Consumer Perception towards Performance of Co-Operative Pharmacy in Cuddalore District

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ABSTRACT

This study investigates consumer perceptions of co-operative pharmacies in Cuddalore District, Tamil Nadu, India. The research aims to evaluate the quality of services, patient satisfaction, and factors influencing consumer preferences for co-operative pharmacies. A survey-based approach was employed to collect data from pharmacy users. The findings provide insights into the strengths and weaknesses of co-operative pharmacies, highlighting areas for improvement. The study contributes to the understanding of consumer perceptions and expectations from co-operative pharmacies, informing strategies to enhance healthcare service delivery.

Keywords: Consumer perception, service quality, Pharmaceutical, Healthcare, Pharmacy services, Generic medicines

INTRODUCTION

The Indian pharmaceutical industry has established itself as a global leader, ranking third in terms of volume production. Its reputation for producing high-quality generic medicines and affordable vaccines has made it a vital contributor to the country's economy. In 2020-21, the sector accounted for 1.32% of India's Gross Value Added, with a total annual turnover of ₹3,44,125 crore (USD 42.34 billion) in the fiscal year 2021-22. The industry encompasses various segments, including generic drugs, over-the-counter medicines, bulk drugs, vaccines, contract research and manufacturing, biosimilars, and biologics.

Globally, the healthcare system has shifted towards evidence-based medicine, emphasizing patient-centered care. International organizations like the World Health Organization (WHO) and the International Pharmaceutical Federation (FIP) have recognized this paradigm shift. However, the general public's perception of this transformation remains uncertain. Research has shown that patients' perspectives are crucial in evaluating healthcare services. Surveys have investigated pharmacy consumers' opinions on service quality and image, highlighting the importance of positive perceptions towards pharmacists.

To address healthcare challenges, the Indian government has launched various initiatives. Despite these efforts, the benefits of health programs have not fully reached the grassroots level. Rural healthcare faces issues like absenteeism, low skill levels, medicine shortages, and inadequate supervision. To bridge this gap, the Tamil Nadu government introduced the "Amma Pharmacy" program in 2014, providing essential medicines at reasonable prices through cooperative networks. This initiative has been supplemented by other efforts, such as the Triplicane Urban Co-operative Society's medical shops, which offer discounted medicines and employ trained pharmacists and sales staff.

The government recognizes the success of cooperative societies in selling medicines at discounted rates, benefiting thousands of poor individuals. To further enhance this initiative, the co-operative department has centralized medicine procurement, streamlining the process and increasing sales. These measures demonstrate the government's commitment to making healthcare more accessible and affordable for marginalized communities.

REVIEW OF LITERATURE

Recent studies have explored patients' perceptions and satisfaction with pharmaceutical care services. Ojha et al. (2023) examined patients' preferences for community pharmacy services, while Muruganantham and Gopika (2020) investigated customer expectations and satisfaction towards medical shops. Gebregeorgisea et al. (2017) assessed customer perceptions and satisfaction with Medicine Retail Outlet services in Addis Ababa.

Other studies have focused on specific aspects of pharmaceutical services. Parinyarux and Yotsombut (2022) explored customer satisfaction with facilities and services received from drug stores under good pharmacy practice. Bratkowska et al. (2020) found that patients valued pharmaceutical services, with pharmacy chains offering slightly higher service levels. However, independent pharmacies were rated higher in providing information on medications.

Research has also examined factors influencing consumer behavior. Ali Jinnah et al. (2020) revealed that customers' attitudes, subjective norms, and perceived behavioral control significantly impacted Over-The-Counter medicine purchases. Yew Ting et al. (2019) emphasized the importance of understanding consumers' decision-making processes when purchasing pharmaceutical products.

Studies in the Indian context have highlighted rational buying motives, with price and product availability being dominant factors (Murali and Saji, 2019). Shahpurwala and Zainab (2011) examined consumers' perceptions of community pharmacy quality measures. Borba and Carvalho (2020) found that consumers seek pharmacists' guidance on over-the-counter drugs but exhibit distrust in pharmacists' competence.

Norida Wahab et al. (2023) identified strengths, weaknesses, and opportunities in India's pharmaceutical supply chain management environment. The study proposed strategies to positively impact the Indian pharmaceutical industry.

These studies collectively underscore the importance of understanding patients' and consumers' perspectives on pharmaceutical services, highlighting areas for improvement and opportunities for growth in the industry.

Statement of the Problem

"Despite cooperative pharmacists being the primary point of contact for healthcare consumers, there is a significant knowledge gap in understanding consumer expectations, needs, and perspectives on cooperative pharmacy services. This study aims to address this gap by exploring consumer attitudes, perceptions, and satisfaction with cooperative pharmacy services in Tamil Nadu, India, to identify areas for improvement and enhance service quality."

Objective of the Study

The objective of the present study aims to explore consumers' perceptions towards cooperative pharmacy in the study area. The findings will provide empirical evidence to supplement the current findings supporting the development and improvement of pharmacy provided by pharmacists in the study area.

RESEARCH METHODOLOGY

In the present research, the researcher deals with potential for analysis on performance of cooperative pharmacy in Cuddalore District. The sample respondent in the Cuddalore District is the main source of information for this study. The study is based on both primary data as well as secondary data. The primary data are collected from the consumers who are buying pharmacy product of cooperative pharmacy in Cuddalore District. The study has been evaluated the performance of cooperative pharmacy based on the level of satisfaction of pharmacy consumers with the infrastructures, facilities, operation systems and services. The information for the study is collected from major sources of primary data through interview schedule. The target population for data collection is the cooperative pharmacy consumers in the study area, The Primary data were collected by using the interview schedule prepared on need-based. In order to collect primary data for the purpose of the study, the sample of 150 consumers are selected through simple randomly sampling technique. The analyses of data have been done by using simple percentage, mean, standard deviation, Factor analysis and one way ANOVA.

Analysis and Interpretation

The present study is to assess the consumers' perception regarding cooperative pharmacy in Cuddalore District based on the sample of 150 respondents. The study deals consumer opinion on performance of pharmacy has been analyzed. From the inferences of the results of the empirical analysis of respondents' attitude are followings.

The study was obtained basically from primary sources, i.e. they were collected by means to structured interview schedule. About 150 questionnaires were administered by the researcher to the randomly selected respondents. The responses collected through the structured questionnaire are analyzed.

Table 1. Demographic Profile

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S.No	Variable	Frequency	Percentage	
	Gender		1	
1	Male	112	74.67	
2	Female	38	25.33	
	Total	150	100.00	
	Age			
1	Below 20 years	12	8.00	
2	21-30	18	12.00	
3	31-40	24	16.00	
4	41-50	45	30.00	
5	51 and above	51	34.00	
	Total	150	100.00	
	Qualification			
1	S.S.L.C	27	18.00	
2	H.S.C	58	38.67	
3	Graduate	32	21.33	
4	Post Graduate	24	16.00	
5	Technical / Diploma	9	6.00	
	Total	150	100.00	
	Occupation		•	
1	Business /Trader	12	8.00	
2	Professional	7	4.67	
3	Private Employee	44	29.33	
4	Govt. employee	42	28.00	
5	Agriculture	9	6.00	
6	Retired Person	36	24.00	
7	Housewife		0	
	Total	150	100.00	
	Monthly Income	·	·	
1	Below Rs. 10000	36	24.00	
2	10000 - 20000	56	37.33	
3	20000-30000	24	16.00	
4	30000-40000	19	12.67	
5	40000 and above	15	10.00	

Source: Primary Data

The demographic profile of the respondents reveals a predominantly male population (74.67%) with a significant age distribution across various categories. The majority of respondents (34%) fall within the 51 and above age group, followed by 30% in the 41-50 age range. This suggests that the sample consists of experienced individuals with a substantial proportion of seniors.

In terms of educational qualifications, the respondents exhibit a diverse profile. The largest proportion (38.67%) holds a Higher Secondary Certificate (HSC), while 21.33% are graduates, and 16% possess postgraduate degrees. This indicates a reasonably educated sample.

Occupationally, the respondents are spread across various sectors. Private employees constitute the largest group (29.33%), closely followed by government employees (28%). Retired persons account for 24% of the sample, while business/traders and professionals make up smaller proportions.

The monthly income distribution shows that 24% of respondents earn below Rs. 10,000, while 37.33% fall within the Rs. 10,000-20,000 range. The remaining respondents are distributed across higher income brackets, with 10% earning above Rs. 40,000. This demographic profile provides a solid foundation for understanding the respondents' perspectives and experiences, enabling meaningful insights into their attitudes and behaviors.

Table 2. Frequency of Buying in Cooperative Pharmacy

S.No	Frequency	No of Respondents	Percentage
1	Regular	114	76.00
2	Occasionally	26	17.33
3	Offer	10	6.67
	Total	150	100.00

Source: Primary data

The frequency of buying in cooperative pharmacies reveals a significant proportion of loyal customers. A substantial 76% of respondents (114) reported buying regularly from cooperative pharmacies, indicating a strong customer base. Additionally, 17.33% (26) of respondents purchase occasionally, while a small fraction (6.67%, 10) stated they only buy when there are offers. This suggests that cooperative pharmacies have successfully established a loyal customer base, with nearly three-quarters of respondents frequenting these pharmacies regularly. The occasional buyers may be influenced by factors such as convenience, price, or product availability. This data provides valuable insights into customer purchasing habits and loyalty, enabling cooperative pharmacies to: Retain existing customers through continued quality service

Target occasional buyers with targeted promotions- Develop strategies to convert offer-driven buyers into regular customersUnderstanding buying frequency helps cooperative pharmacies refine their marketing strategies, enhance customer satisfaction, and ultimately drive business growth.

Table 3. Consumers Priority of Product Purchase in Co-Operative Pharmacy

S. No	Products	Mean	SD	
1	Prescribed Medicine	4.21	1.78	
2	OTC medicine	3.814	1.25	
3	Medical Device	2.40	1.32	
4	Personal Care Products	3.85	0.98	

Source: Primary Data

The consumers' priority of product purchase in cooperative pharmacies reveals interesting insights. Prescribed medicines emerge as the top priority, with a mean score of 4.21 out of 5, indicating their essential nature for respondents. Over-the-counter (OTC) medicines follow closely, with a mean score of 3.814, suggesting their importance for self-medication. Personal care products secure the third spot, with a mean score of 3.85, highlighting their significance in daily healthcare routines. In contrast, medical devices rank lowest, with a mean score of 2.40, indicating a relatively lower priority for respondents. This data implies that cooperative pharmacies should: Ensure consistent availability of prescribed and OTC medicines. Maintain a diverse range of personal care products and focus on promoting medical devices to increase awareness and demand.

Table 4. Motivating Factors for Buying the Product in Cooperative Pharmacy

S.No	Motivate Factor	Mean	Rank
1	Pharmacy Image	4.01	3
2	Qualified& Experienced staff	3.51	6
3	Availability	3.11	7
4	Location/ convenience	4.12	2
5	Quality of service	3.68	5
6	Value added service	2.97	8
7	Price	4.24	1
8	Product assurance	3.86	4
9	Range of Products	2.35	9

Source: Primary Data

The ranking of motivating factors reveals that price (mean: 4.24) is the primary driver for customers buying products in cooperative pharmacies, followed closely by location/convenience (mean: 4.12). Pharmacy image (mean: 4.01) ranks third, indicating the importance of reputation and trust. Product assurance (mean: 3.86) and quality of service (mean: 3.68) also emerge as significant motivators, suggesting customers value reliability and expertise. Qualified and experienced staff (mean: 3.51) and availability (mean: 3.11) are moderately important factors. Value-added services (mean: 2.97) and range

of products (mean: 2.35) rank lowest, indicating that customers prioritize core aspects over additional benefits and product variety.By understanding these motivating factors, cooperative pharmacies can tailor their strategies to meet customer needs, enhance satisfaction, and drive sales.

Table 5. Consumers' awareness about co-operative pharmacy

S.No	Level of Awareness	No of Respondent	percentage
1	Very High	23	15.33
2	High	37	24.67
3	Moderate	57	38.00
4	Low	18	12.00
5	Very Low	15	10.00
		150	100.00

Source: Primary Data

The level of awareness about cooperative pharmacies among respondents reveals a mixed picture. While a significant proportion (38%) exhibit moderate awareness, indicating a basic understanding, nearly 40% (24.67% + 15.33%) demonstrate high or very high awareness, suggesting a good grasp of cooperative pharmacy services. However, a substantial segment (22%) shows limited knowledge, with 12% reporting low awareness and 10% very low awareness. This disparity highlights the need for targeted awareness initiatives to educate respondents about the benefits and services offered by cooperative pharmacies. Notably, the majority of respondents (60%, combining moderate, high, and very high awareness categories) possess some level of awareness, indicating a foundation for further education and engagement. Cooperative pharmacies can leverage this existing awareness to promote their services and products more effectively. To bridge the awareness gap, cooperative pharmacies should consider implementing targeted outreach programs, advertising campaigns, social media engagement, collaborations with healthcare professionals, and educational workshops. By enhancing awareness, cooperative pharmacies can improve customer engagement, drive sales, and establish a stronger market presence.

Table 6. Source of Influence Suggesting to Visit the Cooperative Pharmacy

S.No	Source	No of Respondents	Percentage
1	Friends	11	7.33
2	Neighbours	14	9.33
3	Doctors	13	8.67
4	Relatives	9	6.00
5	Personal preference	89	59.33
6	Advertisement	14	9.33
	Total	150	100.00

Source: Primary Data

The sources influencing respondents to visit cooperative pharmacies reveal interesting insights. Personal preference emerges as the dominant factor, with 59.33% (89 respondents) citing it as their primary motivator. This suggests that respondents value their own judgment and experiences when choosing a pharmacy. Interpersonal influences, such as friends (7.33%), neighbours (9.33%), relatives (6%), and doctors (8.67%), collectively account for 31.33% of responses. These social networks play a significant role in shaping respondents' decisions. Advertisements also have a notable impact, influencing 9.33% (14 respondents) to visit cooperative pharmacies. Cooperative pharmacies should focus on delivering exceptional customer experiences to foster loyalty and positive word-of-mouth. Leverage social networks by encouraging satisfied customers to recommend services to friends and family. Invest in targeted advertising to reach new customers. By understanding these influences, cooperative pharmacies can refine their marketing strategies, enhance customer satisfaction, and attract new customers.

Table 7. Consumer Opinion towards Performance of Cooperative Pharmacy

S.No	Factor	Mean	SD
	Setting up of Pharmacy		
1	Appearance of the pharmacy	2.11	1.68
2	Easy access to pharmacy	3.23	1.23
3	Medicine dispensing area	3.11	1.22

4	Location of the pharmacy	2.11	0.98
	Average	2.64	1.28
	Inventory management	2.01	1.20
1	Procurement and stocking of necessary medicines	3.45	1.01
2	Proper storage of medication	3.65	1.09
3	Maintaining drug quality	4.26	1.31
4	Disposal of unusable drug	4.65	1.35
	Average	4.25	1.19
	Communication with Consumers		
1	Good communication skills of pharmacy staff with consumers	3.89	1.32
2	Providing advice on safe use of medication	3.97	1.42
3	Providing proper advice to selection on non-prescription medicine	4.11	1.02
4	Providing proper Advice on using non-prescription drugs	4.10	1.22
	Average	4.02	1.25
	Consumer value added Services		
1	Provision of online pharmacy services	2.65	1.56
2	Handling requests	2.36	1.45
3	Provision of pharmaceutical services to house bound persons	2.16	1.54
4	Running audit exercises for services provided	2.65	1.30
5	Online payment	1.97	0.99
6	Administering diagnostic tests	2.29	1.01
	Average	2.35	1.31

Source: Primary Data

An observation of the Table-7 indicates that the cooperative pharmacy consumers' satisfaction of various factors on setting up of pharmacy, level of satisfaction on Medicine dispensing area, Easy access to pharmacy has been moderate level (Mean =, >= 2.50 and < 3.50, the range for moderate level) and low level satisfied with 'Appearance of the pharmacy and Location of the pharmacy (Mean =,>= 1.50 and < 2.50, the range for disagree).Next, the cooperative pharmacy consumers' satisfaction of various factors on medicine stock management, the level of satisfaction on Disposal of unusable drug has been very high. Next, followed by high level satisfied with Proper storage of medication and Maintaining medicine quality (Mean =, >= 3.50 and < 4.50, the range for high level) and 'Procurement and stocking of necessary medicines' with Mean values being in between 2.50 and 3.50, the range for moderate, the respondents are moderately satisfied.

Regarding the Table-7 also indicates that the cooperative pharmacy consumers' satisfaction of factors on Communication with Consumers, providing proper advice to selection on non-prescription medicine, providing proper Advice on using non-prescription drugs, providing advice on safe use of medication and Good communication skills of pharmacy staff with consumers have been high level (Mean =, >= 3.50 and < 4.50, the range for high level). Next, the cooperative pharmacy consumers' satisfaction of various factors on Consumer value added Services, the level of satisfaction on'Provision of online pharmacy services and Running audit exercises for services provided with Mean values being in between 2.50 and 3.50, the range for moderate, the respondents are moderately satisfied and followed by low level satisfied with 'Handling requests, Provision of pharmaceutical services to house bound persons, Administering diagnostic tests and Online payment (Mean =,>= 1.50 and < 2.50, the range for disagree).

Major findings

Out of 150 respondents, 74.67 percent of the respondents are male, 25.33 percent of the respondents are female.30.00 percent of the respondents are in the age group of 41-50,38.67 percent of the respondents have completed their higher secondary,28.00 percent of the respondents are Government employees, followed by 29.33 percent of the respondents are private employee, 37.33 percent of the respondents are in the income group of Rs. 10,000-20,000 followed by 24.00 percent of the respondents are in the income group of below Rs.10000,

Out of 150 respondents, 76 percent of the respondents were buying medicine are regular in cooperative pharmacy. The consumers purchase priority from the cooperative pharmacy starts with prescribed medicine with mean score 4.21, followed by Personal care products with mean score 3.85. The motive behind the purchase from the cooperative pharmacy is mainly the price of the product followed by the location/convenience. The level of awareness of the selected consumers about various factors of

cooperative pharmacy, 23.33 percent of the respondents is high level awareness, whereas the 36.67 percent of the respondents' level of awareness is moderate level.

The cooperative pharmacy consumers' satisfaction of various factors on setting up pharmacy, level of satisfaction on Medicine dispensing area, Easy access to pharmacy has been moderate level (Mean =, >= 2.50 and < 3.50, the range for moderate level) and low level satisfied with 'Appearance of the pharmacy and Location of the pharmacy (Mean =,>= 1.50 and < 2.50, the range for disagree).

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Suggestions

The main motivating factors that attract customers towards co-operative pharmacy are product availability, experienced and qualified staff in pharmacy, product usage, free home delivery, and value-added services like regular reminders. So, co-operative pharmacy should be properly observed in such activities.

Consumers give prime importance to the scheme, discount of products and wide range of products respectively, so cooperative pharmacy should take proper care of these things to attract more customers. Cooperative Pharmacy can be provided membership card with various benefits like Apollo, Med-plus Pharmacy etc. Membership card holders can be enjoyed more discount on medical, free health check-up and counseling camps, special offer and additional benefits for members. These types of activities increase the number of customers.

CONCLUSION

As consumer perception is an integral part of the sustainability of pharmacy services, the objective of this study is to assess consumer perception of service quality in cooperative pharmacies in Cuddalore district of Tamil Nadu. As shown in the above discussion and results, drug quality and consumer-to-pharmacist relationship were good in cooperative pharmacy practices, and additional services that add value to the pharmacy organization and pharmacy were not considered acceptable. Therefore, by introducing online services and home services, providing value added services like any other private pharmacy, Co-operative Pharmacy can achieve the desired goal.

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