



Quality of care and patient safety at healthcare institutions: quantitative study of the perspectives of patients and healthcare assistants

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Abstract

Background: The healthcare landscape has evolved significantly yet concerns about declining levels of patient safety and quality culture persist, as highlighted in a recent Quality and Patient Safety Report. This underscores the importance of evaluating care quality and patient safety through the lenses of patients and healthcare assistants.

Objectives: This study aimed to explore (1) patients' and healthcare assistants' perceptions regarding overall care quality and patient safety standards in two tertiary hospitals and (2) the demographic factors associated with these perceptions.

Methods: Using a cross-sectional design, data were gathered via the Revised Humane Caring Scale and Healthcare Professional Core Competency Instrument, assessing overall care quality and patient safety. Surveys were administered to patients ($n = 600$) and healthcare assistants (nurses and physicians, $n = 246$) across medical, surgical, and obstetrics/gynaecology departments in two tertiary hospitals between late 2018 and early 2019. Descriptive statistics and binary logistic regression were employed for data analysis.

Results: A total of 367 patients and 140 healthcare assistants responded, yielding response rates of 61.2% and 56.9%, respectively. Overall, both groups perceived high levels of care quality (patients: $M = 4.23$, $SD = 0.706$; assistants: $M = 4.36$, $SD = 0.720$) and patient safety (patients: $M = 4.22$, $SD = 0.709$; assistants: $M = 4.39$, $SD = 0.675$), with assistants rating slightly higher than patients. Hospital variables were associated with care quality ($OR = 0.095$, 95% $CI = 0.016-0.551$, $p = 0.009$) and patient safety ($OR = 0.153$, 95% $CI = 0.027-0.854$, $p = 0.032$) among assistants. Admission/work area was also linked to participants' care quality perceptions (patients, $OR = 0.257$, 95% $CI = 0.072-0.916$, $p = 0.036$; assistants, $OR = 0.093$, 95% $CI = 0.009-0.959$, $p = 0.046$).

Conclusions: Both patients and healthcare assistants viewed care quality and patient safety favorably, albeit with slight variations, suggesting high levels of satisfaction and competent healthcare delivery. These insights can guide enhancements in healthcare standards, benefiting patients and healthcare systems alike.

Background:

Quality of care and patient safety are undoubtedly two distinctive targets for leading healthcare systems around the world. These targets continue to be at the top of the agenda for healthcare regulators and policy makers. Ministry of Health (MOH) established the Department of Quality and Patient Safety in regional hospitals in 2007 to implement a quality assurance strategy. It also adopted the Patient Safety Friendly Hospital Initiative (PSFHI) in 2015 to promote an inclusive and integrative healthcare system. Such efforts have considerably improved the outcomes of the healthcare system, for instance, by drastically reducing

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mortality rates of children under five by 72% from 1990 to 2013 and maternal mortality rates by 55% from 1990 to 2013. (Salih et al., 2021)

Although healthcare system was ranked by the World Health Organization (WHO) as one of the 10 best healthcare systems in the world in 2012, a recent Report of Quality and Patient Safety (RQPS) highlighted a decreased level of patient safety and quality of care culture among healthcare assistants (HCPs). The report called for a comprehensive assessment of quality of care and patient safety to include the perspectives of both HCPs (as service providers) and patients (as service users). The report recognizes that HCPs typically focus on long-term and sustainable solutions while managing service and delivery costs. Their core competencies and wider technical excellence often play a pivotal role in the overall classification of quality of care and patient safety from the perspective of healthcare providers. (Al-Mandhari et al., 2018)

On the other hand, patients tend to value short-term comforts. Their perspectives are usually based on the overall healthcare system, practice type, and care providers' personal and clinical skills. This explains why world organizations such as the Council of Europe (CoE), the WHO, and the United States (US) Institute of Medicine (IOM) all enhance that patients' views of quality care are important in addition to providers' views to find the right balance between two perspectives and provide additional insight into areas where change is needed. Therefore, this study is part of a larger study that aims to consolidate patients' and HCPs' (nurses and physicians) perspectives on quality of care and patient safety at two tertiary hospitals and identify the participant characteristics most related to quality of care and patient safety. The outcomes of this study will provide meaningful and complementary insights for improving the overall standards of healthcare delivery systems. (Al Khamisi et al., 2018)

Methods:

A cross-sectional design was employed for this study, adhering to the Strengthening the Reporting of Observational studies in Epidemiology (STROBE) guidelines.

Sample and Setting:

The study included adult patients and healthcare assistants (HCPs) - nurses and physicians - from medical, surgical, and obstetrics/gynecology (OBG) departments at two tertiary hospitals (hospitals A and B). The required patient sample size was estimated based on power analysis, with 600 adult patients surveyed (400 from hospital A and 200 from hospital B). HCPs were selected using proportional stratified sampling, with 246 assistants (139 nurses and 107 physicians) participating.

Study Instruments:

Data were collected using the Revised Humane Caring Scale (RHCS) and the Healthcare Professional Core Competency Instrument (HPCCI) for patients and HCPs, respectively. The RHCS and HPCCI encompassed items on overall quality of care and patient safety. The instruments were piloted and validated, with a 5-point Likert scale used for ratings.

Data Collection:

Research assistants distributed questionnaires to patients and HCPs, with reminders delivered verbally during the study period. Participants were assured of anonymity and confidentiality, with the right to withdraw from the study.

Ethical Approval:

The study obtained ethical approval from the University Committee on Research Ethics and permissions. Anonymity and confidentiality of data were maintained.

Data Analysis:

Descriptive statistics and binary logistic regression analysis were employed for data analysis using SPSS version 27.0. Mean scores were used to measure overall quality of care and patient safety, with a score of 4 or higher considered 'excellent'. Binary logistic regression determined associations between demographic variables and quality of care/patient safety perceptions.

Results:

Participants' Demographic Characteristics:

The study achieved response rates of 61.2% from patients (367 out of 600 targets) and 56.9% from healthcare assistants (140 out of 246 targets). In terms of hospital distribution, 218 patients (59.4%) were from hospital A and 149 (40.6%) from hospital B, while 65 assistants (46.4%) were from hospital A and 75

(53.6%) from hospital B. The majority of participants in both groups fell within the 30–40 age range, with more than 50% of healthcare assistants and less than 30% of patients in this age group. Women constituted a significant proportion of participants in both patients (58.5%) and assistants (75.5%). Most patients were citizens (93%), with a slightly higher response rate among staff compared to expatriates.

Participants' Perspectives on Quality of Care and Patient Safety:

Both patients and healthcare assistants rated the overall quality of care and patient safety as excellent. The mean scores for quality of care were 4.23 for patients and 4.36 for healthcare assistants, and for patient safety, the mean scores were 4.22 for patients and 4.39 for healthcare assistants. However, there was a statistically significant difference in perspectives on patient safety between the two groups ($p = 0.013$).

Association between Demographic Characteristics and Quality of Care/Patient Safety:

Binary logistic regression analysis revealed associations between demographic variables and perceptions of quality of care and patient safety. Patients at hospital A were less satisfied with quality of care compared to hospital B, although this difference was not statistically significant. Healthcare assistants at hospital A were significantly less satisfied with quality of care than those at hospital B. There was also a tendency for men to rate quality of care higher than women, although this was not statistically significant. Regarding patient safety, there were no significant differences between patients' perspectives at either hospital, but patients at hospital A were less satisfied than those at hospital B. Similarly, healthcare assistants at hospital A were significantly less satisfied with patient safety compared to hospital B. There was also a tendency for men to rate patient safety higher than women, although not statistically significant. Patients were less satisfied with safety in the medical department compared to the obstetrics/gynaecology (OBG) department, a trend also observed among healthcare assistants.

Discussion:

This study aimed to explore patients' and healthcare assistants' (HCPs) perspectives on quality of care and patient safety at two tertiary hospitals, along with examining demographic associations with these perceptions. The findings revealed that both patients and HCPs rated the quality of care and patient safety as excellent, indicating competent healthcare delivery and high patient satisfaction. (Ministry of Health, 2021)

Perspectives on Quality of Care and Patient Safety:

Patients and HCPs rated both quality of care and patient safety highly, with mean scores indicating excellence. This positive perception suggests that patients appreciated the healthcare services provided and trusted the competence of HCPs. Such perceptions are vital for fostering patient satisfaction, compliance with treatment plans, and overall positive health outcomes. Similarly, HCPs' high ratings reflect their confidence in their skills, adherence to quality assurance strategies, and implementation of patient safety initiatives. (Cave, 2020)

Notably, HCPs rated themselves slightly higher than patients in both quality of care and patient safety, a common trend where providers tend to be more optimistic about their services. This may stem from cultural factors affecting patient feedback and HCPs' belief in their capabilities. However, it's essential to bridge this perception gap to align patient expectations with actual care delivery. (Konrad et al., 2010)

Binary Logistic Regression Analysis:

The analysis revealed associations between demographic characteristics and perceptions of quality of care and patient safety. HCPs at hospital B rated these aspects higher than those at hospital A, potentially due to workload differences and hospital specialization. The significant difference in quality of care perceptions among patients and HCPs in the medical department aligns with previous studies highlighting varied perspectives on quality care. (Papp et al., 2014)

Conclusion:

Understanding patients' and HCPs' perspectives on quality of care and patient safety is crucial for enhancing healthcare delivery. This study's findings contribute valuable insights that can inform healthcare policies and practices aligned and serve as a reference for improving global healthcare quality.

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