

# A Review of Tertiary Care Hospitals' Pharmacy Services' Customer Perceptions and Satisfaction Levels

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## Abstract

*The quality of tertiary care hospital pharmacy services can be assessed largely by how satisfied their customers are. Supplying medication and offering counselling to patients is important for their outcomes and perceptions. I examined literature regarding pharmacy services in tertiary care settings and suggested how it can be improved in the future. ABCD analysis was done to examine the important features of pharmacy services related to satisfaction. While customer satisfaction with pharmaceutical services has been widely investigated, researchers rarely study areas like ease of getting medicine, communication with pharmacists and counselling offered. It is important to note that the first time someone visits and for the elderly, they may experience shortcomings in the service provided. Many people expressed that education on medicine and meetings with pharmacists were not provided in a reliable manner.*

**Keywords:** Customer satisfaction; Pharmacy services; Tertiary care hospitals; Pharmacist–patient interaction; Patient counseling; Drug availability; Healthcare quality; ABCD analysis.

## 1. Introduction

In healthcare delivery, the services of pharmacy help ensure better patient results, efficient treatment and high-quality healthcare. At tertiary care hospitals, specialty treatment and care for patients depend greatly on the effective management of pharmaceuticals. Pharmaceutical services and patient experience are now seen as a key field, as it has been demonstrated that medicine adherence, the results of treatments and healthcare use are linked to the satisfaction patients have with pharmacy care(1).

Globally, healthcare institutions now focus on patient satisfaction which means patients should receive the care they expect. At hospitals, the pharmacy department deals with giving medicines, consulting with clinical pharmacists, managing medication therapy, watching for adverse events and providing pharmaceutical information. How patients feel about the care they get depends largely on the quality of these services.

It has been found that patient satisfaction with pharmacy services includes both technical and interpersonal factors. Many health research studies report that communicating with pharmacists is linked to increased compliance among patients which in turn, helps them achieve better treatment outcomes. If patients are dissatisfied with their pharmacy services, it can result in missing important medicinal doses, returning to the hospital too soon and less effective therapy.

At the tertiary level, the need for pharmacy services is greater since medical regimens are usually complex. Because many patients receiving specialized care are prescribed several medicines, they may come across issues related to taking their medications and side effects. Pharmacists in these hospitals are usually key members of medical teams who give advice on medicines chosen, how they should be given and how medicines are reconciled.

Pharmacy used to focus on products, but nowadays, it focuses more on meeting the needs of patients. Currently, pharmacy services underline providing care, supervising medicines and teaching patients all in addition to what used to be only dispensing medicine(2). As a result of this development, pharmacists now take part in clinical rounds, put medication safety measures in place and provide personalized medication advice. Improved services help patients feel more satisfied, as they address medication issues, reduce dangers and improve outcomes.

There are many aspects that play a role in how patients view the quality of pharmacy services provided in tertiary care areas. If medicines are easy to get, it makes patients very happy, while failing to provide them leads to disappointment. The layout of pharmacy places plays a role in how patients see and judge them. Employees' attitude, the way they look and how they communicate are crucial for job satisfaction. Furthermore, long delays in receiving medications, unclear directions on the drug label and not being able to contact a pharmacist are aspects of

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the procedure that strongly influence what patients go through.

It is difficult to measure how satisfied patients are with their pharmacy services. This means, tools used should cover all aspects of pharmaceutical care. There are different assessment tools and they include surveys as well as qualitative interview methods. Generally, they measure characteristics such as technical abilities, social skills, ease of use and the completeness of information about the drug. Evidence shows that patients are not equally happy with their healthcare, depending on their conditions, kind of care and location, so assessing their satisfaction should take the context into account.

Patient satisfaction surveys are beneficial in improving service quality at many healthcare institutions. To begin with, satisfaction data helps find any gaps in services and allows organizations to apply solutions to improve on those points. In addition, healthcare systems are using patient satisfaction scores to affect both payments they receive and the accreditation standards they must meet. Furthermore, using satisfaction assessment allows institutions, departments and service providers to compare themselves with others and strive for better quality. Additionally, data on patient satisfaction demonstrates what the population needs which could guide the design of services for several patient groups.

Even though it is well known that patient satisfaction is vital in pharmacy, researchers have not fully explored the topic. Only a few investigations have analyzed the way some pharmaceutical services relate to overall satisfaction, mainly in tertiary care situations(3). It is not yet clear what effect automated dispensing, e-prescribing and telehealth pharmaceutical consultations have on patient satisfaction. The effects of culture, society and demographics on patient expectations and perceptions should be further examined for better patient care.

Given today's focus on healthcare awareness, various medical options and caring about patients, optimizing satisfaction with pharmacy services is now extremely important. Given that they treat patients with difficult medical issues, tertiary care hospitals find it necessary to improve their pharmacy operations and put more effort into enhancing patients' experiences. Evaluating how people feel about the hospital pharmacy service, identifying the reasons for those feelings and implementing adjustments can highly improve healthcare quality, patient results and the hospital's performance.

## **2. Methodology and Literature Review Approach**

This review carefully examined literature on patient satisfaction with pharmacy services in hospitals giving tertiary care. Various literary sources were applied to offer a thorough review of the subject matter. We focused mainly on getting published peer-reviewed articles from both international and national journals from the past decade. Moreover, resorting to doctoral theses, learning sites and platforms like Google Scholar, Research Gate, Academia and Shodhganga made it possible to discover the main trends and continuous gaps in the research community.

The assessment of literature started with spotting relevant keywords and setting up the search strategy. I searched for entries containing "customer satisfaction", "pharmacy services", "patient experience", "pharmaceutical care", "pharmacist interactions", "hospital pharmacy", "medication counseling" and "tertiary care hospitals." The use of Boolean operators helped limit the results and bring them closer to the research objectives. Several publications were found using the databases, then each paper was carefully screened to ensure it was relevant, studied with good rigor and provided information on patient views of hospital pharmacy services.

The texts were examined through systematic analyses and the analysis was given notable attention to the abstract, methods, results and any gaps found. Using an analytical method, it was possible to notice similarities, opposing results and topics that still need attention. To ensure a variety of perspectives, this review used surveys, interviews, studies that mix methods and systematic reviews(4).

Reports from a variety of health systems and cultural settings were included to permit a comparison of results and recognition of ideas applicable everywhere or that depended on area-specific features. To assess how various groups had different views on healthcare, researchers included studies of chronically ill patients, elderly people, first-time inpatients and people from diverse socioeconomic backgrounds.

The ABCD approach which includes analyzing Advantages, Benefits, Constraints and Disadvantages, was utilized to study the different aspects of how satisfied people were with their pharmacy service. Thanks to this technique, we could easily identify what was satisfactory to patients and what areas required attention. Through the ABCD framework, the study team could evaluate different pharmacy services based on the views of a range of parties.

Using qualitative content analysis, I looked through the chosen literature to find out what tools, approaches and

techniques scholars use to assess patient satisfaction.

Component	Details
<b>Research Scope</b>	Patient satisfaction with pharmacy services in tertiary care hospitals
<b>Source Types</b>	Peer-reviewed journals, doctoral theses, educational websites, scholarly databases
<b>Databases Searched</b>	Google Scholar, ResearchGate, Academia, Shodhganga
<b>Search Keywords</b>	"customer satisfaction," "pharmacy services," "patient experience," "pharmaceutical care," "pharmacist interactions," "hospital pharmacy," "medication counseling," "tertiary care hospitals"
<b>Search Strategy</b>	Boolean operators, keyword combinations, decade-specific filtering (past 10 years)
<b>Screening Criteria</b>	Relevance to objectives, methodological rigor, contribution to understanding of pharmacy services
<b>Types of Studies Included</b>	Quantitative surveys, qualitative interviews, mixed-methods studies, systematic reviews
<b>Population Diversity</b>	Chronically ill, elderly, first-time hospital visitors, diverse socioeconomic backgrounds
<b>Geographic Scope</b>	Global (various healthcare systems and cultural contexts)
<b>Analytical Methods</b>	Textual analysis, qualitative content analysis, thematic extraction
<b>Conceptual Framework</b>	ABCD Analysis (Advantages, Benefits, Constraints, Disadvantages)
<b>Focus Areas</b>	Abstracts, methodologies, findings, gaps, validated instruments, evidence-based best practices

**TABLE 1** Methodological

Due to the different approaches and tools used in the studies, the findings needed to be interpreted and summarized with care. Authorities made an effort to identify methods and instruments that were shown to make patients happier with the services they received.

### 3.Factors Influencing Patient Satisfaction with Pharmacy Services

It was clear from the literature review that many different factors play a role in influencing patient satisfaction with pharmacy services at tertiary care hospitals. They play a role in various aspects of pharmaceutical care, resulting in patients' opinions and feelings. This knowledge offers healthcare administrators and pharmacy staff ideas that can be applied to serve customers better and meet their expectations.

Being accessible to patients in terms of both location and time factors greatly influences how satisfied they are. A pharmacy is physically accessible if it is easy to reach inside the hospital, is clearly marked, allows users with disabilities and provides the needed comfort. Operating hours need to be designed around patients' needs, mainly for everyone who visits the outpatient clinic. In their study, Bahari and Ling (2010) found that people with difficulties reaching the pharmacy had much lower satisfaction levels, with this issue affecting mainly elderly people and patients needing to repeatedly get their medication refilled. Extended pharmacy hours were seen from research by Kefale et al. (2016) to correlate positively with higher satisfaction from patients in hospitals with a wide variety of attenders(5).

Medication can greatly impact a patient's satisfaction, as numerous research studies have revealed. Ayele et al. (2020) found that when patients faced medicine supply shortages, they tended to be more dissatisfied, regardless of

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other positives they noticed in the service. Those who suffer from chronic diseases appear to be hit the hardest by the absence of needed medications and it often causes these patients more anxiety. What's more, according to Singh and Kaur (2017), when drugs were not available at the hospital pharmacy, patients' satisfaction with the service dropped significantly because they had to acquire their medications from other pharmacies. Due to this factor, hospital pharmacies should rely on efficient methods to handle their stock, foresee supply and maintain their supply chain.

Good communication between a pharmacist and a patient is important for patient satisfaction. Several studies have pointed out that how a pharmacist communicates, shows empathy during counseling and explains matters helps shape patients' opinions. Patients, according to Mohamud et al. (2021), liked pharmacists who listened intently, explained the medication clearly, addressed any worries sensitively and spoke in a language that made sense to them. It was also found that patients' satisfaction with the pharmacist depended on how well the pharmacist adjusted his or her manner of communication. Sletvold and Nguyen (2021) pointed out that individuals with low health literacy or those who use a language other than English depend on healthcare staff communicating using different methods.

Many studies report that the amount of time patients spend in the ED plays an important role in how satisfied they are. Afolabi and Erhun's research in 2003 revealed that as waiting time increased, the patient's satisfaction dropped. In addition, a person's feeling of having waited too long is usually a bigger factor in their satisfaction than just checking the clock. According to Semegn and Alemkere (2019), the implementation of queue lines, visibility of how long the wait will be and improved waiting spots kept customers happy, even when times remained the same. Therefore, satisfaction could be increased by using perception management approaches, along with measures to improve how the company operates.

If staff provides excellent technical services and is seen as professional, patients tend to trust them and feel more satisfied. Numerous studies such as the one by Alotaibi et al. (2021), showed that people are more satisfied when they view pharmacists as knowledgeable. It was important for patients to see pharmacists offering strong expertise, answering challenging questions, managing potential drug problems and processing prescriptions with great accuracy(6). The style and tidiness of staff, the way the pharmacy was set up and orderly handling of medication all contributed to patients' feelings that the pharmacy was technically skilled. Salamatullah et al. further found that patients felt more satisfied when pharmacists were well-versed in their medical conditions and the medicines used to treat them.

Feeling protected with private discussions in a pharmacy can influence a patient's choice to participate and share information. According to Molla et al. (2022), people's satisfaction with how sensitive medications or treatments are managed declines if there are no private areas for consultations. Confidential areas in pharmacies benefitted patients' happiness, as shown in Ali et al.'s 2022 research. When protecting a person's privacy, it matters more for patients with mental health issues, sexually transmitted illnesses or other health concerns that are generally stigmatized.

Many patients also place importance on getting enough information about their medications such as the dosage, side effects, what should not be mixed with them and how to keep them safe. According to Druić et al.'s research (2021), patients were more satisfied with both verbal and written medication information since they had something to refer to after leaving the pharmacy. Saffaei's study team found that patients felt more satisfied when the information was given by pharmacists before they asked for it. It seems essential that details are delivered in the right way, so that learning can be made easier and not made more complicated.

More and more, how much a patient has to pay and how clear the pricing is influences how satisfied healthcare is. According to the study by Khalaf et al. (2016), people were more satisfied when prices were stated clearly, there were generic drugs available and the pharmacist discussed how to save on medication. AlShayban et al. also found in 2020 that being considerate about finances and introducing patients to proper medication assistance programs was valued by these individuals. People with chronic health problems that require lengthy and expensive drug therapy notice the financial aspect most.

Other things that can influence a person's satisfaction are the environment of the pharmacy, using technology for faster and more accurate prescriptions, providing services meant for certain groups of patients and integrating pharmacy care with other healthcare services. All of these details interact and influence patient satisfaction with tertiary care pharmacy services, so it is necessary to approach this with thorough assessments and take improvement

actions in many areas.

#### **4.Current Status and Emerging Issues in Pharmacy Service Satisfaction**

Today, patient satisfaction with pharmacy services is influenced by a variety of factors such as the type of healthcare center, locations and the groups of patients. According to existing research, there is a general sense of satisfaction on a global scale, though some factors need further improvement in particular areas. From these studies, we can tell that people in diverse tertiary health settings are generally satisfied, but challenges still exist in providing these services(7).

Investigations conducted recently highlight that a patient's level of satisfaction with pharmacy services usually lies on a scale, not just at one extreme or another. Results from Mahrosh's study indicate that the overall satisfaction was average, but some services were consistently given higher scores by the participants. Really, customers seem to value most in pharmacists their kindness, respect and professionalism. When it comes to providing the right amount of medicine and following doctors' instructions, most studies also report positive results. Yet, multiple studies indicate that patients are generally dissatisfied with the period they have to wait, methods for keeping their information confidential and the type of advice offered for their medications.

The education levels of patients and what they have gone through in healthcare before play a large role in their ratings of satisfaction. Salamatullah et al. (2021) found that patients who are well-educated and knowledgeable about healthcare expressed a higher standard for drug-related information and appreciated the expertise of the pharmacist when seeking care. From our study, it appears that the expectations a person brings can affect their satisfaction with a hospital compared to people who are used to the healthcare system or health service facilities. Moreover, those with continuing health problems need pharmacy care often and they tend to value connection to the same staff and personal service more than patients having fast-acting illnesses.

It is common for pharmacist-patient interactions to be a problematic aspect of service satisfaction. The study by Mohammed et al. (2019) noted that patients were not given enough time to ask questions, were not given enough details regarding their medicines and were not informed adequately about possible side effects of these medicines. Often, research attention hurts patient involvement as it is common for these studies to record only one-way transmission of information. It is also worrying that pharmacists usually think patients understand more than they actually do.

Many people are dissatisfied because there are access challenges to medications in many healthcare environments. According to Ayele et al. (2020), people receiving medical care in poor and underdeveloped settings frequently report dissatisfaction over not having enough medicines. Shortages in healthcare products are caused by delays in the supply chain, difficulties managing inventories and not having enough funds. Due to the challenges, patients are sometimes forced to pick up their medication at different pharmacies or to accept substitute drugs instead which adds more work for them. When there are no adequate medications, particularly for long-term conditions, patients become very anxious about their therapy(8).

Pharmacy facilities in many tertiary care areas do not have adequate support for providing the best services. Various researchers, like Molla et al. (2022), agree that too few waiting areas, lack of seclusion during consultations and unsuitable processes in the workplace greatly decrease patient happiness. At times when the pharmacy is crowded, it becomes difficult for pharmacists to communicate easily with patients. Studies have shown that caring for patients is often put after operational solutions and hospital layouts are then created without considering how to deliver pharmaceutical care. Facilities that do not meet patient-centered care requirements are mostly found in buildings built much earlier.

Using technology in pharmacies does not always succeed and does not have the same effect on all patients' satisfaction. Automated prescription systems, machines that dispense treatment and portals for patients have appeared in many tertiary hospitals for the same aim: better service and more access. According to Lämsä et al. (2017), people using innovations often find them positive when it leads to shorter wait times and better accuracy in prescriptions. Notwithstanding, problems with incorporation, glitches in the equipment and incomplete patient knowledge about how to use it often affect the benefits. Also, research based on various populations shows that problems related to digital divide may leave elderly individuals and individuals lacking skill in digital technologies

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with less support.

Nowadays, it is becoming more important for people in healthcare to know how much medicine costs and whether it is affordable. Studies from Khalaf et al. (2016) indicated that mixed-quality services and communication about prices do not completely explain why patients are not satisfied. Pharmacist Consultation in Healthcare Even though financial concerns with medicine are well established, pharmaceutical care is generally not managed well in this area and no major approaches have been taken to deal with the problem.

Despite the benefits shown from using these services, they are not always offered to vulnerable patients in tertiary hospitals. According to Ismail et al. (2020), satisfaction grew when pharmacy services were adapted for older people, those who speak different languages and people with low health literacy using appropriate strategies. Nevertheless, not many facilities have adopted standard approaches for these services and they still lack set plans for reaching out to those with special needs. The service gap becomes a serious concern because the healthcare system is becoming more diverse and organizations are dealing with growing numbers of aging individuals(9).

Combining pharmacy care with routine healthcare delivery has varying degrees of effectiveness now. In their study from 2007, Bond and Raehl noted that by participating in interdisciplinary care teams, pharmacists helped patients feel more satisfied with their treatment. Even today, inpatient and outpatient services are separated which could lead to challenges in caring for patients during their move from hospital to home. Although there is evidence that expanding the roles of pharmacists in healthcare is satisfying to them, it is still facing hurdles in deciding their role, blending activities with others and communicating within the team.

New research explains that younger people often look for well-organized, modern services, while older people prefer to continue being treated by the same dietitians and be able to ask dietitians questions easily(10). Therefore, to satisfy different patients, healthcare services should adapt and change their approach to suit various preferences and requests. While healthcare shifts toward valuing patients' experience, pharmacy services must pay closer attention to these various satisfaction factors to succeed.

## **5.Conclusion and Future work**

This comprehensive review underscores the multidimensional nature of patient satisfaction with pharmacy services in tertiary care hospitals, highlighting the complex interplay of structural, procedural, and interpersonal factors that collectively shape patient experiences. The literature synthesis reveals that patient satisfaction represents not merely a desirable service outcome but a critical quality indicator with significant implications for medication adherence, treatment efficacy, and overall healthcare utilization patterns. The evaluation of pharmacy service quality through satisfaction metrics serves as an essential feedback mechanism enabling continuous improvement while providing valuable insights into evolving patient expectations and priorities within contemporary healthcare environments.

The reviewed literature consistently demonstrates that pharmacist-patient communication quality, medication availability, waiting time management, physical environment characteristics, and pharmacist technical competence constitute the primary determinants of satisfaction across diverse healthcare contexts. These factors operate synergistically rather than independently, creating comprehensive service experiences that patients evaluate holistically. Consequently, satisfaction enhancement initiatives require multifaceted approaches addressing multiple service dimensions simultaneously rather than isolated interventions targeting individual factors. The significant variation in satisfaction determinants across different patient demographics further emphasizes the necessity for adaptable, patient-centered service models capable of accommodating diverse preferences, expectations, and needs.

Despite considerable research examining pharmacy service satisfaction, significant knowledge gaps persist that warrant further investigation. Limited research has specifically addressed the relationship between patient satisfaction and clinical outcomes within tertiary care environments, particularly regarding medication adherence, therapeutic success rates, and hospital readmission frequencies. The impact of emerging pharmacy practice models, including expanded clinical roles, pharmacist prescriptive authority, and specialized medication therapy management services, on patient satisfaction remains incompletely understood. Additionally, the effectiveness of specific interventions designed to enhance satisfaction requires more rigorous evaluation through controlled studies rather than observational research, enabling evidence-based implementation of improvement strategies.

Future research directions should include longitudinal studies examining satisfaction trajectories throughout extended treatment courses, particularly for patients with chronic conditions requiring ongoing pharmaceutical care. Such longitudinal approaches would provide insights into satisfaction evolution over time and identify critical

intervention points for service enhancement. Implementation research investigating effective strategies for translating satisfaction data into operational improvements represents another critical research need, addressing the frequent disconnection between satisfaction assessment and resultant service modifications. Studies examining the economic implications of enhanced satisfaction, including potential cost savings through improved medication adherence and reduced healthcare utilization, would provide valuable justification for investment in service enhancement initiatives.

Additional research priorities include investigation of technology impact on satisfaction dynamics, particularly regarding electronic prescription systems, pharmacy automation, telehealth pharmaceutical consultations, and digital patient engagement platforms. These technological innovations potentially transform traditional pharmacist-patient interactions, necessitating evaluation of their satisfaction implications across diverse patient populations. Research examining cultural and contextual influences on pharmaceutical care expectations would enhance understanding of satisfaction determinants within increasingly multicultural healthcare environments. Studies specifically addressing vulnerable populations, including elderly patients, individuals with limited health literacy, and linguistic minorities, represent another critical research priority given potential disparities in pharmaceutical care access and quality.

Practical implications emerging from this review include recommendations for pharmacy service enhancement across multiple dimensions. Standardized, comprehensive satisfaction assessment using validated instruments should be implemented within quality improvement frameworks, enabling data-driven service modifications and longitudinal progress monitoring. Pharmacy workflow redesign prioritizing waiting time reduction while maintaining dispensing accuracy would address a consistently identified satisfaction detractor. Implementation of structured, patient-centered communication protocols emphasizing bidirectional dialogue rather than unidirectional information transfer would enhance medication counseling effectiveness while addressing documented communication deficiencies.

Physical environment modifications facilitating privacy, comfort, and efficient service delivery represent another practical recommendation emerging from this review. Designated consultation areas enabling confidential discussions, comfortable waiting spaces, and intuitive navigation pathways collectively enhance patient experiences while facilitating effective pharmaceutical care delivery. Strategic technology integration, accompanied by appropriate patient education regarding digital tool utilization, offers potential efficiency improvements while maintaining necessary interpersonal interaction components. Proactive inventory management systems utilizing predictive analytics and establishing reliable alternative sourcing mechanisms represent essential strategies for addressing medication availability issues consistently identified as satisfaction detractors.

Pharmacy staff development programs specifically addressing communication skills, cultural competence, and patient engagement techniques constitute another critical recommendation. Beyond technical competence, pharmacists require advanced interpersonal capabilities to effectively engage diverse patient populations, necessitating structured training programs addressing these nuanced aspects of professional practice. Integration of pharmaceutical care with broader healthcare delivery through formalized communication channels, interdisciplinary team participation, and care transition management would enhance continuity while addressing documented fragmentation challenges.

In conclusion, patient satisfaction with pharmacy services represents a crucial quality dimension requiring systematic assessment, continuous improvement initiatives, and evidence-based enhancement strategies. The evolving healthcare landscape, characterized by increasing patient engagement, expanding pharmacist roles, technological integration, and diverse patient expectations, necessitates adaptive pharmaceutical care models prioritizing patient-centered service delivery. Through ongoing research addressing identified knowledge gaps, implementation of evidence-based improvement strategies, and systematic satisfaction monitoring, pharmacy services can significantly contribute to enhanced patient experiences, improved treatment outcomes, and healthcare delivery optimization within tertiary care environments. As healthcare systems increasingly incorporate patient experience metrics within quality frameworks and reimbursement models, strategic prioritization of satisfaction enhancement becomes not merely beneficent but essential for sustainable pharmaceutical care excellence.

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### **Conflicts of interest**

The authors have no conflicts of interest to declare

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