

Exploring Patient-Centered Care in a Tertiary Hospital: A Mixed-Methods Study on Patient Satisfaction and Perceptions

Salha A. AlZayer¹, Asmaa A. Alanazi², Fatmah T. Alrabodh³,
Abeer A. Alnezi⁴, Ebtihal A. Almusallam⁵, Sarah A. Alafari⁶,
Brooj S. Alenezi⁷, Duha H. Alharbi⁸, Hedaiah F. Alotaibi⁹,
Nouf H. Harisi¹⁰

Health Affairs at the Ministry of National Guard

Abstract

Background: Patient-centered care (PCC) has become a critical focus in improving healthcare quality and patient satisfaction. However, its implementation and impact in tertiary hospital settings remain underexplored.

Objective: This study aimed to investigate the relationship between PCC and patient satisfaction in a tertiary hospital using a mixed-methods approach.

Methods: Quantitative data were collected through validated surveys from 250 patients, assessing PCC domains and satisfaction levels. Qualitative data were gathered via semi-structured interviews with 20 patients to explore their experiences and perceptions. Descriptive statistics, correlation analysis, and thematic analysis were conducted.

Results: The quantitative analysis revealed high mean scores for PCC domains, with communication mean = 4.2, $r = 0.68$) showing the strongest correlation with satisfaction. Themes from qualitative findings included communication and trust, respect for patient preferences, emotional support, and continuity of care. Participants highlighted the importance of clear communication and involvement in decision-making but noted gaps in emotional support and care coordination.

Conclusion: Effective communication, respect for patient preferences, and consistent emotional support significantly enhance patient satisfaction. Addressing continuity of care remains a key area for improvement in tertiary hospitals.

Keywords: Patient-centered care, patient satisfaction, tertiary hospital, communication, continuity of care, emotional support.

Introduction

Patient-centered care (PCC) emerged as a pillar of quality healthcare as it focuses on understanding and catering patients' needs, preferences, and values. This not only improves satisfaction but clinical outcomes as well, as it encourages participation of patients in their care (Ewunetu et al, 2023). For tertiary hospitals, where specialization and complex care is often a requirement, adoption of PCC can greatly improve healthcare experience of patients.

PCC was found to improve satisfaction scores upon discharge, as patients surveyed felt more engaged, valued, and respected during the entire cycle of care provided (Wolf et al, 2007). Such improvements are not limited to health measures indicators alone, but reduced hospital readmission rates and shorter lengths of stay attested those correlations as well (Yu et al, 2023).

Implementing these practices in tertiary hospitals comes with significant barriers. Those include, but are not limited to, limited resources, understaffing, and organizational constraints preventing the widespread utilization of patient-centered approaches (Zhou et al, 2018). Furthermore, gauging patient satisfaction involves utilizing both qualitative and quantitative data (Wolf et al, 2008).

The goal of this study is to evaluate the effects that patient-centered care (PCC) has on patient satisfaction at a tertiary hospital. This work attempts to merge quantitative data obtained from satisfaction score metrics with qualitative data derived from example interviews with patients. The aim of this research is to try and understand how PCC affects the experiences of patients as well identify gaps in the delivery of services.

Literature Review

The term patient-centered care (PCC) gained popularity recently with the focus on healthcare services over the last two decades. Patients' requirements, preferences, and values are crucial in formulating a specific treatment plan for the patients. A systematic review by (Rathert and Wyrwich 2013) demonstrates that PCC has a positive relationship with better healthcare services through improved patient satisfaction and increased compliance to the treatment regimen.

In tertiary hospitals, PCC has been linked to considerable improvements in the quality of care. For example, Wolf et al (2008) explained that PCC strategies improves patients' satisfaction and nurse's perception of the quality of nursing care provided to patients (Wolf et al., 2008). In the same vein, (Jayadevappa and Chhatre 2011) argue that for estimate reduction in healthcare utilization due to improved satisfaction with care of patients is also achievable.

Different systematic reviews have been undertaken and constitute integrated reports of activities and designs towards implementation of PCC. These strategies have been narrowed down to simple ones that can be exercised such as (Triharini and Has 2022) staff training workshops and patient care participation programs geared to improve patient satisfaction and overall experience.

Although these benefits exist, there are still challenges implementing person-centered care (PCC) in tertiary hospitals. Some barriers that limit the incorporation of PCC models are insufficient resources, heavy staff workload, and resistance to change (Davis et al, 2020). Moreover, while patient satisfaction is frequently a surrogate measure of quality, concerns existed with its use as a single measure. (Kupfer and Bond 2012) warn against using satisfaction as an outcome measure arguing that patients expressing high satisfaction can continue to receive very poor care.

In summary, the literature emphasizes the significant role that PCC plays in the provision of healthcare services and patients' recovery, especially in tertiary hospitals. On the other hand, more studies should

be conducted to find out how the barriers to the implementation of PCC could be overcome and how its impact could be accurately evaluated.

Methodology

Study Design

This study utilized a mixed-methods design to explore the relationship between patient-centered care (PCC) and patient satisfaction in a tertiary hospital setting. The quantitative component involved the collection of survey data from patients, while the qualitative component focused on in-depth interviews to gain insights into patient perceptions of care.

Setting and Participants

The study was conducted in a tertiary hospital. The facility provides specialized care across multiple disciplines, catering to a diverse patient population. Participants included adult inpatients who had been admitted for at least 48 hours to ensure sufficient exposure to hospital services. Convenience sampling was used to recruit 250 patients for the quantitative phase, and 20 patients were selected purposively for the qualitative interviews based on their willingness to share detailed experiences.

Data Collection

1. Quantitative Data

- A validated survey instrument, the Patient-Centered Care Questionnaire (PCCQ), was administered to participants. The survey measured various domains of PCC, including communication, respect for patient preferences, emotional support, and continuity of care.
- Patient satisfaction was assessed using the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, focusing on domains such as overall satisfaction, responsiveness of hospital staff, and communication with nurses and physicians.
- Surveys were distributed at the time of discharge, and responses were collected anonymously.

2. Qualitative Data

- Semi-structured interviews were conducted with 20 patients to explore their experiences with PCC in greater depth. The interview guide included open-ended questions about communication with healthcare providers, the extent to which their needs and preferences were addressed, and perceptions of the overall care experience.
- Interviews were conducted in a private setting within the hospital to ensure confidentiality and lasted 30–45 minutes each. All interviews were audio-recorded and transcribed verbatim for analysis.

Data Analysis

1. Quantitative Analysis

- Descriptive statistics were used to summarize demographic data and survey results. Mean scores and standard deviations for each PCC domain and overall satisfaction were calculated.
- Inferential statistics, including Pearson's correlation and multiple regression analysis, were employed to identify relationships between PCC domains and patient satisfaction scores. Statistical significance was set at $p < 0.05$.

2. Qualitative Analysis

- A thematic analysis was conducted using Braun and Clarke’s six-step framework. Transcripts were coded inductively to identify key themes and subthemes. NVivo software was used to facilitate data organization and analysis.
- Triangulation was employed to ensure the credibility of findings, with two independent researchers reviewing and discussing the emerging themes.

Ethical Considerations

Ethical approval for the study was obtained from the ethics committee. Written informed consent was obtained from all participants prior to data collection. Participation was voluntary, and patients were assured of confidentiality and the right to withdraw at any time without consequences.

Study Validity and Reliability

To enhance the validity and reliability of the findings:

- The survey instruments used were previously validated in similar settings.
- Pilot testing of the interview guide was conducted with five patients to refine the questions.
- Data triangulation was achieved by integrating quantitative and qualitative findings.

Limitations

While the mixed-methods design provided a comprehensive understanding of PCC and patient satisfaction, the study was conducted in a single tertiary hospital, which may limit the generalizability of the findings. Additionally, self-reported data may be subject to response bias.

Findings

Quantitative Findings

The quantitative analysis of patient-centered care (PCC) domains and their relationship with overall patient satisfaction revealed the following results:

- Communication with Healthcare Providers had the highest correlation with overall satisfaction ($r = 0.68$), emphasizing its critical role in influencing patient perceptions.
- Respect for Patient Preferences and Emotional Support also showed strong positive correlations ($r = 0.61$ and $r = 0.65$, respectively).
- Continuity of Care scored the lowest in mean value (3.9) but still demonstrated a moderate correlation ($r = 0.58$) with overall satisfaction.

The findings are summarized in the table below:

Domain	Mean Score (out of 5)	Standard Deviation	Correlation with Satisfaction
Communication with Healthcare Providers	4.2	0.5	0.68
Respect for Patient Preferences	4.0	0.6	0.61

Domain	Mean Score (out of 5)	Standard Deviation	Correlation with Satisfaction
Emotional Support	4.1	0.4	0.65
Continuity of Care	3.9	0.7	0.58
Overall Satisfaction	4.3	0.4	1.00

Qualitative Findings

Themes, Sub-Themes, and Participant Responses

Theme 1: Communication and Trust

- Sub-theme 1.1: Clarity of Information

- Participant 3: "Again, each physician communicated such that I understood, and this boosted my confidence in their treatment."

- Participant 8: "In some cases, the medical lingos were advanced and I was in a state of perplexity."

- Sub-theme 1.2: Active Listening

- Participant 12: "The nurses always addressed my issues without haste which made me feel esteemed."

Theme 2: Respect for Patient Preferences

- Sub-theme 2.1: Inclusion in Decision-Making

- Participant 5: "I liked that they consulted me about my preferences before coming up with the treatment plan."

- Participant 15: "There were times that I was not consulted and that made me feel excluded from key decision making."

Theme 3: Emotional Support

- Sub-theme 3.1: Empathy from Staff

- Participant 7: "The staff were really concerned about my feelings which reduced my anxiety."

- Participant 11: "Some staff members appeared too preoccupied to tend to my emotional needs."

Theme 4: Continuity of Care

- Sub-theme 4.1: Coordination Between Departments

- Participant 2: "The handover between departments was flawless, and there was no need to repeat anything."

- Participant 9: "I remember thinking I was beginning afresh, each time a different group assumed responsibility for my treatment."

Discussion

This study underscores the importance of patient centered care (PCC), in boosting patient satisfaction in a tertiary level hospital. The combination of quantitative and qualitative results offer insights into how specific PCC domains affect patient perception and outcome.

Key Findings and Interpretations

1. Communication as a Cornerstone of Patient Satisfaction

- The highest association was with communication with healthcare providers of $r = 0.68$. This is consistent with prior studies stressing the need for effective, compassionate, and reliable communication for building trust among patients which is (Rathert&Wyrwich, 2013). Qualitative patients' interviews revealed that several patients appreciated the clarity with which doctors and nurses offered explanations. On the other hand, the experienced confusion which stemmed from medical talk served as a barrier warrants improvement.

2. Respect for Patient Preferences

- Respect for patient's preferences scored a mean of 4.0, and with a correlation of $r = 0.61$, this showed respect for patient preferences as one of the many determinants of satisfaction. Patients who reported feeling listened to during the process of decision-making demonstrated higher levels of trust and feelings of power over their care. On the other hand, patients who reported being out of the decision-making process felt detached from their care which highlights the importance of proactively involving patients in their treatment plans.

3. Emotional Support

- Emotional support care scored highly (mean = 4.1, $r = 0.65$) and it was also found to be a prevalence in the qualitative results. Patients valued the compassionate engagement of the medical personnel, which reduced their tension and worry while they were admitted. Some patients, however, reported inconsistencies in the degree and type of emotional support given, especially during busy hours, which indicates gaps in training personnel to provide emotional support.

4. Continuity of Care

- The mean score (3.9, $r = 0.58$) for continuity of care was the lowest revealing gaps in interdepartmental coordination. Some patients noted that they were able to move between teams effortlessly, while others were irritated at having to recount their medical history over and over again. This corroborates previous studies that have noted a negative association between patient satisfaction and outcomes due to discontinuity of care (Jayadevappa&Chhatre, 2011).

Implications for Practice

The research highlights that effective communication, meeting patient's needs, and providing emotional support greatly enhances patient satisfaction. Moreover, the research showed that in tertiary hospitals where patients are seen by more than one provider, improving care continuity by better coordination and handover practices is also essential.

Limitations and Future Research

The study at hand does contain some limitations. To begin with, it was restricted to a single tertiary clinic which limits the scope and the general applicability of the data obtained. Secondly, self-reported data by the respondents may be subject to bias, thus cannot be solely relied upon. There is a need in

further research to target a wider sample as well as focus on interventions that are intended to fill the gaps within PCC, more so in the area of continuity in care as well as the emotional support aspect.

Conclusion

In summary, this study illustrates how PCC is integrated at a tertiary hospital and how it relates to patient satisfaction. Closing existing gaps in communication, patient involvement in decision making, and strengthening continuity of care can help enhance the satisfaction and outcomes of patients in a responsive healthcare system.

References

1. Rathert, C., & Wyrwich, M. D. (2013). Patient-centered care and outcomes: A systematic review of the literature.
2. Wolf, D. M., Lehman, L., Quinlin, R., & Zullo, T. (2008). Effect of patient-centered care on patient satisfaction and quality of care.
3. Jayadevappa, R., & Chhatre, S. (2011). Patient-centered care—a conceptual model and review of the state of the art. (Bentham Open)
4. Triharini, M., & Has, E. M. M. (2022). Strategy to promote patient-centered care for improving patient satisfaction: A literature review. (KertaCendekia Nursing Journal)
5. Davis, E. L., Kelly, P. J., Deane, F. P., & Baker, A. L. (2020). The relationship between patient-centered care and outcomes in specialist drug and alcohol treatment: A systematic literature review. (SAGE Journals)
6. Kupfer, J. M., & Bond, E. U. (2012). Patient satisfaction and patient-centered care: Necessary but not equal. (JAMA Network)
7. Ewunetu, M., Temesgen, W., & Zewdu, D. (2023). Patients' perception of patient-centered care and associated factors among patients admitted in private and public hospitals: A comparative cross-sectional study. (PPA)
8. Wolf, D. M. (2007). Effect of patient-centered care on patient satisfaction at hospital discharge. (University of Pittsburgh)
9. Yu, C., Xian, Y., Jing, T., Bai, M., Li, X., Li, J., & Liang, H. (2023). More patient-centered care, better healthcare: The association between patient-centered care and healthcare outcomes in inpatients. (Frontiers in Public Health)
10. Zhou, H., Bai, G., Gao, J., Zhou, Y., Ma, E., Hu, L., & Hu, G. (2018). The development of indicator measure for monitoring the quality of patient-centered care in China's tertiary hospitals. (PLOS ONE)
11. Wolf, D. M., Lehman, L., Quinlin, R., & Zullo, T. (2008). Effect of patient-centered care on patient satisfaction and quality of care. (ResearchGate)