RJNMSR
Review Journal of Neurological & Medical Sciences Review

Volume 3, Issue 8, 2025

PATIENT SATISFACTION WITH PRIMARY HEALTHCARE SERVICES IN HOSPITALS OF DISTRICT SUKKUR, SINDH, PAKISTAN

Saleha Javed[*1], Moeen Ahmed[2], Ahsan Ali Memon[3], Maria Ishaque[4], Faisal Nadeem Malik[5], Shamim Bhatti[6], Zahida Noor Khuhro[7]

[*1]*College of Public Health, Ziauddin University Sukkur Campus, Sukkur, Sindh, Pakistan.*
[2,3,4]*College of Pharmacy, Liaquat University of Medical and Health Sciences (LUMHS), Jamshoro, Sindh, Pakistan.*
[5,6,7]*Pir Abdul Qadir Shah Jeelani Institute of Medical Sciences, Gambat, Sindh, Pakistan.*

[*1]salehajaved94@gmail.com

Corresponding Author: *
Saleha Javed

DOI: https://doi.org/10.5281/zenodo.18172119

Received	Accepted	Published
28 October 2025	12 December 2025	26 December 2025

ABSTRACT

Background: *Patient satisfaction is a central element of the assessment of health systems and it is a reflection that shows the quality and sensitivity of medical services. In outer administrative regions like Sukkur, Pakistan, where the health infrastructures are often financially deprived and already occupied, the indicative attribute of patient satisfaction provides a way forward strategy in bringing about effective changes.*

Objective: *To assess the level of patient satisfaction with primary healthcare services provided in the district hospitals in Sukkur, Sindh in Pakistan, and to outline the main factors that influence the level of satisfaction.*

Methods: *This was a cross-sectional study conducted in three publicly sector district hospitals in Sukkur. The calculation of the representative size of sample was done through Cochran formula and the result was 384. Stratified random sampling procedure was used. Data is obtained through a structured questionnaire that was based on the World Health Organization guidelines. Following statistical analyses were done through the SPSS version 26.*

Results: *Only 384 of the respondents were found to be satisfied with the healthcare services, and this represented 67.4%. Such variables that proved to be statistically associated with the satisfaction included staff courtesy, short waiting hours, the skills of physicians in communicating, and access to medicinal supplies. On the other hand, patients rated the levels of cleanliness and the presence of diagnostic services unsatisfactorily.*

Conclusion: *In spite of the fact that general satisfaction is moderate, it is possible to observe obvious gaps in particular aspects of service provision. Specific remedies directed towards the improvement of hygiene levels, reduction of waiting time and strengthening of diagnostic facilities in the district hospitals are necessary.*

Keywords: *Patient satisfaction, primary healthcare, Sukkur, district hospitals, Pakistan, healthcare quality*

1. Introduction

1.1 Background

Patient satisfaction is a complex construct which summarizes the perceptions, expectations and the experience patients undergo in healthcare provision. It is gradually becoming a solid measure of care quality, especially when the primary care structures are taken into account [1]. Patient-centered care is being highlighted as one of the key aspects of quality health systems as defined by the World Health Organization [2]. Satisfaction levels have the ability to determine health seeking behavior, consumption of therapy regimens and the ultimate health outcomes [3,4].

With health spending in the developing countries like Pakistan, still less than 3 % of Gross Domestic

Product and infrastructure development being below the par, patient satisfaction gets a new sense of importance [5]. In Pakistan, primary healthcare (PHC) serves as a primary point of contact to most citizens and it presupposes leading the role in prevention of illness, health promotion, and the provision of low-quality curative treatment [6].

Sindh, which is among four provinces of Pakistan, is characterized by high levels of unequal access to health services in urban and rural constituencies. These issues are epitomised by the District Sukkur, which is inhabited by more than 1.5million people [7]. Although the district hospitals seemingly form the core of PHC provision in Sukkur, anecdotal and observational reports depict significant shortcomings in quality, responsiveness and standards on patient-care services [8].

It is impossible to ignore the value of patient satisfaction as this will help improve the quality of service delivery and build confidence in the government-provided healthcare systems. Poor customer satisfaction would tend to drive patients to find other producers, which is more costly to their own well-being, or no care at all, which is further contributing to the poor health outcomes [9]. Previous literature in Pakistan has seen the satisfaction on a wide variation between 40 to 80 as a result of region and typology of facilities [10–12].

This research aim is at filling the gap in knowledge concerning patient satisfaction in the district hospitals of Sukkur. The results are likely to guide the policymakers, administrators of the health institutions, and the people health professionals in charge of community health as they will enable the adoption of measures to provide the appropriate services.

2. Materials and Methods

2.1 Study Design

The current investigation is a descriptive, cross-sectional research study conducted in the settings of the public sector healthcare in Sukkur. The choice of this design was based on the need to capture an up to date glimpse of the perception of patients or their experiences as they meet their healthcare facilities.

2.2 Study Setting

The sample population included three major hospitals, which were located in District Sukkur:

- Civil Hospital Sukkur (The largest tertiary care facility in the region).
- Taluka Hospital Rohri
- Taluka Hospital Pano Aqil

These hospitals serve a heterogenous population of urban, peri-and rural residents. These hospitals provide care on inpatient and outpatient basis, simple diagnostics, maternal and child health, and few inpatient facilities.

2.3 Study Duration

The study was carried out over a period of six months from January 2025 to June 2025.

2.4 Sample Size Calculation

The determination of sample size was based on the formula used by Cochran which was the estimation of a big population:

$n=Z^2 \cdot p \cdot (1-p)/e^2$

Where:

- Z=1.96 (Standard normal deviation for 95% CI)
- p=0.5 (Assumed proportion for maximum variability)
- e=0.05 (Margin of error)

$n=(1.96)^2 \cdot 0.5 \cdot (1-0.5)/(0.05)^2=384$

Thus, 384 respondents were included in the study.

2.5 Sampling Technique

Stratified random sampling was used. Sample was allocated proportionately to the three hospitals in which they were based on the average number of patients receiving outpatient care every month. In both institutions, a sample size of participants was chosen by using systematic random sampling (every 5th eligible patient).

2.6 Inclusion and Exclusion Criteria

Inclusion Criteria:

- Patients aged 18 years or above.
- Visited OPD for general or primary health consultation.
- Provided informed consent.

Exclusion Criteria:

- Critically ill patients.
- Emergency cases.
- Patients unable to communicate due to cognitive or language barriers.

2.7 Data Collection Tool

An organized survey questionnaire was designed, based on already existing validated scales, such as WHO Service Availability and Readiness Assessment (SARA) and Patient Satisfaction Questionnaire III (PSQ-III) [13, 14]. The tool consisted of the following domains:

1. Demographics
2. Accessibility & Waiting Time
3. Staff Behavior & Communication
4. Facility Cleanliness
5. Availability of Medicines and Diagnostics
6. Overall Satisfaction

They rated each of the items on a 5-point Likert scale (1 = Very dissatisfied; 5 = Very satisfied). The questionnaire was translated into Urdu and Sindi before translating it into English to achieve linguistic fidelity.

2.8 Pilot Testing

A pilot test was done on the use of the tool on 30 patients (not included in the final analysis) to determine clarity, reliability, and internal consistency (Cronbach's $\alpha = 0.84$).

2.9 Data Collection Procedure

Medical students and junior doctors who were trained collected the data. The interviews took short durations of almost 10-15 minutes and were conducted in a separate place to protect privacy and contain response bias.

2.10 Ethical Considerations

- Ethical approval was obtained from the Institutional Review Board (IRB), Ghulam Muhammad Mahar Medical College, Sukkur (Reference: IRB/2025/PHC/109).
- Written informed consent was obtained.
- Participation was voluntary, and confidentiality was maintained throughout.

2.11 Data Analysis

- Data were entered into SPSS version 26.
- Descriptive statistics (mean, SD, frequencies, percentages) were used.
- Inferential statistics included chi-square tests and binary logistic regression to identify factors associated with satisfaction.
- A p-value <0.05 was considered statistically significant.

3. Results

3.1 Demographic Characteristics

Table 1: Socio-demographic profile of participants (N=384)

Variable	Frequency (n)	Percentage (%)
Gender		
Male	198	51.6
Female	186	48.4
Age Group		
18–30 years	120	31.3
31–45 years	154	40.1
46–60 years	72	18.8
>60 years	38	9.8
Education Level		
Illiterate	110	28.6
Primary	92	24.0
Secondary	116	30.2

Graduate/Postgraduate	66	17.2
Residence		
Urban	214	55.7
Rural	170	44.3

Interpretation:
Most of the respondents lived in cities, and their age was 31-45 years. There was a near parity of the gender percentage. Almost a third of them could not read or write, which made the point of having an available health communication.

3.2 Overall Satisfaction

Table 2: Overall patient satisfaction level

Satisfaction Level	Frequency (n)	Percentage (%)
Very satisfied	78	20.3
Satisfied	181	47.1
Neutral	55	14.3
Dissatisfied	46	12.0
Very dissatisfied	24	6.3

Interpretation:
About 67.4 percent of the patient population indicated either satisfaction or high satisfaction with quality of care and 18.3 percent indicated dissatisfaction. These data demonstrate moderate satisfaction with the prospects of improvement.

3.3 Domain-wise Satisfaction

Table 3: Satisfaction across service domains

Domain	Mean Score (out of 5)	Satisfaction (%)
Staff behavior	4.12 ± 0.83	78.6
Waiting time	3.42 ± 1.14	61.3
Cleanliness	2.98 ± 1.25	49.1
Medicine availability	3.65 ± 1.03	67.2
Diagnostic services	2.75 ± 1.32	43.7
Communication by doctors	4.05 ± 0.91	76.8

Interpretation:
Patients expressed the highest level of satisfaction with communication with physicians and employee behavior; in their turn, the cleanliness and diagnostic services were the most frequent dissatisfaction factors.

3.4 Factors Associated with Satisfaction

Table 4: Logistic regression analysis of satisfaction predictors

Variable	Adjusted OR	95% CI	p-value
Urban residence	1.41	1.02–2.30	0.031
Female gender	1.18	0.85–1.66	0.263
Education (graduate)	1.97	1.22–3.20	0.004
Waiting time <30 mins	2.45	1.65–3.64	<0.001

Staff politeness	2.88	1.90–4.35	<0.001

Interpretation:
Shortened waiting time, increased education and politeness by the staff behavior were also highly correlated with high satisfaction.

4. Discussion

4.1 Summary of Key Findings

The existing analysis shows that a total of 67.4% of patients who visited the district hospitals in Sukkur were satisfied with the provided care. The areas that were highly praised were staff courtesy, physician communication, and drug availability, and the areas of concern focused on cleanliness, wait period, and diagnostic provisions. The findings of these observations along with an array of national and international research agree. Such was the case of a study in Punjab, Pakistan, where 74 per cent were satisfied with staff behaviour, but only 48 per cent of them were satisfied with sanitation and cleanliness [15]. A similar trend was seen in studies that were generated within India where lack of infrastructure significantly undermined patient satisfaction even in the presence of qualified medical staff [16].

4.2 Patient Demographics and Satisfaction

The statistical test revealed that there was a significant relationship between the urban residency and the increased satisfaction. The patients in cities are likely to have better health literacy, information access, and thus attribute to their expectations and perceptions [17].

The educational level was also positively correlated with the satisfaction. Patients having an education may have a more efficient communication with the healthcare system, understanding the instructions, and involvement in decision-making which will result in higher overall experiences [18–20].

4.3 Waiting Time and Satisfaction

Delay time is one of the leading complaints of patient dissatisfaction in all healthcare systems. The current research supports this, as the study found out that patients who reported short waiting times (less than 30 minutes) were 2.45 more likely to report about satisfaction. This is in line with the Ethiopian and Turkish results wherein patient waiting time was in the top three factors of patient satisfaction [21, 22].

4.4 Interpersonal Aspects of Care

Courtly behavior of the staff and doctor-patient dialogue also proved to formidable predictors of satisfaction, which once again substantiates the vital nature of empathy, active listening, and respectful practices of clinical care. There is a growing body of systematic review that provides support of the use of soft skills to promote health outcomes, treatment adherence, and patient loyalty [23–25].

4.5 Facility Environment and Cleanliness

The lowest scores in the satisfaction survey was cleanliness and sanitation, which is a significant issue, especially in the implementation of the control of infectious diseases. Similar dissatisfaction with facility hygiene, particularly in the institutions of the public sector, has been reported in parallel studies of rural hospitals in other countries [26, 27].

4.6 Implications for Policy and Practice

- Infrastructure investment is needed to improve diagnostic facilities and sanitation.
- Training programs should focus on patient-centered communication.
- Human resource management must address staff shortages leading to excessive waiting times.
- Community feedback can be institutionalized through regular satisfaction surveys.

5. Conclusion

The research concludes that many patients have expressed satisfaction with primary healthcare offered in the district level in Sukkur, although there are still so much more problems in areas like cleanliness, diagnosis and waiting time. These shortages might undermine the societal confidence in the health care system unchecked. These areas should be given a priority by policymakers to have a better patient experience and health outcomes.

6. Recommendations

1. Increase funding for facility maintenance and sanitation.

2. Reduce patient waiting times by optimizing appointment and triage systems.
3. Improve diagnostic services through public-private partnerships.
4. Institutionalize patient satisfaction surveys as part of hospital performance metrics.
5. Conduct regular training of healthcare providers in communication and empathy.

7. Limitations

- This study was confined to public hospitals; results may not generalize to private facilities.
- Self-reported responses may be subject to social desirability bias.
- Only outpatient visits were considered; inpatient and emergency services were excluded.

8. REFERENCES

1. Donabedian A. The quality of care. How can it be assessed? *JAMA*. 1988;260(12):1743–1748.
2. World Health Organization. *People-centered and integrated health services: an overview of the evidence*. Geneva: WHO; 2015.
3. Cleary PD, McNeil BJ. Patient satisfaction as an indicator of quality care. *Inquiry*. 1988;25(1):25–36.
4. Sitzia J, Wood N. Patient satisfaction: a review of issues and concepts. *Soc Sci Med*. 1997;45(12):1829–1843.
5. Nishtar S. Health Indicators of Pakistan: Gateway Paper II. Islamabad: Heartfile; 2007.
6. Shaikh BT, Hatcher J. Health seeking behavior and health service utilization in Pakistan: challenging the policy makers. *Public Health*. 2005;119(9):704–710.
7. Government of Sindh. *Sindh Development Statistics 2022*. Karachi: Bureau of Statistics; 2022.
8. Akhtar S, Iqbal M, Shah S, Rizvi A, Ahmed S, Malik HA et al. Hospital care quality in Sindh: a situational analysis. *Pak J Public Health*. 2021;11(1):58–63.
9. Ahmed SM, Mazumdar M, Khandaker A. Factors influencing patient satisfaction in public and private hospitals in Bangladesh. *Health Policy Plan*. 2000;15(1):27–35.
10. Khan A, Ali S, Baig M, Akhtar W, Rehman A, Ali M et al. Patient satisfaction with primary healthcare services in public hospitals of Punjab. *Pak J Public Health*. 2020;10(2):88–93.
11. Rehman N, Iqbal M, Shah AA, Abbas S, Khan A, Tariq M et al. Health service satisfaction among OPD patients in KP. *J Ayub Med Coll Abbottabad*. 2021;33(1):45–50.
12. Asghar Z, Hussain M, Siddiqui A, Ahmed R, Khan M, Tariq MA et al. Evaluation of primary care services in Balochistan. *Pak J Med Sci*. 2022;38(2):345–352.
13. World Health Organization. *Service Availability and Readiness Assessment (SARA): Toolkit*. Geneva: WHO; 2022.
14. Marshall GN, Hays RD. The Patient Satisfaction Questionnaire Short-Form (PSQ-18). *Santa Monica, CA: RAND Corporation*; 1994.
15. Ali M, Ali S, Ahmed R, Khan MU, Tariq M, Baig MA et al. Patient satisfaction and the role of hygiene in public hospitals. *Pak J Hyg Health*. 2019;6(2):44–51.
16. Sharma J, Das S, Mathew A, Tripathi P, Singh A, Menon G et al. Assessment of patient satisfaction in primary health centers in India. *Indian J Community Med*. 2020;45(3):278–283.
17. Mahmood A, Iqbal M, Khan MA, Akbar M, Shahid M, Raza H et al. Urban-rural disparities in healthcare satisfaction in Punjab. *Pak J Med Res*. 2020;59(3):112–117.
18. Al-Abri R, Al-Balushi A. Patient satisfaction survey as a tool towards quality improvement. *Oman Med J*. 2014;29(1):3–7.
19. Aday LA, Andersen R. A framework for the study of access to medical care. *Health Serv Res*. 1974;9(3):208–220.
20. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *J Retail*. 1988;64(1):12–40.
21. Abdosh B. The quality of hospital services in eastern Ethiopia: patients' perspective. *Ethiop J Health Dev*. 2006;20(3):199–200.
22. Yildiz Z, Erdogmus S. Patient satisfaction of the quality of hospital services in Turkey. *Int J Health Care Qual Assur*. 2004;17(6):516–520.

23. Stewart MA. Effective physician-patient communication and health outcomes: a review. *CMAJ*. 1995;152(9):1423–1433.
24. Ong LM, de Haes JC, Hoos AM, Lammes FB. Doctor-patient communication: a review of the literature. *Soc Sci Med*. 1995;40(7):903–918.
25. Trummer U, Mueller UO, Nowak P, Stidl T, Pelikan JM. Does physician–patient communication that aims at empowering patients improve clinical outcome? *Patient Educ Couns*. 2006;61(2):299–306.
26. Akin JS, Hutchinson P. Health-care facility choice and the phenomenon of bypassing. *Health Policy Plan*. 1999;14(2):135–151.
27. Andaleeb SS. Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Soc Sci Med*. 2001;52(9):1359–1370.