., each p value multiplied by the number of separate analyses.) Multivariate associations were explored by logistic regression analyses. Data were analyzed using SAS software version 9.2 (SAS Institute Inc., Cary, NC, USA.).

RESULTS

The total number of consumer/ customers/ subjects (total n = 106) were recruited for field testing. There were 68 (64.15%) men and 38 (35.84%) women. The mean (SD) age was 34.58 (6.8) years. The majority of the consumer was of age 20-55 (n=86). The 98 number of consumers were give respond and able to complete the questionnaire. Respondents were somewhat younger than non-respondents. The total 48 chemists were recruited for field testing including 17 from mall pharmacy and 31 of retail drug stores in which the questionnaires were distributed. The 46 number of chemists were give respond. Also the 12 doctors were recruited for field testing out of which 9 doctors were give respond (Table 1).

Almost customers are satisfied with the quality of services i.e. the quality of respect given by chemist to the consumer, billing and the payment system, recording of the proper patient medication record (PMR) and the counseling to the consumer at the time of the delivery of the drug that are provided by the retail drug store than shopping mall pharmacy.

35.71% of customers arrive at retail drug store feel good & 29.59% feel excellent regarding store quality of services provide by them. Majority of the customers feel good but not excellent in case of quality of services given by chemist. The customers like the way the staff interacted and helped them.

But in case of the mall pharmacy drug store 27.55% of the customers feel bad regarding the quality of services provided by them. Still there is an opportunity for the management to improve it and customer perception towards staff of the mall pharmacy drug store was still positive (Fig.1). Some customers were not satisfied with staff attitude. Lack of knowledge about the product may be the reason for that. Customer felt that product knowledge of staff was average or below average. Many times staff was not able to answer customer questions regarding the usage of the product and also they didn't able to manage the proper counseling to the consumer at the time of the delivery of the drug.

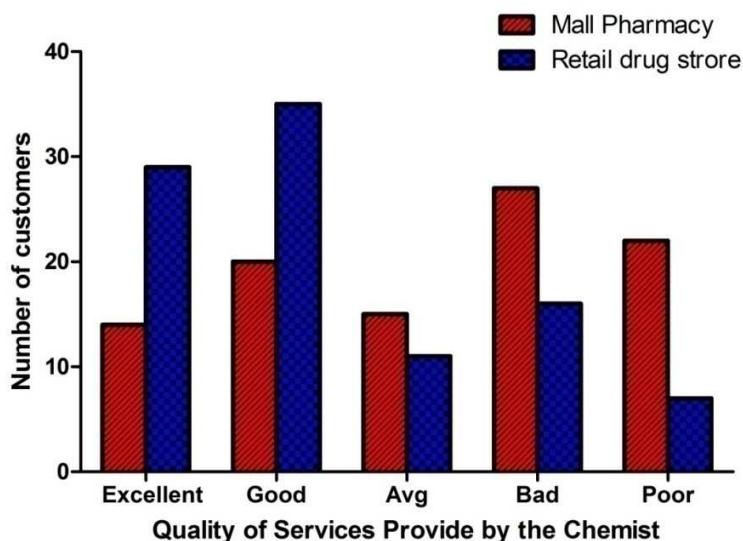


Fig. 1 Satisfaction of customer with quality of services provided by the chemist

Billing and payment system of mall pharmacy drug store is good. According to study, some of customers were not satisfied with billing and payment system as they need to wait during the rush hours.

Company should satisfied maximum customer to stay in this competitive market. Customers perception towards product availability and the range of the product in retail drug store is excellent as compare to mall pharmacy drug store. They can easily find the displayed products that they need. 53.04% of customers feel excellent and about 34.69% feels good about product availability and range in the retail drug store.

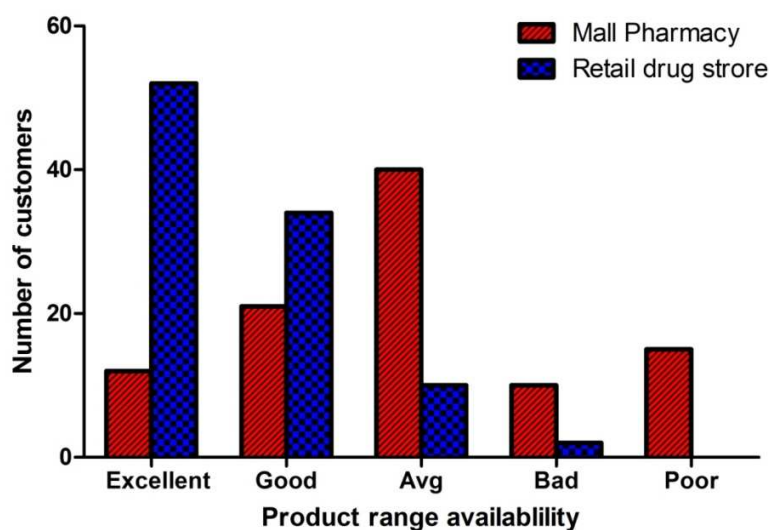


Fig. 2 Satisfaction of customer with product range and its availability

40.81% of customers feel average and 21.42% of customers feel good about product availability and range in the mall pharmacy drug store. Management has to take some action to reduce this level by making the new products available in every relevant store as soon as possible (Fig. 2).

The presence of the discount system and sufficient parking space in the mall pharmacy stores attract younger customer than the elder one. But the respect given by the chemist to the consumer and various qualities of the services provided by the retail drug store pharmacist attract more customers towards them. Hence, the 26.53% of the elder and 56.12% of the younger population like to purchase the medicines from the retail drug stores ($p = 1.000$). (Fig. 3) (Table 2).

Table 1 Purchasing tendency of the customer in mall pharmacy and retail drug store

Variables	No. of customer	Age between 20-55	Age Above 55	p value	Odd ratio	95% CI of OR
Mall Pharmacy	31	26	5	1.0000	Referent	0.3617 -
Retail drug store	67	55	12		1.135	3.558

Statistical analysis performed by Fischer exact test using SAS version 9.2 and $p < 0.05$ was considered significant.

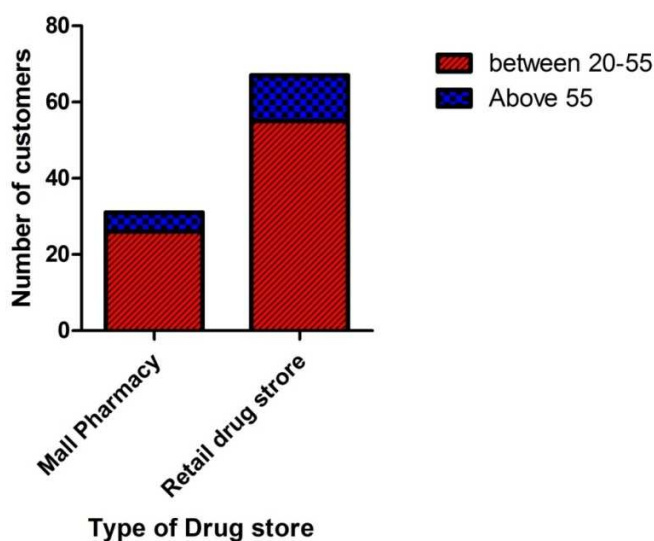


Fig. 3 Purchasing tendency of the customer in drug store

As shown in the Fig. 4 the 72.44% of the consumer rated the retail drug store as excellent and good as they are satisfied with the quality of services i.e. the quality of respect given by chemist to the consumer, billing and the payment system, recording of the proper patient medication record (PMR) and the counseling to the consumer at the time of the delivery of the drug. Whereas almost 47.95% of the consumer rated the mall pharmacy drug store as average and they suggest for the improvement in quality of services provided by mall pharmacy drug store.

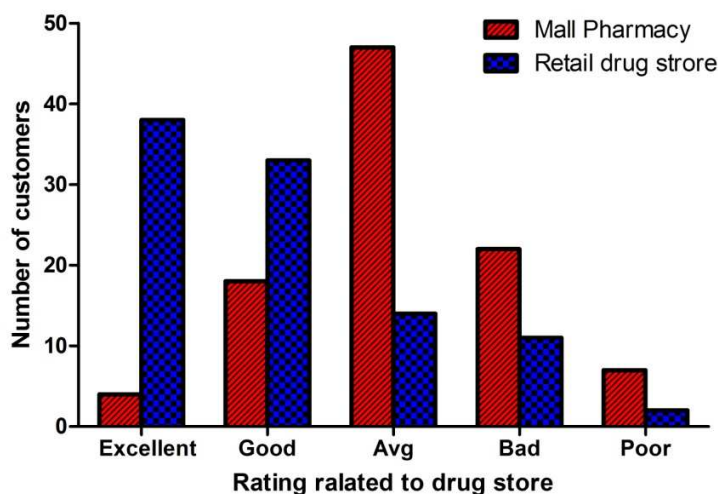


Fig. 4 Customer rating to drug store

DISCUSSION

This study was designed in order to measure the level of customer satisfaction and also their purchasing behaviour when purchasing a drug in retail drug store and in mall pharmacies. Over the years independent pharmacies i.e. retail pharmacy are being taken over by chain or shopping mall pharmacies.

Retail pharmacies are based solely on the patients and their needs. Customer service is the number one priority in the retail pharmacy drug store. They provide services and opportunities that chain stores would never think of trying. In retail pharmacy store there are well trained professionals present who educate and provide information to customers about their everyday medication and the safety and dangers of them [17]. They not only educate patients on their medication but also provide services and information like immunizations, diabetes management and preventative screenings. They also have ability to provide a free of charge delivery service. The retail pharmacy a wide variety of prescription and non-prescription medications, along with a host of other health related products.

In case of chain or shopping mall pharmacy drug store where the staff have lack of proper knowledge of medicines their ingredient as well as there is no direct customer interaction [18]. Therefore the customer get dissatisfy with the services that are provided by the chemist.

Customers get irritated by shortfalls of medicines or absence of medicine range and availability also the mall pharmacist unable to suggest the medicines to patients in such situations customer may divert to other stores. Also the displaying discounts structure may create a cheap impression on customer mind. The billing system in mall pharmacy is good but there need to be two billing counters so that during the rush it reduces the waiting time of the people [19].

Therefore management has to provide some sort of training programme to improve staff knowledge in the mall pharmacy drug store. The training provided to the staff, in terms of

handling customers, is adequate as the customers are found to be satisfied with the service of staff. The billing system is good but there need to be two billing counters so that during the rush it reduces the waiting time of the people [20].

Customer loyalty will result in continuity of care which is very important in ensuring improved health outcomes. Customers will have a single main pharmacist from which they obtain information and advice from. The pharmacist can regularly monitor all the medications, supplements that a customer has purchased and consumed. They can also establish the customer's history on medicines that they have been prescribed with or are currently taking [21]. Therefore coordination of the customer's pharmacotherapy can be done efficiently and effectively by the pharmacist. This can reduce drug related problems and improve the customer's state of well-being, hence improve health quality.

CONCLUSION

Manufacturers must ensure that their drug reaches customers with uncompromised quality. In India, because manufacturers do not retain control over the multi layered distribution system, the cold- chain management process continues to be difficult and expensive. However, manufacturers are increasingly realizing the importance of an effective distribution system, all the way to the end-customer.

Increasing brand awareness and quality consciousness among consumers would lead to shift to organized retailers because of value-added services such as diagnostics, lab facilities and other value added services. Further, consolidation in the industry will deem profitable for many and lead to good pharmacy practices.

A broad conclusion about store choice behavior among consumers indicates that image and perceptions along with individual characteristics have significant impact on the final outcome.

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