



# Consumers' expectations and experiences with chain community pharmacies in Lahore, Pakistan: a qualitative exploratory study

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## Abstract

**Background** The model of community pharmacy practice is changing remarkably not only in the West but also in developing countries, which has led retail pharmacies to transform into chain community pharmacies. However, very little is known about consumers' expectations and experiences with chain community pharmacies in developing countries. **Objective** This study aims to assess the expectations and experiences of consumers with services provided by chain community pharmacies in Lahore, Pakistan. **Setting** Four random chain community pharmacies. **Methods** A qualitative study design was employed and face-to-face, audio-recorded, interviews were conducted with 12 consumers attending 4 randomly selected chain community pharmacies. All interviews were transcribed verbatim and the interview data were analysed thematically using NVivo® software. **Main outcome measure** Consumers' expectations and experiences with chain community pharmacies. **Results** The results contributed to a deeper understanding of the consumers' expectations and experiences with the services provided by chain community pharmacies. Six themes emerged from interview data including; access to pharmacists, quality use of medicines, range of distinct services, staff's behaviour, inventory management, and scope of services. The consumers reported that pharmacists working in chain community pharmacies were building trusting relationships and encouraging them to take an active role in healthcare. Pharmacists working there were providing them medication information and counselling services, which they normally do not expect from traditional pharmacies. Consumers mentioned that they had access to pharmacists and quality services, but the inventory of pharmacies was limited. **Conclusions** This exploratory study provides preliminary evidence that some of the consumers' expectations and experiences were aligned. However, some deficiencies were highlighted by the consumers that need to be addressed by relevant stakeholders. Further research is needed to assess the expectations and experiences of pharmacists working in the chain community pharmacy sector.

**Keywords** Chain community pharmacy · Community pharmacy services · Consumer · Pakistan · Qualitative study

## Impacts on practice

- It seems that some of the consumers' expectations and experiences with regard to chain-pharmacy services in Pakistan were aligned, however, further research is needed to make generalisable conclusions.
- Some of the consumers' expectations are not met by chain community pharmacies, in Pakistan. This needs the attention of stakeholders such as the pharmacist, policymakers and pharmacy business owners.
- Consumers' expectations and experiences with regard to pharmacy in Pakistan should be explored at a national or wider level so that all stakeholders, including the community pharmacy owners, could improve consumers' sat-

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isfaction by improving the quality and scope of pharmacy service provision.

## Introduction

The practice of pharmacy differs markedly around the world, especially in the retail and community pharmacy sector [1]. The changing pharmacy practice model has led traditional pharmacies to transform into modernised chain community pharmacies (CCPs). While this change has given pharmacies an opportunity to transform into a hub of various public health services, most pharmacies remain focused on dispensing prescriptions and increasing productivity and efficiency through technology and technicians [2].

The model of community pharmacy differs around the world, being either business oriented or practice-oriented [3, 4]. This makes it difficult to compare those models across different regions [5]. Furthermore, consumers' expectations and experiences with pharmacies may also vary due to their varying level of exposure to pharmacy services [5]. Prior research conducted in the US in 1997 has indicated that consumers are likely to be more satisfied with independent pharmacies as compared to CCPs [6]. The key reasons behind the consumers' high satisfaction with independent pharmacies identified in the US study included less waiting time and convenient location of the pharmacy, and the excellent technical and communication skills of the pharmacist [6]. Another study from the UK reported that stakeholders (including pharmacists, consumers and general practitioners) supported the use of community pharmacies over GP practices for services such as management of minor ailments, medication reviews and routine check-ups [7]. The reason behind preferring community pharmacies was faster access and convenience for patients. However, the same stakeholders stressed the importance of having an appropriate system before expanding the scope of community pharmacy services [7]. In comparison to the US and UK, consumers from developing countries might not have similar perspectives about community practice because of their varying level of exposure to community pharmacy services. The model of community pharmacy business and practice in the West is different from the rest of the world, making it essential to explore consumers' expectations and experiences with CCPs particularly in developing countries where the model of pharmacy services is yet transforming.

Broadly speaking, pharmacists in the West are now offering various extended pharmacy services ranging from diagnostic testing, smoking cessation, and needle support program, to medicines management [8, 9]. In contrast, in some other regions, pharmacists are offering limited services such as compounding, dispensing of medicines, and inventory management [10, 11]. This indicates that most

community pharmacies in those regions are business oriented and providing basic pharmacy services [12]. The situation is concerning particularly in some developing countries, where not only the quality of pharmacy service provision is poor, but also there is a lack of professionally trained workforce [10, 11].

In Pakistan, for example, there are approximately 63,000 pharmacy outlets [11]. These outlets are categorised into three main types: retail pharmacies, community pharmacies and hospital-affiliated community pharmacies. Retail pharmacies (locally known as medical stores) are completely business oriented and staffed with sales assistants (who lack pharmacy related qualification) and a manager who may or may not be a qualified pharmacist [11]. In contrast, the other two types of pharmacies are staffed with qualified pharmacists (having a professional degree allowing them to practice pharmacy), pharmacy technicians (having at least a diploma of pharmacy technician) and/or pharmacy assistants [11, 13]. Retail pharmacies are solely offering dispensing services to consumers. Community pharmacies, on the other hand, are providing some additional pharmacy services such as; patient counselling, blood pressure monitoring, blood glucose testing and some other extended pharmacy services. However, as compared to both retail and community pharmacies, hospital-affiliated community pharmacies are providing most sophisticated and advanced pharmacy services such as bulk compounding, medicine labelling and immunisation, in addition to all those services that community pharmacies currently offer.

Pakistani community pharmacies, particularly in the metropolitan areas, are rapidly transforming into CCPs. In Lahore alone, which is the capital city of Punjab province, 4 different types of CCPs (approximately 80 outlets) are providing services to about 12-million population [12]. However, the expectations and experiences of consumers with the CCPs are remaining unknown. Research is needed to explore consumers' expectations and experiences with Pakistani CCPs because prior research published from Pakistan has entirely focused on the negative aspects of pharmacy services, overlooking the positive side or services that actually work. Therefore, exploring the consumers' expectations and experiences with CCPs will help stakeholders in understanding the community needs. Exploring consumers' perspectives will identify what actually works for the consumers and highlight ways to improve the overall quality of pharmacy service provision.

## Aim of the study

To explore the expectations and experiences of consumers with chain community pharmacies in Lahore, Pakistan.

## Ethics approval

Ethical approval was obtained from the Pharmacy Research Ethics Committee (PREC) of The Islamia University of Bahawalpur, Pakistan (Reference Number: 70-2016/PREC). Verbal informed consent was also obtained from the consumers prior to their recruitment.

## Methods

This study was conducted using a qualitative study design. Purposive sampling method was employed to recruit consumers for in-depth interviews. Currently, four different types of chain community pharmacies are working in Lahore, Pakistan. Two of them have been working for the last 5–10 years and the other two have started operating recently. Out of the two recent CCPs, one is a hospital-affiliated community pharmacy.

Therefore, one representative pharmacy from each of the four different chain community pharmacies was selected strategically as a recruitment site. The consumers, visiting those four CCPs in Lahore (the capital city of Punjab province), aged above 18 years were approached, invited and recruited. The interviewees were recruited until saturation of responses was achieved [14]. Interviews were conducted face to face by two trained interviewers (AS and UA) in the Urdu language (National language of Pakistan) and audio-recorded. The interview lasted for 3–5 min, as it asked only two simple questions; (1) Can you please describe what you think about and expect from chain community pharmacies and pharmacists working there? (2) Can you please share your recent experience when chain community pharmacies and pharmacists working there meet or did not meet, your expectations?

Interview data were transcribed verbatim and translated into English. Thematic analysis was conducted using an inductive approach [15]. Three research team members read the translated transcript many times, familiarised themselves with the data, identified the concepts and coded the data [15]. The codes were then compared through constant comparison technique and themes were generated [15]. N-Vivo® software was used to conduct the thematic analysis of the interview data. One senior researcher (IM) checked the coding of the data at different intervals and verified the translation and interpretation of the data to minimise the chances of researcher's bias and to check the accuracy of interpretation of colloquial terms used by the consumers.

## Results

The demographic characteristics of respondents are depicted in Table 1. All the participants were males and aged 27–40 years. The educational status of the majority of the respondents was either equal to or above the bachelors level.

The response saturation was achieved at the twelfth interview. Interviews were conducted by two authors (UA and AS) in February 2017. Overall, six themes emerged as a result of the thematic synthesis of the interview data. The emergent themes were; access to pharmacists, quality use of medicines, range of distinct services, staff's behaviour, inventory management, and scope of services. The consumers' expectations and experiences with CCP are described in detail under the headings of these six themes.

### Theme 1: Access to pharmacists

In this theme, the consumers' expectations and experiences with regards to accessing the pharmacist are described. The consumers mentioned that pharmacists were easily available to them, usually at the front counter of CCPs. In comparison, they found pharmacists sitting behind the counter at traditional pharmacies and consumers were being managed by other pharmacy support staff such as pharmacy assistants and technicians. The consumers highlighted that pharmacists were assigned a number of administrative tasks and cash handling, which gives a positive indication that pharmacists were given more job responsibilities but also indicates an excessive administrative work burden on them.

I have always found pharmacists at the front counter here (CCPs) [Consumer 1].

Pharmacist here (CCPs) deal with everything, including cash, while at other pharmacies, a pharmacist sits behind the counter with protocol, and salesmen (pharmacy technicians and support staff) deals with consumers [Consumer 3].

**Table 1** Demographic profile of consumers

Consumer ID	Age	Gender	Education level
1	28	Male	Bachelors
2	34	Male	Bachelors
3	37	Male	Masters
4	40	Male	Bachelors
5	26	Male	Masters
6	29	Male	Bachelors
7	32	Male	Bachelors
8	38	Male	Bachelors
9	31	Male	Intermediate
10	35	Male	Masters
11	27	Male	Bachelors
12	29	Male	Intermediate

## Theme 2: Quality use of medicines

The consumers expected that pharmacists should carefully evaluate prescriptions. They expected pharmacists to guide them on the proper use of medications. On the other hand, they experienced that pharmacists were providing them with detailed health information, which they usually do not expect from traditional pharmacies.

...The pharmacist should see our prescriptions and explain when to take medicines, and what should or should not be taken with those medicines [Consumer 1].

We are being educated about drug interactions, side-effects, and even about how it works within the body. In contrast, when we go to other (traditional) pharmacies, we keep our questions inside us, just show prescriptions, and don't share our thoughts and confusions about medicines [Consumer 2].

## Theme 3: Range of distinct services

The consumers expected a range of services from CCPs. When asked about personal experiences, the consumers highlighted that they received many services that they expected, but only a few distinct services. Overall, they were very satisfied with the services provided by CCPs and keen to see such services all over the country. Many of the highlighted services were only available at hospital-affiliated community pharmacies.

### Counselling service

Consumers were positive and satisfied with the counselling services provided by the pharmacist. A consumer shared his personal experience that he was addicted to a benzodiazepines-class drug and how the pharmacist helped him to get rid of it.

I was using Rivotril® (medicine brand). A doctor prescribed it to me for relaxation and I increased its dose myself and became an addict. When I came here (CCPs), one of the pharmacists counselled me. After following his advice I am feeling better as I have left that medicine [Consumer 6].

Another consumer, who was the carer of his father, told how a pharmacist's advice helped him to resolve the breathing difficulty of his father that was a side effect of a drug. He further explained that the pharmacist suspected the adverse effect of the medicine and suggested him to

request his father's doctor to change that medicine, which ultimately resolved the breathing difficulty of his father.

My father is a hypertensive patient. He was on Zestril® and suffering from breathing difficulty. A pharmacist here (CCPs) recommended me to consult a doctor. He suspected that it (Zestril®) was causing breathing difficulty. We consulted the doctor and he changed that medicine, and surprisingly, the problem was resolved. I am thankful to the pharmacist who asked me to consult our doctor [Consumer 8].

Even basic counselling sessions about the proper use of medicines positively changed views of the consumers towards the CCPs. However, a consumer reported that he did not receive such consultation services from traditional pharmacies.

I came here (CCPs) once to get medicines. I think it was ciprofloxacin. The pharmacist guided me that calcium supplements should not be used with ciprofloxacin. I have used this medicine before, on many occasions, but no one (pharmacist at traditional pharmacies) told that [Consumer 3].

### Quality of services

The consumers highlighted that some CCPs offer good services, but they are not comparable to traditional pharmacies as the quality of services is poor at most traditional pharmacies. The initial perception of the consumers towards the CCPs was neutral and they considered it, for an instance, to be similar to traditional pharmacies. However, their perception changed after visiting and experiencing CCPs.

I had an idea that just like other pharmacies I'll just go in, hand over prescription, and get medicines. You know...we try to ask questions from personnel working in traditional pharmacies, but sometimes they say that they do not know about medicines, and say you should ask from doctors. They give lame excuses, sorry to say that. But, I felt better when I came here (CCPs) [Consumer 4].

The consumers were happy with the availability of pharmacist and satisfied with the storage conditions at CCP.

...Temperature (inside pharmacy) is always maintained and pharmacist is always available here (CCPs) [Consumer 10].

### Medication labelling

The consumers reported that some of the hospital-affiliated community pharmacies were providing them printed medication labels containing dosage information. The consumers

appreciated that labelling service. However, they mentioned that those labelling services were not available at other CCPs or traditional pharmacies.

...Whenever I came here (hospital-affiliated community pharmacies) to purchase medicines, pharmacists labelled everything (medicines) [Consumer 10].

They (hospital-affiliated community pharmacies) have started a good service like labelling medicines, which contains detailed dosage information [Consumer 4].

On the other hand, a consumer raised a concern with the English language used in those medicine labels that was not understandable for his father.

...But the medicine labels are in the English language and it is difficult for my father to read the instructions given in English [Consumer 9].

#### Theme 4: Staff's behaviour

The thematic analysis of interviews data highlighted that consumers were satisfied with the staff's behaviour working at CCPs. They considered CCPs staff as polite, educated, professionally trained, helpful and very interactive. The consumers reported that pharmacists were actively engaging and counselling them to improve their medicine use.

Much better, other pharmacies have very rude type staff [Consumer 5].

Personnel available at these pharmacies are very well equipped with the knowledge and are quite professionals as well. Whenever we come here, we feel that we will get the right services, medicines, and even follow-ups [Consumer 9].

Pharmacists welcome in a good way, take the prescription, and guide us [Consumer 11].

They (CCPs pharmacists) ask several questions about medicines and they counsel us in a well manner [Consumer 5].

#### Theme 5: Inventory management

The consumers reported a shortage of inventory as a barrier to accessing the required medicines. The consumers highlighted that due to the limited availability of brand medicines in CCPs, it was difficult for them to get all the required medicines. The interview data also indicated the unwillingness of consumers towards generic alternatives. They suggested that CCPs should expand inventory, particularly brands and their quantity so that they can get all medicines that they want or recommended by their doctors.

They (CCPs) offer good services, but I have a complaint. Whenever I come here, I cannot find all the medicines that I need [Consumer 4].

Their inventory is very limited in terms of brand, but not generics. The quantity of stock is also limited. Mostly I don't get what I need [Consumer 6].

#### Theme 6: Scope of services

Consumers highlighted that these days quackery has become a challenging public health concern and the pharmacist may help to curb that arising problem. Quackery refers to the provision of health-related services by unqualified persons or quacks. The consumers acknowledged the importance of the role of the pharmacist in healthcare and suggested to expand the scope of CCPs services, particularly to those remote areas of the country where people lack access to quality healthcare services.

I would like to support it (CCPs), because these days quackery is common throughout the country (Pakistan), and it risks the lives of many people [Consumer 2].

Pharmacists have a unique role in healthcare. Whenever you go to a doctor, you must also consult a pharmacist as he is a medicines expert. I suggest they (CCPs) should be expanded to far and remote areas of the country [Consumer 4].

#### Discussion

This study explored the consumers' expectations and experiences with the CCPs in Lahore, Pakistan. While consumers were generally positive towards CCPs, certain changes were recommended by the consumers to improve the quality of services provided by CCPs.

The consumers were particularly satisfied with the easy access to the pharmacist. Expanding CCPs setups from metropolitan to rural areas may help pharmacists to deliver quality pharmacy services to individuals living in rural and remote areas, lacking access to quality healthcare services and pharmacy facilities [16]. The consumers in this study showed satisfaction with the quality of services provided by CCPs. Therefore, expanding CCPs further from metropolitan areas to rural areas in Pakistan may help in changing community practice by creating a sense of competition in the market. Creating a sense of competition is the way forward as previous studies have clearly highlighted that most of the traditional pharmacies in Pakistan do not comply with basic standards of medicine storage [10].

This study further highlighted that consumers were in favour of medication labelling service provided by some hospital-affiliated community pharmacies. This service has recently been introduced by outreach pharmacies affiliated with the Aga Khan University Hospital [17]. Such labelling services may significantly promote medication-taking behaviour among patients [18]. Therefore, stakeholders from the community pharmacy sector should pay attention to consumers' needs and take steps to equip community pharmacies with the labelling resources. Making these simple changes in the community pharmacy practice may help in building consumers' trust in the community pharmacy sector.

Although this study reflected a positive response of the consumers towards the quality of services provided by the CCPs, it highlighted the consumers' dissatisfaction with the generic substitution and shortage of inventory. A study from Iran reported that physicians' motivation followed by the pharmacist consultation played a positive role in reducing the out of pocket expenditure via generic substitution [19]. In contrast, a prior study from Pakistan highlighted that physicians have several concerns regarding the quality of generic medicines, which may negatively influence the acceptance of generic medicine by consumers [20]. Therefore, consumers and physicians should be equally educated about generic medicines. This vertical transmission of information from physicians to consumers may help in converting consumers' negative perceptions into positive ones and in increasing the overall acceptance of generic medicines by consumers.

According to a Malaysian study, the most rated services provided by community pharmacists were patient counselling and smoke cessation programs, and general practitioners were also in favour of medication management as well as referral services provided by the community pharmacists [21]. In another study, approximately half of the patients (58%) from Iraq thought of community pharmacists as businessmen, but still, the majority (66%) consulted community pharmacists for minor ailments [22]. A similar positive attitude towards community pharmacists has been observed among Pakistani consumers, which indicates that CCPs may start offering various advanced pharmacy services.

Lastly, this study highlights that the consumers had high expectations from CCPs. These findings are in line with a prior study evaluating the public perception towards community pharmacists in Jordan, which reported that the majority of the participants had no previous knowledge about pharmaceutical care, however, they had higher expectations from the pharmacist [23]. Therefore, stakeholders should develop strategies and allocate resources for CCPs to meet high the expectations of consumers.

Although this study explored the consumers' expectations and experiences with CCPs, research is needed to

investigate the perspectives and challenges faced by the pharmacist practising in Pakistani chain community pharmacy sector. Despite several interesting findings, there are some limitations of the study that should be considered by readers. Firstly, although generalisability was not an intent, it is a limitation of the study. Secondly, the interviewees were recruited only from one metropolitan city, which warrants further exploration from other less metropolitan areas where CCPs may be located. Thirdly, the majority of interviewees were educated; therefore, these findings do not reflect the expectations and experiences of illiterate or less educated people. Further research should focus on illiterate people because their low qualification might have an influence on their health literacy and their expectations and experiences with pharmacies. Another limitation is the lack of representation from female consumers due to some cultural barriers and their hesitation towards participating in this interview study. Females also use pharmacy services therefore; further research should focus on the female consumer as they might have different expectations and experiences than males. Lastly, the lack of representation from females and illiterate people might have bearing on the claim that data saturation has been met.

### Policy and practice implications

This study promises to initiate a debate amongst stakeholders and provoke researchers to conduct a country level study to make generalisable conclusions. By determining the perceived expectations, experiences, and unmet needs of consumers, subsequent steps can be taken to improve the quality and scope of services provided by chain community pharmacies. Stakeholders, particularly pharmacy business owners and pharmacists, should note that making some simple changes in community pharmacy practice, which do not require massive resources, can make a notable difference. In addition, stakeholders support to pharmacists will help them in delivering quality pharmacy services to masses.

### Conclusions

This exploratory study provided insights into the consumers' expectations and experiences with the chain community pharmacies. While consumers were satisfied with most of the services provided by the chain community pharmacies, they highlighted some serious deficiencies. Although this study reported interesting findings, caution is needed before generalising the study findings at a national or international level. Further large scale research is needed to make solid conclusions and to inform stakeholders, particularly pharmacy owners and policymakers, about the strategies needed

to transform chain community pharmacies into a more advanced hub of public health services.

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