

# Evaluating Patient Satisfaction with Surgical Care in a Public Tertiary Hospital in Karachi: A Cross-Sectional Study.

Shafaq Naseer<sup>1</sup>, Summaya Saeed<sup>2</sup>, Imrana Zulfiqar<sup>3,\*</sup>,  
Ayesha Anwar<sup>4</sup>, Emaan Ali<sup>5</sup>.

## ABSTRACT:

**Objective:** To assess patient satisfaction with surgical care at a tertiary care hospital in Karachi and identify key factors influencing their experience.

**Methodology:** This descriptive cross-sectional study was conducted at a major public-sector tertiary care hospital in Karachi, Pakistan during December 2024 to February 2025. A total of 220 patients who underwent elective or emergency surgeries were recruited using convenience sampling. The Picker Patient Experience Questionnaire (PPE-15), translated and validated in Urdu, was used to assess patient satisfaction. Data were analyzed using SPSS version 13, and results were compared with findings from similar international studies.

**Results:** 65% of patients rated their overall surgical care as good or excellent. Highest satisfaction was seen in doctor-patient communication (70%) and nursing care (60%). Major areas of dissatisfaction included hygiene (45%) and emergency department waiting times (50%). Emotional support was inadequate for 40% of patients. Elective surgery patients reported higher satisfaction (75%) than emergency patients (42%).

**Conclusion:** Significant gaps exist in surgical care, particularly in hygiene, emergency services, and emotional support. While communication shows improvement, systemic challenges like overcrowding, poor sanitation, and limited psychological support persist. Targeted interventions—such as enhanced provider communication training, improved hygiene practices, streamlined emergency workflows, and better emotional care—are crucial. Emphasizing patient-centered care is vital to improving satisfaction and trust in resource-limited healthcare systems like Pakistan.

**Keywords:** Patient satisfaction, surgical care, tertiary hospital, healthcare quality.

Cite as : Naseer S, Saeed S, Zulfiqar I, Anwar A, Ali E. Evaluating Patient Satisfaction with Surgical Care in a Public Tertiary Hospital in Karachi: A Cross-Sectional Study. J Muhammad Med Coll. 2026;16(2) pp-126-29

## Introduction:

Patient satisfaction serves as a vital indicator of healthcare quality, yet it remains a relatively neglected aspect in Pakistan. To provide healthcare that emphasizes quality, significant attention must be directed towards fostering a positive patient experience, which in turn results in improved outcomes and enhanced trust. Elements such as age, gender, literacy, socioeconomic status, and expectations concerning surgical care play a role in shaping the overall patient experience.<sup>1</sup> Dissatisfaction frequently stems from insufficient privacy, restricted autonomy, ineffective communication, and hygiene-related concerns. Patient satisfaction is a complex concept shaped by various contexts. As noted by Cheung et al., it emerges from the interplay between what

patients expect and their actual experiences. In recent years, there has been significant focus on assessing healthcare quality, mainly aimed at enhancing services and minimizing disparities within healthcare systems.<sup>2</sup> While conventional quality evaluations typically emphasize structure, process, and outcomes from the provider's perspective, it is also crucial to take into account the patient's perspective.<sup>3</sup> Patient-reported outcomes serve as valuable tools for capturing patient experiences within the healthcare system. In addition to health-related quality of life and present health status, patient satisfaction serves as a vital endpoint for evaluating healthcare quality.<sup>4</sup> However, the research surrounding patient satisfaction is still limited, leading to insufficient tools for accurate assessment. This article seeks to outline patient satisfaction and suggest methods for creating new instruments to measure patient satisfaction in Pakistan.

Patient experience and satisfaction play a crucial role in shaping healthcare policies and frameworks. Although satisfaction metrics can reveal areas needing improvement, they may occasionally clash with the necessity of upholding surgical quality standards. Existing methods often do not adequately reflect the discrepancies in patient viewpoints and the influence of system settings on satisfaction. Tackling these challenges can assist in aligning healthcare services with patient requirements, thereby enhancing care quality in resource-constrained environments like Pakistan.

## Objectives:

To assess patient perception of surgical care quality in a tertiary hospital in Karachi.

## Methodology:

This descriptive cross-sectional study was conducted from December 2024 till February 2025 at major public sector

1. Assistant professor. Department of Surgery Unit 6 Civil Hospital; Dow University of Health Sciences. Karachi.
2. Associate professor. Department of Surgery Unit 6 Civil Hospital; Dow University of Health Sciences. Karachi.
3. Professor. Department of Surgery Unit 6 Civil Hospital; Dow University of Health Sciences. Karachi.
4. Senior Registrar. Department of Surgery Unit 6 Civil Hospital; Dow University of Health Sciences. Karachi.
5. 4th year MBBS student. Dow Medical College. Karachi.

## Corresponding Author :

Email: [imrana.zulfiqar@duhs.edu.pk](mailto:imrana.zulfiqar@duhs.edu.pk)

Received: 02.02.2026

Revised: 18.02.2026

Accepted: 21.02.2026

Published online: 20.03.2026

tertiary care hospital serving as a teaching center for undergraduate and postgraduate students, with an operational capacity of 800 beds at Karachi Pakistan. A total of 220 patients who underwent elective or emergency surgeries were recruited using convenience sampling. The Picker Patient Experience Questionnaire (PPE-15), translated and validated in Urdu, was used to assess patient satisfaction. A total of 220 consecutive patients meeting the inclusion criteria were recruited through non-probability convenience sampling was during their hospital stay. Patients aged between 18 to 80 having had elective or emergency surgery were included. However, patients requiring admission to ICU/CCU, having psychiatric illness or receiving chemotherapy were excluded. Data were analyzed using SPSS version 13, and results were compared with findings from similar international studies.

#### Questionnaire Development:

A modified version of the Picker Patient Experience Questionnaire (PPE-15), originally designed by the Picker Institute Europe for the NHS, was used. The questionnaire was translated into Urdu through consensus by three independent individuals. Two additional individuals, unfamiliar with the original English version, back-translated the Urdu version into English to ensure linguistic accuracy.

#### Pilot Testing and Adaptation:

A pilot study was conducted on a convenience sample of 50 patients to refine the questionnaire. Based on relevance to healthcare services in Pakistan and pilot study results, the final version comprised 35 questions addressing:

- Emergency department services.
  - Physical environment of the wards.
  - Doctor-patient and nurse-patient relationships.
  - Quality of overall care and treatment.
  - Care related to surgical procedures and operations.
- Additionally, socio-demographic details were collected.

#### **Data Collection and Ethical Considerations:**

The questionnaire was administered by trained personnel after obtaining verbal informed consent from participants. Confidentiality was ensured by omitting any identifying information. Approval for the study was obtained from the hospital administration, adhering to the ethical principles.

#### **Data Analysis:**

All collected data were entered and analyzed using SPSS software (version 13). Relative frequencies and mean values were calculated. The results were compared subjectively with findings from similar surveys conducted in other countries, particularly a British NHS survey using the same questionnaire.

#### **Results:**

##### **1. Patient Demographics**

- **Age Distribution:** The majority of patients (40%, n = 86) were between 31-50 years of age. Patients aged 18-30 comprised 25% (n = 54), those aged 51-70 were 28% (n = 60), and patients over 70 made up 7% (n = 16).
- **Gender:** Among the participants, 55% were male (n = 119) and 45% were female (n = 97).
- **Socioeconomic Status:** 60% of patients (n = 130) identified as belonging to lower-income groups, while 30% (n = 65) were middle-income, and only 10% (n = 21) were from higher-income backgrounds.

##### **2. Patient Satisfaction Scores (Overall & By Category)**

- **Overall Satisfaction:** 65% of patients (n = 140) rated their surgical care as good or excellent.

- **Emergency Department Services:** 50% (n = 108) expressed dissatisfaction, primarily due to long waiting times and perceived neglect.
- **Doctor-Patient Communication:** 70% (n = 151) reported clear and effective communication with their surgeons.
- **Nursing Care:** 60% (n = 130) were satisfied, citing nurse attentiveness and politeness.
- **Cleanliness & Hygiene:** 45% (n = 97) reported dissatisfaction—particularly regarding restroom conditions and linen quality.

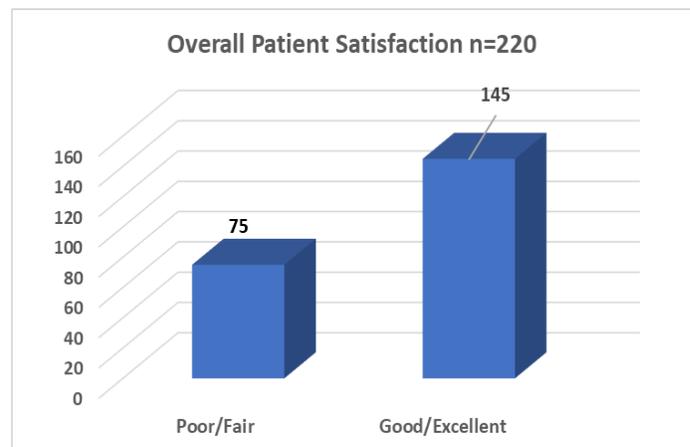
##### **3. Comparison: Emergency vs. Elective Surgery Patients**

- **Emergency Surgery Patients:** Among emergency cases (n ≈ 100), 58% (n = 58) expressed dissatisfaction, citing long delays, hygiene concerns, and lack of emotional support.
- **Elective Surgery Patients:** Of the elective cases (n ≈ 116), 75% (n = 87) reported satisfaction, highlighting adequate preoperative information, counseling, and postoperative support.

##### **4. Key Factors Influencing Satisfaction**

- **Top Positive Influencers:**
  - Effective communication (70%)
  - Surgical outcome satisfaction (68%)
  - Nursing attentiveness (60%)
- **Top Negative Influencers:**
  - Hygiene and cleanliness issues (45%)
  - Extended waiting times (35%)
  - Lack of emotional support (30%)

##### **Graph No 1: Overall patient satisfaction**



#### **Discussion:**

Patient satisfaction is a critical component in evaluating the quality of surgical care, influencing healthcare outcomes, patient adherence to treatment, and institutional reputation. This study aimed to assess patient satisfaction with surgical care in a tertiary hospital in Karachi, highlighting key factors affecting their experience.

#### **Comparison with Previous Studies:**

Our findings revealed an overall satisfaction rate of 65%, with significant variations based on service categories. Doctor-patient communication received the highest satisfaction (70%), whereas hygiene and emergency department services were major areas of concern, with dissatisfaction rates of 45% and 50%, respectively. These findings are consistent with international studies, such as those conducted in the UK's National Health Service (NHS), where communication and hygiene were found to be key

determinants of patient satisfaction.<sup>5,6</sup> A similar study in Pakistan reported a lower satisfaction rate (58%), primarily due to poor communication and lack of informed consent practices.<sup>7</sup> However, our study showed higher satisfaction in communication, possibly due to the hospital's recent efforts to improve patient interaction and counseling. Nonetheless, hygiene and waiting times remain persistent issues that align with findings from developing countries where resource constraints impact healthcare delivery.<sup>8</sup> Common issues such as inadequate staffing, high work pace, and poor responsiveness to errors can elevate the risk of mistakes and compromise patient safety, highlighting the need for urgent intervention.<sup>9</sup>

### Key Factors Influencing Patient Satisfaction

**Doctor-Patient Communication:** The high satisfaction in this category suggests that patients appreciated clear explanations of their conditions, procedures, and treatment options. Effective communication has been linked to improved patient trust and adherence to medical advice, reinforcing its importance in surgical care.

**Hygiene and Cleanliness:** Hygiene-related dissatisfaction (45%) was primarily due to unclean ward conditions and restroom facilities. Previous studies indicate that poor sanitation in hospitals increases infection risk, negatively impacting both patient safety and satisfaction.<sup>10,11</sup> Addressing this issue requires policy interventions to enforce strict hygiene protocols.

**Waiting Time in Emergency Care:** Half of the emergency patients expressed dissatisfaction due to prolonged wait times before surgery. This issue is prevalent in many resource-limited settings where high patient loads and staff shortages lead to delays. Strategies such as optimized patient flow and increased staffing could help mitigate these concerns.

**Emotional Support:** Emotional support was a frequently mentioned concern, with 40% of patients feeling that they lacked a staff member to discuss their fears and worries. Psychological distress before and after surgery is common, and neglecting emotional well-being may lead to anxiety and reduced patient cooperation.<sup>12,13</sup> Integrating counseling services or enhancing nurse-patient interaction could help bridge this gap.<sup>13</sup>

### Implications for Policy and Practice

The findings of this study emphasize the need for targeted interventions to improve surgical care quality in tertiary hospitals in Pakistan.

The key recommendations include:

- Strengthening communication skills training for healthcare providers.<sup>14</sup>
- Positive safety attitudes are strongly influenced by teamwork, effective communication, and managerial support. Training focused on teamwork has been shown to enhance these safety attitudes.<sup>15,16</sup>
- Implementing strict hygiene and sanitation protocols.
- Reducing emergency department waiting times by optimizing patient flow.
- Enhancing emotional support services for surgical patients.

By addressing these concerns, healthcare institutions can significantly improve patient satisfaction and trust in the system, ultimately leading to better health outcomes and patient-centered care.<sup>17, 18</sup>

### Future Research Directions

Future studies should explore the long-term impact of pa-

tient satisfaction on clinical outcomes, hospital readmission rates, and adherence to post-surgical care.<sup>19</sup> Additionally, qualitative research methods such as in-depth patient interviews could provide further insights into patient expectations and concerns.

### Limitations & Strengths:

The limitations include small sample size due to resource constraint, potential reporting bias due to social desirability and limited applicability to private hospitals. The strength includes 1st study of its kind in a tertiary care hospital of Karachi, a standardized internally accepted questionnaire that includes comprehensive approach to assessing multiple aspects of surgical care.

### Conclusion:

Every element of surgical treatment has a lot of room for improvement, but patients' emotional support needs should receive special attention. Healthcare teams should ensure that patients have access to at least one staff person to talk about their worries and anxieties. Before gaining consent, surgical teams must patiently answer all patient questions and fully explain all risks and advantages. Addressing these issues can lead to better healthcare outcomes, higher levels of satisfaction, and more patient trust.

### References:

1. Tsai TC, Orav EJ, Jha AK. Patient satisfaction and quality of surgical care in US hospitals. *Ann Surg.* 2015 Jan;261(1):2-8. doi: [10.1097/SLA.0000000000000765](https://doi.org/10.1097/SLA.0000000000000765). PMID: [24887985](https://pubmed.ncbi.nlm.nih.gov/24887985/); PMCID: [PMC4248016](https://pubmed.ncbi.nlm.nih.gov/PMC4248016/).
2. Lyu H, Wick EC, Housman M, Freischlag JA, Makary MA. Patient satisfaction as a possible indicator of quality surgical care. *JAMA Surg.* 2013 Apr;148(4):362-7. doi: [10.1001/2013.jamasurg.270](https://doi.org/10.1001/2013.jamasurg.270). PMID: [23715968](https://pubmed.ncbi.nlm.nih.gov/23715968/).
3. Alabdaly A, Hinchcliff R, Debono D, Hor SY. Relationship between patient safety culture and patient experience in hospital settings: a scoping review. *BMC Health Serv Res.* 2024 Aug 7;24(1):906. doi: [10.1186/s12913-024-11329-w](https://doi.org/10.1186/s12913-024-11329-w). PMID: [39113045](https://pubmed.ncbi.nlm.nih.gov/39113045/); PMCID: [PMC11308681](https://pubmed.ncbi.nlm.nih.gov/PMC11308681/).
4. Kibru EA, Mogessie YG, Regassa AA, Hailu KT. Patient satisfaction with post-operative surgical services and associated factors at Addis Ababa City government tertiary hospitals' surgical ward, cross-sectional study, 2022. *Pan Afr Med J.* 2023 Aug 30;45:189. doi: [10.11604/pamj.2023.45.189.38416](https://doi.org/10.11604/pamj.2023.45.189.38416). PMID: [38020351](https://pubmed.ncbi.nlm.nih.gov/38020351/); PMCID: [PMC10656589](https://pubmed.ncbi.nlm.nih.gov/PMC10656589/).
5. Lobo Prabhu K, Cleghorn MC, Elnahas A, Tse A, Maeda A et al. Is quality important to our patients? The relationship between surgical outcomes and patient satisfaction. *BMJ Qual Saf.* 2018 Jan;27(1):48-52. doi: [10.1136/bmjqs-2017-007071](https://doi.org/10.1136/bmjqs-2017-007071). Epub 2017 Nov 3. PMID: [29101291](https://pubmed.ncbi.nlm.nih.gov/29101291/).
6. Etebarian Khorasgani A, Najafi Ghezeljeh T, Sharif-Nia H, Ashghali Farahani M, Golestan F, Saraipour F. Patient safety culture in home healthcare centres: protocol for a scoping review. *BMJ Open.* 2024 Sep 5;14(9):e082604. doi: [10.1136/bmjopen-2023-082604](https://doi.org/10.1136/bmjopen-2023-082604). PMID: [39242161](https://pubmed.ncbi.nlm.nih.gov/39242161/); PMCID: [PMC11381718](https://pubmed.ncbi.nlm.nih.gov/PMC11381718/).
7. Rawas H, Abou Hashish EA. Predictors and outcomes of patient safety culture at King Abdulaziz Medical City, Jeddah, Saudi Arabia. A nursing perspective. *BMC Nurs.* 2023 Jul 3;22(1):229. doi: [10.1186/s12912-023-01391-w](https://doi.org/10.1186/s12912-023-01391-w). PMID: [37400816](https://pubmed.ncbi.nlm.nih.gov/37400816/); PMCID: [PMC10316534](https://pubmed.ncbi.nlm.nih.gov/PMC10316534/).
8. Imam SZ, Syed KS, Ali SA, Ali SU, Fatima K et al. Patients' satisfaction and opinions of their experiences

- during admission in a tertiary care hospital in Pakistan - a cross sectional study. *BMC Health Serv Res*. 2007 Oct 3;7:161. doi: [10.1186/1472-6963-7-161](https://doi.org/10.1186/1472-6963-7-161). PMID: 17915023; PMCID: [PMC2082029](https://pubmed.ncbi.nlm.nih.gov/PMC2082029/).
9. Ahsan N, Chawala JA, Farooq U, Rasool A, Ahmad A, Burki NA, Qureshi MU. Assessment of patients' satisfaction in medical and surgical wards in a tertiary care hospital. *J Ayub Med Coll Abbottabad*. 2012 Jul-Dec;24(3-4):147-50. PMID: [24669638](https://pubmed.ncbi.nlm.nih.gov/24669638/).
  10. Kim MJ, Woo MWJ. Healthcare workers' perceptions of patient safety culture in emergency departments: a scoping review. *BMJ Open*. 2025 Jun 4;15(6):e097086. doi: [10.1136/bmjopen-2024-097086](https://doi.org/10.1136/bmjopen-2024-097086). PMID: [40467312](https://pubmed.ncbi.nlm.nih.gov/40467312/); PMCID: [PMC12142157](https://pubmed.ncbi.nlm.nih.gov/PMC12142157/).
  11. Naseer, M., Zahidie, A., Shaikh, B. T. (2012). Determinants of patient's satisfaction with health care system in Pakistan: a critical review. *Pakistan Journal of Public Health*, 2(2), 52-61. Available at: [https://ecommons.aku.edu/pakistan\\_fhs\\_mc\\_chs\\_chs/135](https://ecommons.aku.edu/pakistan_fhs_mc_chs_chs/135)
  12. Pan WJ, Wang SF. Understanding patients' emotional needs to strengthen therapeutic relationships: A deep insight into narrative nursing. *World J Psychiatry*. 2025 Mar 19;15(3):103093. doi: [10.5498/wjp.v15.i3.103093](https://doi.org/10.5498/wjp.v15.i3.103093). PMID: [40109985](https://pubmed.ncbi.nlm.nih.gov/40109985/); PMCID: [PMC11886313](https://pubmed.ncbi.nlm.nih.gov/PMC11886313/).
  13. Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: a systematic review. *Perspect Public Health*. 2017 Mar;137(2):89-101. doi: [10.1177/1757913916634136](https://doi.org/10.1177/1757913916634136). Epub 2016 Jul 20. PMID: [27004489](https://pubmed.ncbi.nlm.nih.gov/27004489/).
  14. Alzahrani N, Jones R, Rizwan A, Abdel-Latif ME. Safety attitudes in hospital emergency departments: a systematic review. *Int J Health Care Qual Assur*. 2019 Aug 12;32(7):1042-1054. doi: [10.1108/IJHCQA-07-2018-0164](https://doi.org/10.1108/IJHCQA-07-2018-0164). PMID: [31411093](https://pubmed.ncbi.nlm.nih.gov/31411093/); PMCID: [PMC7068731](https://pubmed.ncbi.nlm.nih.gov/PMC7068731/).
  15. Sofaer S, Firminger K. Patient perceptions of the quality of health services. *Annu Rev Public Health*. 2005;26:513-59. doi: [10.1146/annurev.publhealth.25.050503](https://doi.org/10.1146/annurev.publhealth.25.050503). PMID: [15760300](https://pubmed.ncbi.nlm.nih.gov/15760300/).
  16. Xesfingi S, Vozikis A. Patient satisfaction with the healthcare system: Assessing the impact of socio-economic and healthcare provision factors. *BMC Health Serv Res*. 2016 Mar 15;16:94. doi: [10.1186/s12913-016-1327-4](https://doi.org/10.1186/s12913-016-1327-4). PMID: [26979458](https://pubmed.ncbi.nlm.nih.gov/26979458/); PMCID: [PMC4793546](https://pubmed.ncbi.nlm.nih.gov/PMC4793546/).
  17. Ferreira DC, Vieira I, Pedro MI, Caldas P, Varela M. Patient Satisfaction with Healthcare Services and the Techniques Used for its Assessment: A Systematic Literature Review and a Bibliometric Analysis. *Healthcare (Basel)*. 2023 Feb 21;11(5):639. doi: [10.3390/healthcare11050639](https://doi.org/10.3390/healthcare11050639). PMID: [36900644](https://pubmed.ncbi.nlm.nih.gov/36900644/); PMCID: [PMC10001171](https://pubmed.ncbi.nlm.nih.gov/PMC10001171/).
  18. Cairns A, Battleday FM, Velikova G, Brunelli A, Bell H et al. General patient satisfaction after elective and acute thoracic surgery is associated with postoperative complications. *J Thorac Dis*. 2020 May;12(5):2088-2095. doi: [10.21037/jtd-19-3345b](https://doi.org/10.21037/jtd-19-3345b). PMID: [32642112](https://pubmed.ncbi.nlm.nih.gov/32642112/); PMCID: [PMC7330326](https://pubmed.ncbi.nlm.nih.gov/PMC7330326/).
  19. He H, Chen X, Tian L, Long Y, Li L, Yang N, Tang S. Perceived patient safety culture and its associated factors among clinical managers of tertiary hospitals: a cross-sectional survey. *BMC Nurs*. 2023 Sep 25;22(1):329. doi: [10.1186/s12912-023-01494-4](https://doi.org/10.1186/s12912-023-01494-4). PMID: [37749580](https://pubmed.ncbi.nlm.nih.gov/37749580/); PMCID: [PMC10518958](https://pubmed.ncbi.nlm.nih.gov/PMC10518958/).

Authors' Contribution	
Shafaq Naseer	Conceptualization, Study design, Writing - review & editing.
Summaya Saeed	Data interpretation, Critical revisions for intellectual content.
Imrana Zulfikar	Methodology development, Statistical analysis, Formal analysis, Oversight of overall project, Final approval of the manuscript.
Ayesha Anwar	Data collection,
Emaan Ali	Data collection, writing synopsis