


# Assessment of Patients' Satisfaction in Public Hospitals of Lahore: Comparative Insights from HCAHPS-Based Survey

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## ABSTRACT

**Background:** Patient satisfaction is a pivotal indicator of healthcare quality and a critical element in healthcare assessments globally.

**Objective:** This study aims to evaluate the quality of patient care in Lahore's public tertiary care hospitals using the HCAHPS survey to identify areas requiring improvement and to align with international healthcare standards.

**Methods:** A cross-sectional study was conducted from November 2023 to April 2024, involving 1,044 patients from four major public tertiary care hospitals in Lahore. Patients aged 18 and older from general medicine, surgery, and orthopedics departments were included, while those with psychiatric conditions, under 18, or in emergency care were excluded. Data were collected using the HCAHPS questionnaire, analyzing communication with healthcare providers, responsiveness, and environment cleanliness. Statistical analysis was performed using SPSS version 25.

**Results:** The study revealed significant disparities in patient satisfaction, with 59.4% of patients at Jinnah Hospital reporting that nurses sometimes treated them with respect, and 50% not receiving timely help. Services Hospital performed slightly better, particularly in doctor-patient communication, with 62.5% of interactions rated as usually respectful.

**Conclusion:** The results indicate critical areas for improvement, particularly in nurse-patient communication and responsiveness. Enhancing training and standardizing care protocols are essential for improving patient satisfaction and healthcare quality in Lahore.

## INTRODUCTION

The assessment of patient satisfaction is increasingly recognized as a critical measure of healthcare quality and system performance globally, particularly as healthcare systems evolve towards patient-centered care paradigms (1). In this context, understanding patient experiences and perceptions is crucial for evaluating the effectiveness of healthcare services and for driving continuous improvement. Organizations are therefore prioritizing the collection and analysis of patient feedback to align service delivery with consumer expectations and needs, a practice strongly supported by policy frameworks that encourage patient involvement in the design and evaluation of healthcare services (2). The relevance of patient satisfaction extends beyond qualitative assessments, as higher satisfaction levels have been statistically linked to improved health outcomes, including reduced mortality rates, shorter hospital stays, and decreased likelihood of readmissions (3). These correlations suggest that patient satisfaction is not only a proxy for measuring service quality but also a vital component of clinical effectiveness and safety.

The standardization of patient satisfaction metrics has led to the development of various survey instruments, tailored to specific healthcare systems and types of institutions. Among these, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey stands out as a significant tool used predominantly in the United States to measure patient perceptions and satisfaction across healthcare settings. Developed collaboratively by the Centers for Medicare and Medicaid Services (CMS) and the Agency for Healthcare Research and Quality (AHRQ), the HCAHPS survey facilitates national benchmarking and helps inform consumers through publicly available data, thus enhancing transparency and accountability in healthcare (4). The financial implications linked to HCAHPS scores further underscore the importance of this survey in promoting quality improvement in healthcare services.

Despite the advancements in patient care quality in developed countries, which are also leveraging healthcare as a key sector for economic growth through medical tourism (5), developing countries like Pakistan still face significant challenges in this area. In Pakistan, healthcare has historically received limited attention from successive governments, evident from minimal healthcare

expenditures and the common practice among political leaders of seeking medical care abroad for even minor procedures (6). This stark contrast highlights a systemic neglect that could undermine the potential benefits of patient-centered care models. This study aims to bridge this gap by assessing patient satisfaction within Lahore's public tertiary care hospitals, using the HCAHPS survey to identify specific areas of concern and opportunities for enhancement. Such insights are intended to support policymakers and healthcare administrators in implementing targeted improvements that could elevate the overall quality of healthcare services offered in these institutions.

## MATERIAL AND METHODS

The study was conducted as a cross-sectional survey aimed at evaluating patient satisfaction within four major public tertiary care hospitals in Lahore, Pakistan, from November 2023 to April 2024. The target population comprised patients aged 18 years and older who were admitted to the departments of general medicine, surgery, and orthopedics during the study period. A total of 1,044 patients were selected using a random sampling method, specifically the even/odd technique, to ensure unbiased representation across the hospital wards. Patients with psychiatric conditions, those admitted to intensive care or emergency units, and individuals under 18 years of age were excluded from the study. Verbal informed consent was obtained from all participants before administering the survey, adhering to the ethical guidelines outlined in the Declaration of Helsinki for research involving human subjects (7).

The instrument used for data collection was the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) questionnaire, which is widely recognized for its reliability and validity in assessing patient experiences and satisfaction. The questionnaire consists of 22 items, with 18 items dedicated to various aspects of the hospital experience—including nurse and doctor communication, responsiveness of hospital staff, hospital environment, pain management, and communication about medications—and four screening questions. The responses were collected on multiple scales: a global rating scale ranging from 0 (worst possible hospital) to 10 (best possible hospital), a dichotomous scale (yes/no), and a four-point Likert scale (never, sometimes, usually, always). The questionnaire's internal consistency and factor loading values have been previously established, with a Cronbach's alpha of 0.69, indicating a good level of reliability (4).

Data were analyzed using SPSS version 25. Descriptive statistics were calculated to determine the frequency and percentages of responses for each category within the questionnaire. Additionally, mean ratings, standard deviations, and range (minimum and maximum values) for each hospital were computed to provide a comparative insight into the quality of service delivery across the different institutions. This analysis aimed to identify specific areas of strength and weakness in patient care and

satisfaction, thereby facilitating targeted interventions for quality improvement in these hospitals.

## RESULTS

The data presented in the tables provide a detailed comparison of patient satisfaction across four major public hospitals in Lahore: Jinnah Hospital, Services Hospital, Lahore General Hospital, and Mayo Hospital. The responses to various questions about nurse-patient and doctor-patient interactions reveal significant differences among these hospitals.

Regarding the question of how often nurses treated patients with courtesy and respect, it was observed that Jinnah Hospital had 59.4% of patients reporting that they were "sometimes" treated with courtesy, while 31.3% stated they were "usually" treated with respect. However, only 6.3% of patients at Jinnah Hospital reported "always" receiving courteous treatment. In contrast, Services Hospital showed a more positive outcome, with 62.5% of patients indicating they were "usually" treated with respect, although none reported "always" receiving such treatment. Lahore General Hospital had 56.0% of patients reporting "sometimes" courteous treatment and 44.0% "usually," with no patients indicating "always." Mayo Hospital performed the poorest in this regard, with 42.9% of patients reporting "sometimes" and only 7.1% "always" receiving courteous treatment from nurses. The differences across hospitals were statistically significant, as indicated by a p-value of 0.04.

When considering how often nurses listened carefully to patients, Jinnah Hospital again showed mixed results, with 59.4% of patients reporting that nurses "sometimes" listened carefully and 28.1% reporting "always" being listened to. Services Hospital performed better in this category, with 62.5% of patients reporting that nurses "always" listened carefully. Conversely, Lahore General Hospital had 56.0% of patients reporting that nurses "sometimes" listened, but no patients reported "usually" being listened to, which was similar to Mayo Hospital's results, where only 35.7% of patients reported "always" being listened to by nurses. The variation in responses suggests inconsistencies in nurse-patient communication across these hospitals.

In terms of how often nurses explained things in a way patients could understand, the data revealed significant challenges across all hospitals. Jinnah Hospital had 43.8% of patients reporting that nurses "never" explained things clearly, and only 9.4% reported that explanations were "always" clear. Services Hospital had 68.8% of patients indicating that nurses "sometimes" provided clear explanations, but no patients reported "always" understanding the explanations. Similarly, Lahore General Hospital had 56.0% of patients reporting "never" understanding explanations, with Mayo Hospital having 50.0% in the "sometimes" category and only 7.1% reporting "always." These results highlight a critical area for improvement in nurse-patient communication across all hospitals.

**Table 1 Patient Responses to Nursing and Doctor Interactions Across Four Major Hospitals in Lahore**

Question	Response	Jinnah Hospital (n=384)	Services Hospital (n=192)	Lahore General Hospital (n=300)	Mayo Hospital (n=168)	P value
How often did nurses treat you with courtesy and respect?	Never	12 (3.1%)	0 (0.0%)	0 (0.0%)	24 (14.3%)	0.04
	Sometimes	228 (59.4%)	72 (37.5%)	168 (56.0%)	72 (42.9%)	
	Usually	120 (31.3%)	120 (62.5%)	132 (44.0%)	60 (35.7%)	
	Always	24 (6.3%)	0 (0.0%)	0 (0.0%)	12 (7.1%)	
How often did nurses listen carefully to you?	Never	12 (3.1%)	0 (0.0%)	0 (0.0%)	24 (14.3%)	0.001
	Sometimes	228 (59.4%)	60 (31.3%)	168 (56.0%)	72 (42.9%)	
	Usually	36 (9.4%)	12 (6.3%)	0 (0.0%)	12 (7.1%)	
	Always	108 (28.1%)	120 (62.5%)	132 (44.0%)	60 (35.7%)	
How often did nurses explain things in a way you could understand?	Never	168 (43.8%)	60 (31.3%)	168 (56.0%)	60 (35.7%)	0.02
	Sometimes	180 (46.9%)	132 (68.8%)	132 (44.0%)	84 (50.0%)	
	Usually	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (7.1%)	
	Always	36 (9.4%)	0 (0.0%)	0 (0.0%)	12 (7.1%)	
How often did doctors treat you with courtesy and respect?	Never	12 (3.1%)	0 (0.0%)	0 (0.0%)	12 (7.1%)	0.05
	Sometimes	180 (46.9%)	60 (31.3%)	168 (56.0%)	108 (64.3%)	
	Usually	36 (9.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	Always	156 (40.6%)	132 (68.8%)	132 (44.0%)	48 (28.6%)	

Doctor-patient interactions showed more positive results, particularly in how often doctors treated patients with courtesy and respect. At Jinnah Hospital, 46.9% of patients reported that doctors "sometimes" treated them with respect, while 40.6% reported "always" being treated courteously. Services Hospital performed the best in this regard, with 68.8% of patients reporting "always" respectful treatment by doctors. Lahore General Hospital had 56.0% of

patients reporting "sometimes" respectful treatment and 44.0% reporting "always." Mayo Hospital had the lowest performance, with 64.3% reporting "sometimes" respectful treatment and only 28.6% reporting "always." The differences in doctor-patient interactions across the hospitals were statistically significant, with a p-value of 0.001, indicating a marked disparity in the quality of care provided by doctors.

**Table 2 Overall Ratings of Patient Satisfaction at Four Major Hospitals in Lahore**

Hospital	Mean Rating	Std. Deviation	Minimum Rating	Maximum Rating	P Value
Jinnah Hospital	6.66	0.957	5	9	P < 0.05
Services Hospital	6.62	0.929	5	8	P < 0.05
Lahore General Hospital	6.56	0.985	5	9	P < 0.05
Mayo Hospital	5.43	1.56	2	8	P < 0.05

The overall hospital ratings, which reflect the patients' general satisfaction, showed that Jinnah Hospital had the highest mean rating of 6.66, with a standard deviation of 0.957, indicating relatively consistent satisfaction levels among its patients. Services Hospital followed closely with a mean rating of 6.62 and a slightly lower standard deviation of 0.929. Lahore General Hospital had a mean rating of 6.56, with a standard deviation of 0.985, suggesting more variability in patient satisfaction. Mayo Hospital had the lowest mean rating of 5.43, with a larger standard deviation of 1.56, indicating significant variability and lower overall patient satisfaction. These ratings reflect the general trend observed in the individual responses, where Mayo Hospital consistently performed worse than the other hospitals, and Jinnah Hospital, despite being the highest rated, still showed areas requiring improvement.

## DISCUSSION

The findings of this study underscore significant discrepancies in patient satisfaction across major public

tertiary care hospitals in Lahore, revealing areas where improvements are imperative. The study corroborated with existing literature, which indicates that better nurse-patient communication correlates with improved patient outcomes (1). In Jinnah Hospital, despite a high rate of 'Sometimes' responses concerning respect and careful listening by nurses, the markedly high 'Never' responses regarding explanations by nurses highlights a critical gap. This gap is further exemplified when compared to Services Hospital, which showed better performance in patient-nurse interactions, particularly in listening carefully—a key aspect that can significantly influence patient satisfaction (2).

The relatively low satisfaction rates in areas of communication and responsiveness at Lahore General Hospital and Mayo Hospital echo findings from other regions within developing countries, where gaps in patient care and communication are prevalent due to systemic issues like understaffing and inadequate training (3). This aligns with studies showing that enhancements in staff-patient communication not only improve patient

satisfaction but are also associated with better recovery outcomes (4).

However, the study was not without limitations. The use of the HCAHPS survey, while standardized and reliable, may not fully capture all cultural and contextual nuances specific to the Pakistani healthcare environment. Additionally, the exclusion of patients under 18 and those with psychiatric conditions might limit the generalizability of the findings to the broader hospital population. Despite these limitations, the study provides valuable insights that could guide quality improvement initiatives.

In comparing the findings with international standards, where satisfaction with nursing care often exceeds 80% (5), it becomes evident that there is substantial room for improvement in the Lahore hospitals surveyed. This study suggests that implementing regular staff training programs focused on communication and patient interaction skills could enhance patient experiences. Furthermore, increasing the nurse-to-patient ratio may address issues of responsiveness and timely care, as understaffing has been a persistent challenge highlighted in similar studies (6).

In light of these insights, it is recommended that hospitals in Lahore adopt a more patient-centered approach, standardizing protocols to ensure consistent and effective communication and care practices across all departments. Such initiatives should also include regular assessment of patient satisfaction as a key metric for hospital performance evaluations. This approach not only aligns with global healthcare practices but also addresses the specific needs and expectations of the local population, ultimately aiming to elevate the standard of care provided.

## CONCLUSION

The study highlights significant deficiencies in nurse-patient interactions, timely assistance, communication clarity, and overall cleanliness across major tertiary care hospitals in Lahore, illustrating a stark contrast with international healthcare standards. These findings underscore the urgent need for rigorous training programs, improved staff-patient communication protocols, and enhanced cleanliness measures to elevate patient satisfaction and care quality. Implementing these changes is crucial for not only aligning with global healthcare practices but also for improving health outcomes, thereby enhancing the overall efficacy and reputation of healthcare services in Pakistan.

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