

SERVICE QUALITY AND HOSPITAL ENVIRONMENT IN RELATION TO PATIENT SATISFACTION AMONG SELECTED PRIVATE HEALTH FACILITY IN BUKIDNON

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ABSTRACT

This study investigates the relationship between service quality, hospital environment, and patient satisfaction in selected private healthcare facilities in Bukidnon. The descriptive-correlational design was used, employing structured questionnaires administered to patients who recently received care. Mean, Pearson r correlation, and multiple regression analysis were used to analyze the data. Results show that there is a significant positive relationship between both service quality and the hospital environment with overall patient satisfaction. Staff responsiveness, facility cleanliness, and safety measures were identified as particularly influential in enhancing satisfaction levels.

Keywords: *Service Quality, Hospital Environment, Patient Satisfaction, Healthcare Facilities, Bukidnon*

INTRODUCTION

Background of the Study

Because healthcare systems are always changing, methods for analyzing results and assessing patient satisfaction must be developed. Since patient satisfaction is defined as a patient's response to several elements of their service experience, it is extremely significant. Evaluating patient satisfaction can yield insightful information on the quality and routineness of healthcare treatments. It is commonly accepted as an independent factor that determines the quality of care, taking into account inherent features of hospital care. Even though patient happiness is crucial, it is frequently overlooked and requires assessment.

Many experts argue that satisfaction and the patient's health status are interrelated notions (Elixhauser et al., 2019). Thus, the present study clarifies the factors that primarily influence patient satisfaction, particularly regarding service quality and the hospital environment, which are hardly examined. This information allows managers to allocate resources more efficiently to improve patient experience and satisfaction (Qin et al., 2019).

The evaluation of patient satisfaction with healthcare quality is a multifaceted topic that has been thoroughly investigated globally. However, in the Philippines, there has been insufficient research on patient satisfaction with healthcare, specifically with quality implementation and the work environment.

Access to quality healthcare constitutes a fundamental human right and a vital predictor

of patient well-being (Fuseini et al., 2022). Delivering healthcare that adheres to quality standards is crucial for guaranteeing patients receive superior care (Karaca & Durna, 2019). Healthcare quality can be assessed by monitoring patient satisfaction levels (Gishu et al., 2019), which can be improved through efficient healthcare delivery (Aiken et al., 2021). Evaluating patient happiness yields essential information into hospital efficacy and assesses the quality management of healthcare institutions (Hepsiba & Bhattacharjee, 2021). Patient satisfaction with care cultivates loyalty and trust (Liu et al., 2021): satisfied patients demonstrate loyalty and are more inclined to return to the same hospital or healthcare provider in the future, potentially endorsing them to family and friends (Setyawan et al., 2020).

Patient satisfaction includes multiple aspects of healthcare, such as professionalism, technology use, and the overall quality and level of care delivered (Hepsiba & Bhattacharjee, 2021). Balancing patient satisfaction with quality improvement is crucial, as it affects patients' long-term survival, safety, and health (Rahim et al., 2021).

In order to thrive in contemporary competitive markets, it is essential for service providers to comprehend the demands and expectations of clients. They must provide what the consumer expects rather than what they deem essential for sustaining company demand (Singh & Prasher, 2019). Kotler and Keller (2006) assert that in the consumer-driven healthcare market, characterized by commodified services and patient autonomy, the patient ought to evaluate service quality. Therefore, to enhance service quality, healthcare practitioners must determine the primary dimensions of service quality in healthcare and concentrate on those aspects deemed most significant by patients (Singh & Prasher, 2019).

Understanding patient satisfaction with healthcare can aid nurses, healthcare personnel, and hospital administrators in identifying the factors that affect patient contentment and dissatisfaction, potentially influencing the overall quality of hospital care (Lotfi et al., 2019).

Statement of the Problem

This study determined the influence of service quality and hospital environment on Patient Satisfaction in Selected Private Health Facility in Bukidnon. More specifically, it sought answers to the following questions:

- 1. What is the service quality of the hospital?*
- 2. What is the status of hospital environment?*
- 3. What is the level of patient's satisfaction in terms of:*
 - 3.1 care for doctors*
 - 3.2 personal perspectives*
 - 3.3 care for staffs*
- 4. Is there a significant relationship between*
 - 4.1 service quality and patient satisfaction*
 - 4.2 hospital environment and patient satisfaction?*
- 5. Do service quality and hospital environment significantly influence patient satisfaction?*

Framework

This study is anchored on Equity Theory, Consonance Theory, and Primary Provider Theory within the healthcare context. Equity Theory explains that patients evaluate the fairness of healthcare services by comparing their inputs (time, effort, trust) with the outcomes they receive. When patients perceive that the ratio of inputs and outcomes is fair compared to others, they experience satisfaction with the care provided.

Consonance Theory of Patient Satisfaction states that patient satisfaction results from the alignment between patients' expectations of care and the actual care they receive from nurses. When expectations and experiences are consistent, patients are more likely to achieve positive health outcomes and perceive higher quality of care.

Meanwhile, the Primary Provider Theory suggests that patient satisfaction is largely influenced by the interaction between the patient and the primary healthcare provider. Satisfaction depends on patients' expectations and their experiences with the provider, including the care delivered by assistants and the overall service process. This theory emphasizes that patient-centered evaluation is essential in determining the quality of healthcare services.

METHODOLOGY

This study employed a descriptive-correlational research design, a non-experimental approach used to describe variables and examine relationships among them without manipulation (Polit & Beck, 2021; Creswell & Creswell, 2018). This design was used to determine the relationship between organizational climate, work stress, and caring behavior among hospital staff.

The respondents of the study were in-patients admitted to selected health facilities in the province of Bukidnon. They were chosen because they had direct experiences with healthcare services, allowing them to evaluate service quality, hospital environment, and patient satisfaction. Random sampling was used to ensure that each eligible patient had an equal chance of being selected, thereby reducing selection bias and improving sample representativeness.

The study utilized three adapted standardized questionnaires to measure the variables: Service Quality, Hospital Environment, and Patient Satisfaction. The SERVQUAL scale, developed by Parasuraman, Zeithaml, and Berry and adapted by Min Li et al. (2020), measured service quality across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy using a 5-point Likert scale. The Hospital Environment Questionnaire, also adapted from Min Li et al. (2020), assessed patients' perceptions of the hospital's physical and organizational environment, including cleanliness, noise level, and facility condition. Lastly, the Patient Satisfaction Questionnaire (PSQ), adapted from the RAND Health Care model, measured patients' satisfaction with healthcare services, including communication with staff, accessibility of services, and overall care experience, using a 5-point Likert scale.

The mean was used to determine the level of the variables measured in the study, including service quality, hospital environment, and patient satisfaction. The Pearson product-moment correlation coefficient (Pearson r) was applied to examine the relationship among these variables. Furthermore, multiple regression analysis was used to determine the influence of service quality and hospital environment on patient satisfaction.

RESULTS AND DISCUSSION

Level of Service Quality

Table 1 shows that respondents have a moderately positive perception of the hospital's service quality. The item with the highest mean score was "Hospital can give personalized care to staff" ($M = 3.64$, $SD = 0.619$), indicating a high level of agreement that individualized support is provided. In contrast, the lowest mean score was "Hospital can show concern for individual staff" ($M = 2.98$, $SD = 1.053$), although it still falls within the moderate level.

Other items related to professional development and workplace relationships also received moderate ratings, including “Hospital pays attention to training of staff’s professional knowledge and skills” ($M = 3.38$, $SD = 0.769$) and “Staff are friendly and polite to each other” ($M = 3.01$, $SD = 0.948$). Overall, the average mean score was 3.22 ($SD = 0.349$), which is interpreted as moderate, indicating that service quality is sometimes evident in the hospital setting.

These findings support the study of Duffield et al. (2011), who emphasized that education and collaboration are important for healthcare quality but may have limited impact when system-level issues such as workload and insufficient support remain. Since organizational climate influences staff morale, patient safety, and clinical outcomes (Carayon & Wood, 2010), the results highlight the need for healthcare leaders to strengthen support systems within the workplace.

Table 1. Service Quality of the Hospital

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Description</i>
1. Staff are friendly and polite to each other.	3.01	.948	moderate
2. Hospital pays attention to training of staff's professional knowledge and skills.	3.22	.903	moderate
3. Hospital can show concern for individual staff.	2.98	1.053	moderate
4. Hospital pays attention to training of staff's professional knowledge and skills.	3.38	.769	moderate
5. Hospital pays attention to staff's interests.	3.07	.886	moderate
6. Hospital can give personalized care to staff.	3.64	.619	high
Overall	3.22	.349	moderate

Status of Hospital Work Environment

Table 2 illustrates the mean and standard deviation of respondents’ assessment on the Status of Hospital Environment. The findings indicate that the Status of Hospital Environment performing the indicators indicated above as reflected in the overall mean of 3.00.

Among all indicators on the Status of Hospital Environment, the highest rated indicator is “Staff with a neat and professional appearance” ($M=3.33$, $SD=.702$). On the other hand, the lowest-rated indicator was “Office area clearly marked.” ($M=2.48$, $SD=.970$). The result implies that a neat and professional appearance of healthcare staff conveys professionalism, competence, and trust to patients. It can enhance patient comfort and confidence, making them feel more secure and at ease. This, in turn, can improve patient satisfaction and overall healthcare outcomes.

The result is supported by studies which show that a health-care provider’s personal appearance must project professionalism and competence to engender trust in

patients. Additionally, a professional appearance communicates expertise and authority, increasing the likelihood that patients will comply with care instructions which results in improved clinical outcomes and patient satisfaction (Mahajan et al., 2020). Similarly, the level of patient satisfaction and, ultimately, the assessment of the quality of care are greatly influenced by physicians' capacity to leave a positive impression on patients during provider-patient interactions. The way doctors dress affects how people view their care. There have been few studies on the impact of doctors' attire on patient confidence and trust (Khojah et al., 2022).

Table 2. Status of hospital environment

	Mean	Std. Deviation	description
1. Clean and comfortable work environment.	3.14	.737	moderate
2. Modern and advanced work equipment.	3.04	.965	moderate
3. Office area clearly marked.	2.48	.970	Low
4. Staff with a neat and professional appearance.	3.33	.702	moderate
Overall	3.00	.414	moderate

Level of Patient's Satisfaction

Table 3 presents the mean and standard deviation of patient satisfaction across three dimensions: Care from Doctor, Personal Perspective, and Care from Hospital Staff. The overall mean of 2.38 indicates that patients are generally satisfied with the services provided.

For Care from Doctor, the highest-rated item was "Doctors usually spend plenty of time with me" (M = 2.93), while the lowest was "My doctors treat me in a very friendly and courteous manner" (M = 1.97). This suggests that patients value the time doctors spend with them, as it helps build trust, improves treatment adherence, and leads to better health outcomes (Gross et al., 2020).

In terms of Personal Perspective, the highest rating was "Regardless of the health problems I have now or develop later, I feel protected from financial hardship" (M = 3.67). The lowest rating was "It is easy for me to get medical care in an emergency" (M = 1.99). This indicates that while patients feel financially supported, some still experience difficulty accessing emergency medical care. Access to healthcare is important to ensure timely services and better health outcomes (Institute of Medicine, 2021).

For Care from Hospital Staff, the highest-rated item was "All things considered, the medical care I received is excellent" (M = 3.67), while the lowest was "I am dissatisfied with some things about the medical care I receive" (M = 2.12). This suggests that patients generally view the care provided by hospital staff positively.

Overall, patient satisfaction is strongly influenced by interactions with medical staff, such as communication, competence, and staff availability. When patients feel cared for and supported by healthcare providers, they report better experiences and higher satisfaction (Roos et al., 2023).

Table 3 Level of Patient's satisfaction

<i>Categories</i>	<i>MEAN</i>	<i>SD</i>	<i>Description</i>
<i>Care from Doctors</i>	<i>2.31</i>	<i>.210</i>	<i>Low</i>
<i>Personal Perspective</i>	<i>2.43</i>	<i>.304</i>	<i>Low</i>
<i>Care from Staff</i>	<i>2.39</i>	<i>.200</i>	<i>Low</i>
<i>Overall</i>	<i>2.38</i>	<i>.204</i>	<i>Low</i>

Relationship between the Variables

Table 4 shows the results of correlation analysis to determine the relationship of service quality and hospital environment with patient satisfaction. The results show that among the independent variables, it is only the hospital environment having a significant relationship with patient satisfaction ($r=.250$, $p<.05$). This means that better hospital environment would also likely improve the patient satisfaction.

This result aligns with existing literature emphasizing the critical role of physical and psychosocial environments in healthcare settings. According to Ulrich et al. (2008), well-designed hospital environments—characterized by cleanliness, quietness, comfortable space, good lighting, and organized layout—can significantly influence patients' emotional well-being and overall perception of care. Similarly, Dijkstra, Pieterse, and Pruyn (2006) noted that environmental factors, such as aesthetic appeal and safety, play a major role in shaping a patient's experience and satisfaction with healthcare services.

Furthermore, the World Health Organization (2020) affirms that a healing hospital environment contributes to improved patient outcomes and satisfaction, especially when the facility fosters a sense of calm, privacy, and safety. In contrast, noisy, overcrowded, or poorly maintained hospital settings tend to cause stress and anxiety among patients, negatively impacting their satisfaction (Douglas & Douglas, 2005).

On the other hand, service quality does not have a significant relationship with the patient satisfaction ($r=.062$, $p>.05$).

This finding contrasts with a large body of literature that generally supports a strong connection between service quality and patient satisfaction. For instance, Parasuraman, Zeithaml, and Berry (1988) conceptualized service quality through the SERVQUAL model, which posits that dimensions such as reliability, responsiveness, assurance, empathy, and tangibles directly influence customer satisfaction. Several healthcare studies (e.g., Pakdil & Harwood, 2005; Andaleeb, 2001) also affirm that when patients perceive healthcare providers as responsive, caring, and competent, their satisfaction tends to increase.

Table 4
Correlation Between the Variables

		Patient Satisfaction
Service quality	Pearson Correlation	.062
	<i>p</i> -value	.498
Hospital environment	Pearson Correlation	.250**
	<i>p</i> -value	.006

Influence of Service Quality and Hospital Environment on Patient Satisfaction

The results of the multiple regression analysis reveal that among the independent variables, hospital environment is the only factor that has a statistically significant influence on patient satisfaction. Specifically, the standardized coefficient for hospital environment is $\beta = .253$, $t = 2.707$, $p = .008$, indicating a moderate positive effect. This means that improvements in the hospital environment such as cleanliness, comfort, safety, and physical facilities are associated with higher levels of patient satisfaction.

On the other hand, service quality does not significantly predict patient satisfaction in this model, with a standardized coefficient of $\beta = -.012$, $t = -.127$, $p = .899$. This implies that variations in how patients perceive service quality (e.g., responsiveness, reliability, or empathy of staff) do not significantly impact their satisfaction levels when considered alongside the hospital environment.

The regression model overall is statistically significant, $F(2, 97) = 3.906$, $p = .023$, with an $R^2 = .063$, suggesting that about 6.3% of the variance in patient satisfaction can be explained by the combined effects of service quality and hospital environment. While this effect size is small, it highlights the importance of hospital environment as a meaningful factor in improving patient satisfaction outcomes.

Table 5. Influence of Service Quality and Hospital Environment on Patient Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	p-value	Remarks	
	B	Std. Error	Beta				
	(Constant)	2.023	.191		10.616	.000	
1	Service Quality	-.007	.055	-.012	-.127	.899	Not Significant
	Hospital Environment	.125	.046	.253	2.707	.008	Significant

Note: $R=.250$, $R\text{-square}=.063$, $F=3.906$, $p=.023$

CONCLUSIONS

Conclusions

Based on the findings, the following conclusions were drawn:

1. The hospital's service quality was perceived as moderately positive, with particular appreciation for personalized care to staff. While aspects like professional development were rated fairly, areas such as concern for individual staff received relatively lower scores, suggesting room for improvement in staff-centered support.
2. The hospital environment was also rated moderately, with professional appearance of staff being the most positively perceived aspect. However, clarity in signage and wayfinding within the hospital was identified as a notable area needing attention.
3. Patient satisfaction was rated low overall, reflecting concerns in areas such as friendliness of doctors, ease of accessing emergency care, and some dissatisfaction with medical services. Despite this, patients appreciated the amount of time doctors spent with them and felt financially protected.
4. Among the two independent variables, only the hospital environment showed a significant positive relationship with patient satisfaction, indicating that improvements in the physical and psychosocial hospital setting are more influential than perceived service quality in shaping patient experiences.
5. Regression analysis confirmed that hospital environment significantly influenced patient satisfaction, whereas service quality did not. Although the model explained only a modest portion of the variance, it highlights the critical role of hospital environment as a determinant of patient satisfaction.

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