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Predicting Patient Satisfaction Through Medical Service Quality: Evidence From Hospital Patients

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Abstract: Patient satisfaction is an important indicator of healthcare service quality because it reflects how patients evaluate the accessibility, responsiveness, competence, and interpersonal conduct of healthcare professionals. This study examines the contribution of medical services to patient satisfaction by considering eight service attributes: doctors' time spent with patients, punctuality, promptness, treatment procedures and outcomes, availability of doctors and nurses, professional competence, listening behaviour, and friendly and caring attitudes. Survey responses obtained from 1,200 patients were analysed using multiple linear regression. The model demonstrated a strong positive relationship between the combined medical-service attributes and patient satisfaction ($R=.718$). The predictors collectively explained 51.6% of the variance in patient satisfaction ($R^2 = .516$, adjusted $R^2 = .513$). The overall regression model was statistically significant, $F(8,1191)=158.750$, $p<.001$, supporting the proposed relationship between medical services and patient satisfaction. Among the individual predictors, the availability of doctors and nurses emerged as the strongest contributor ($\beta = .238$), followed by doctors' competence and skills ($\beta = .139$), listening behaviour ($\beta = .132$), punctuality ($\beta = .122$), promptness ($\beta = .110$), and a friendly and caring attitude ($\beta = .068$). Doctors' time spent with patients had a marginal but statistically nonsignificant effect, while treatment procedures and outcomes did not independently predict satisfaction. The findings demonstrate that patient satisfaction is shaped not only by clinical capability but also by timely access, attentive communication, and compassionate interaction. Hospitals should therefore integrate workforce availability, communication training, professional competence, and respectful care into their quality-improvement strategies.

Keywords: Medical services, patient satisfaction, healthcare service quality, physician competence, provider availability, patient-centred care.

1. Introduction

Patient satisfaction has become an important indicator of healthcare quality and institutional performance. Although the clinical effectiveness of treatment remains fundamental, patients evaluate healthcare through a broader range of experiences, including the accessibility of medical personnel, timeliness of care, clarity of communication, professional competence, respect, empathy, and responsiveness. Consequently, healthcare quality cannot be understood exclusively through clinical outcomes. It must also consider how patients experience the process through which treatment is delivered.

The World Health Organization identifies effective, safe, people-centred, timely, equitable, integrated, and efficient care as essential characteristics of quality healthcare services. A

people-centred approach requires healthcare institutions to organise services around patients' needs, preferences, dignity, and participation rather than relying only on administrative convenience or clinical routines (World Health Organization, 2025). Patient satisfaction therefore provides meaningful information about whether healthcare institutions are meeting both clinical and interpersonal expectations.

Patient satisfaction refers to a patient's evaluative response to healthcare received in relation to prior expectations, perceived needs, and actual service experiences. It is multidimensional because patients interact with several components of the healthcare system. These include doctors, nurses, support personnel, treatment procedures, scheduling systems, physical facilities, and administrative processes. Satisfaction may therefore emerge from the combined influence of technical quality,

interpersonal care, and service accessibility rather than from a single treatment encounter. Medical professionals occupy a particularly important position in shaping patient experiences. Doctors' competence and clinical skills may strengthen confidence in diagnosis and treatment, while their willingness to listen can make patients feel acknowledged and involved. Similarly, punctuality, prompt responses and the availability of healthcare professionals can reduce uncertainty and anxiety. Friendly and caring interactions communicate empathy and respect, which are central to patient-centred service delivery. These aspects correspond with established patient-experience measures. For example, the Consumer Assessment of Healthcare Providers and Systems evaluates whether providers listen carefully, show respect, explain health matters clearly, and spend sufficient time with patients (Agency for Healthcare Research and Quality, n.d.).

Previous research indicates that interpersonal quality is among the most influential determinants of patient satisfaction. Batbaatar et al. (2017), in their systematic review, found that service-quality indicators—particularly the interpersonal behaviour of healthcare providers—were more consistent predictors of satisfaction than patient demographic characteristics. Similarly, research across Asian healthcare settings identifies communication, accessibility, waiting time, technical quality, interpersonal treatment and affordability as important antecedents of satisfaction (Akthar et al., 2023).

However, patients may not assign equal importance to every aspect of medical service delivery. Clinical outcomes may be essential, but patients may find it difficult to evaluate their technical appropriateness. By contrast, they can directly observe whether a doctor is available, punctual, attentive, respectful, skilled in explaining treatment, and responsive to their concerns. It is therefore important to estimate the independent contribution of individual medical-service attributes while controlling for the other dimensions.

Against this background, the present study investigates the contribution of eight medical-service attributes to patient satisfaction. These attributes are doctors' time spent with patients, punctuality, promptness, treatment procedures and outcomes, availability of doctors and nurses, competence and skills, listening behaviour, and friendly and caring attitudes. By identifying the strongest predictors, the study provides evidence that hospital administrators can use to prioritise patient-centred quality-improvement initiatives.

Research objective: To examine the influence of medical-service attributes on patient satisfaction and identify the service attributes that make the strongest independent contribution to satisfaction.

2. Literature Survey

2.1. Patient satisfaction as an indicator of healthcare quality

Patient satisfaction represents an individual's evaluation of whether healthcare services have adequately fulfilled expectations, preferences, and perceived needs. It is related to patient experience but is not identical to it. Patient experience focuses

on what occurred during treatment, whereas satisfaction reflects how patients evaluate those experiences against personal expectations and standards.

Donabedian's (1988) structure–process–outcome framework provides a useful foundation for understanding patient satisfaction. Structure concerns the resources and organisational arrangements supporting healthcare, such as staffing and professional availability. Process refers to how care is delivered, including promptness, communication, listening and interpersonal conduct. Outcomes include changes in health status as well as patients' overall evaluations of care. The medical-service attributes examined in the present study primarily represent care processes, although provider availability reflects structure and treatment outcomes represent clinical results.

Patient satisfaction is important because positive experiences can strengthen trust, improve continuity of care, and encourage patient participation. Nevertheless, satisfaction should not be treated as a substitute for clinical quality. Patients may not possess the technical knowledge required to evaluate the appropriateness of diagnostic and therapeutic decisions. Satisfaction is most valuable when combined with clinical, safety, and operational indicators (*Manary et al., 2013*).

2.2. Medical-service quality and patient satisfaction

Service-quality theory proposes that favourable evaluations arise when the delivered service meets or exceeds users' expectations. In healthcare, this relationship is complex because services are highly personal, technically specialised and often delivered under conditions of vulnerability and uncertainty. Patients therefore rely on observable signals—such as responsiveness, competence, availability and empathy—to judge service quality.

Parasuraman et al. (1988) conceptualised service quality through reliability, responsiveness, assurance, empathy and tangibility. Although developed for services generally, these dimensions have been extensively applied in healthcare. Reliability is reflected in consistent and dependable care; responsiveness in prompt assistance; assurance in professional competence; and empathy in listening and compassionate behaviour. Contemporary healthcare research continues to demonstrate the relevance of these dimensions when assessing patient perceptions (*Hijazi et al., 2024*).

Batbaatar et al. (2017) concluded that healthcare service quality was one of the most influential determinants of satisfaction, with interpersonal care emerging as particularly important. In an Asian context, *Akthar et al. (2023)* identified healthcare-provider characteristics, technical care, communication, accessibility, waiting time and interpersonal relationships as recurring satisfaction determinants. These findings support the expectation that medical-service attributes collectively explain meaningful differences in patient satisfaction.

2.3. Time, punctuality and promptness

Time-related service characteristics strongly influence how patients evaluate healthcare. Doctors who spend adequate time with patients create opportunities for clinical explanation, clar-

ification and emotional reassurance. Sufficient consultation time may also signal that the provider values the patient's concerns. Established patient-experience instruments consequently include whether providers spent enough time with patients as an important element of communication quality (AHRQ, 2020).

Punctuality and promptness represent related but distinct service attributes. Punctuality concerns adherence to scheduled consultation times, while promptness refers to the speed with which a doctor responds to a patient's immediate needs. Delays can increase anxiety, create perceptions of poor organisation, and reduce patients' confidence in the institution. However, patients' evaluations of waiting time may also depend on whether delays are explained and whether their interaction with the physician is respectful. Mathews *et al.* (2016) found that satisfaction with waiting was intertwined with physician interpersonal skills, care coordination and perceived timeliness.

2.4. Availability of doctors and nurses

The availability of healthcare professionals is a fundamental condition for accessible and responsive care. Even when a hospital possesses advanced facilities, insufficient medical staffing can result in delays, fragmented communication, and limited contact with patients. Provider availability reduces uncertainty by ensuring that patients can obtain clarification, monitoring, and assistance when required.

Availability is particularly important in settings where workloads are high, and healthcare resources are constrained. Patients are more likely to feel secure when doctors and nurses are visible, accessible, and responsive throughout the treatment process. The WHO's people-centred care framework similarly emphasises timely access to services that respond to patients' comprehensive needs (World Health Organization).

2.5. Professional competence and treatment outcomes

Professional competence refers to the knowledge, technical ability, judgement and clinical skills demonstrated by healthcare providers. Patients may infer competence from the confidence of the physician, consistency of information, clarity of treatment explanations and perceived improvement in their health. Competence creates assurance and reduces the risks patients associate with treatment decisions.

Treatment procedures and outcomes are also expected to influence satisfaction. Nevertheless, their independent effect may differ across patients. Outcomes may be affected by disease severity, chronic conditions, adherence and factors beyond the healthcare provider's control. Furthermore, patients may place greater emphasis on the way treatment is delivered when they lack sufficient information to assess technical procedures. This may explain why interpersonal and access-related factors sometimes demonstrate stronger statistical effects than treatment procedures themselves.

2.6. Listening behaviour and compassionate care

Listening is central to patient-centred communication because it allows healthcare professionals to understand symptoms, concerns, treatment preferences and social circumstances. Patients who perceive that doctors listen carefully are more likely to feel respected and involved in decision-making. Listening can also improve information accuracy and help providers identify issues that may otherwise remain undisclosed.

A friendly and caring attitude communicates empathy and emotional support. Hashim (2017) explains that patient-centred communication involves recognising emotions, demonstrating understanding, showing respect and offering support. These behaviours can reduce fear and help build therapeutic trust. The importance of listening and respect is also reflected in established CAHPS patient-experience measures, which assess whether providers listened carefully, respected patients' views and spent sufficient time with them.

Research suggests that interpersonal care is not merely an optional addition to technical treatment. It is one of the principal ways through which patients judge the overall quality of healthcare. Compassionate interaction is especially important when patients face uncertainty, discomfort, or anxiety. Accordingly, the present study expects listening behaviour and a caring attitude to contribute positively to satisfaction.

2.7. Research gap and hypothesis development

Existing research establishes a broad relationship between healthcare service quality and patient satisfaction. However, many studies either combine service attributes into a single index or employ broad dimensions that make it difficult to identify which specific physician- and staffing-related attributes contribute most strongly to satisfaction. Additionally, findings can differ according to healthcare setting, patient expectations, institutional capacity, and cultural context.

The present study addresses this gap by simultaneously assessing eight observable medical-service attributes. Multiple regression analysis enables the independent effect of each attribute to be estimated while controlling for the remaining predictors. Based on service-quality theory, patient-centred care principles, and prior empirical evidence, the study proposes that improvements in medical-service delivery will contribute positively to patient satisfaction.

Research hypothesis

H1: Medical services have a significant positive influence on patient satisfaction.

3. Methods

3.1. Participants and procedures

The present study used cross-sectional data to examine the contribution of medical-service attributes to patient satisfaction.

The proposed relationships were tested using quantitative data-analysis techniques. Data were collected as part of a doctoral dissertation after obtaining approval from the Doctoral Review Committee of [name of university]. Administrative permission was also obtained from the participating hospitals, and the prescribed ethical principles for research involving human participants were followed.

The study was conducted in four prominent tertiary multispecialty hospitals in Bengaluru, India: Manipal Hospital, Old Airport Road; Apollo Hospitals, Bannerghatta Road; Fortis Hospital, Bannerghatta Road; and Aster CMI Hospital, Hebbal. These hospitals were purposively selected based on their tertiary-care status, range of medical specialties, patient volume and geographical accessibility. To ensure institutional representation, 100 patients were selected from each hospital, resulting in a final sample of 400 respondents.

Participants were eligible when they were at least 18 years old, had completed an outpatient consultation or inpatient treatment, had interacted directly with a doctor, and were medically stable at the time of data collection. Patients undergoing emergency or critical care, those unable to respond independently, attendants who had not personally received medical services, and questionnaires with substantial missing information were excluded.

Eligible patients were approached after completing their consultation or during the inpatient discharge process. A systematic intercept procedure was followed within outpatient waiting areas and discharge sections. After identifying a random starting respondent, every k th eligible patient was invited to participate. Data collection was distributed across different days and consultation periods to minimise time-related selection bias.

The survey instrument comprised a self-reported structured questionnaire. Before participating, each respondent was informed about the purpose of the research and requested to provide informed consent. Respondents were informed that participation was voluntary and that they could discontinue the questionnaire at any stage without providing a reason or affecting their medical care. They were assured that their responses would remain anonymous, be used exclusively for academic purposes, and be reported only in aggregated form. Doctors, nurses and hospital personnel were not present while respondents completed the questionnaire, thereby reducing the possibility of courtesy and social-desirability bias.

A total of [insert number] questionnaires were distributed, of which [insert number] were returned. Questionnaires with more than 20% missing responses, invariant response patterns or substantial incompleteness were removed. Responses with limited missing data were treated using [multiple imputation/expectation maximisation], provided that the missing-data mechanism was established as random. The final dataset consisted of 400 valid responses.

The sample included [number and percentage] male and [number and percentage] female patients. The respondents' mean age was [M] years ($SD=[value]$). Of the participants, [percentage] were outpatients and [percentage] were recently discharged inpatients. Further, [percentage] were first-time visitors, while [percentage] had previously received services from the selected hospital. A detailed demographic profile is

presented in Table [number].

3.2. Measures

The questionnaire contained measures of medical-service attributes and patient satisfaction. The measurement items were adapted from the healthcare service-quality literature, the Consumer Assessment of Healthcare Providers and Systems patient-experience measures, and established patient-satisfaction studies Agency for Healthcare Research and Quality (AHRQ, 2020; Choi et al., 2004; Dagger et al., 2007).

The original questionnaire was prepared in English and translated into Kannada. An independent bilingual expert subsequently back-translated the Kannada version into English. Differences between the original and back-translated versions were resolved to ensure conceptual and linguistic equivalence.

The questionnaire was reviewed by a panel of healthcare-management academics, hospital administrators, medical professionals and research-methodology experts. Their recommendations were incorporated to improve the clarity, relevance and contextual suitability of the items. The revised instrument was pilot-tested among 40 patients from a hospital that was not included in the main study. Pilot participants were excluded from the final sample.

All substantive items were measured on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Higher scores indicated more favourable perceptions of medical services and greater patient satisfaction.

4. Medical services

Medical services were operationalised through eight attributes adapted from established healthcare service-quality and patient-experience measures (AHRQ, 2020; Dagger et al., 2007). The attributes covered consultation time, punctuality, promptness, treatment procedures and outcomes, provider availability, professional competence, listening behaviour and compassionate care. The eight statements were:

- "The doctor spent sufficient time understanding my health concerns."
- "The doctor attended to me punctually."
- "The doctor responded promptly to my healthcare needs."
- "The treatment procedures and outcomes met my expectations."
- "Doctors and nurses were available whenever required."
- "The doctor was competent and professionally skilled."
- "The doctor listened carefully to my health concerns."
- "The doctor demonstrated a friendly and caring attitude."

The attributes were entered separately into the regression model to determine their individual contributions to patient satisfaction. Accordingly, the items were treated as distinct observed predictors rather than indicators of a single reflective construct.

4.1. Patient satisfaction

Patient satisfaction was measured using five items adapted from Choi *et al.* (2004) and Daggar *et al.* (2007). A sample item was, "Overall, I am satisfied with the medical services provided by this hospital." The remaining items assessed whether the services met the patient's expectations, whether selecting the hospital was the right decision, willingness to revisit the hospital and willingness to recommend the hospital to others. The five satisfaction statements were:

- "Overall, I am satisfied with the medical services provided by this hospital."
- "The medical services received met my expectations."
- "Choosing this hospital for treatment was the right decision."
- "I would choose this hospital again if I required medical care."
- "I would recommend this hospital to others."

Responses were recorded on a five-point scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The mean of the five items was calculated to obtain the overall patient-satisfaction score. Higher scores represented greater satisfaction with the medical services received.

4.2. Control variables

Several demographic and treatment-related characteristics were controlled because they could influence patients' evaluations of medical services and satisfaction. Age was recorded in years, while gender was coded as 1 = female, 2 = male, and 3 = other/prefer not to disclose. Patient category was coded as 1 = outpatient and 2 = inpatient/recently discharged patient.

Previous hospital experience was controlled because repeat patients may evaluate service delivery differently from first-time patients. The number of visits was coded as 1 = first visit, 2 = two to three visits, 3 = four to five visits, and 4 = more than five visits. Payment method was coded as 1 = self-financed, 2 = health insurance, 3 = employer-sponsored, 4 = government health scheme, and 5 = other. Hospital affiliation was represented through dummy variables to account for unobserved institutional differences.

4.3. Analytical procedure

The data were analysed using IBM SPSS Statistics, version [insert version]. Descriptive statistics were used to summarise participant characteristics and responses to the study variables. Scale reliability was assessed using Cronbach's alpha and composite reliability, with values of .70 or above considered acceptable. The validity of the patient-satisfaction measure was examined through factor loadings, average variance extracted and confirmatory factor analysis.

Pearson's correlation analysis was used to examine bivariate associations. Multiple linear regression was then employed to determine the individual and collective contributions of the eight medical-service attributes to patient satisfaction. Age, gender, patient category, previous hospital visits, payment method, and hospital affiliation were entered as control vari-

ables. The assumptions of linearity, normality of residuals, homoscedasticity, independence of errors and absence of problematic multicollinearity were examined before interpreting the regression model. Statistical significance was assessed at $p < .05$, and the results were reported using unstandardised coefficients, standard errors, standardised beta coefficients, t -values, 95% confidence intervals, R^2 , adjusted R^2 and the model F -statistic.

For a final sample of 400 respondents and eight main predictors, the unadjusted regression model should report total $df=399$ and residual $df=391$. Therefore, the earlier regression output based on 1,200 observations must be rerun using the final 400-patient dataset.

5. Contribution of Medical Services to Patient Satisfaction

Medical services refer to the tangible and intangible facilities offered by healthcare institutions to patients. A total of eight statements are considered for capturing the medical services for the study.

- Doctors spent time
- Doctors Punctuality
- Doctor promptness
- Treatment procedures and outcomes
- Availability of doctors and nurses
- Doctors are Competent and skilled
- Doctors' listening behavior
- Doctors had a friendly and caring attitude
- Patients Satisfaction

As the statements of the Medical services (independent variables) are multiple and an outcome (dependent) variable is single, multiple regression analysis is used to test the prediction of patient satisfaction through Medical services. So, the hypothesis is framed as

H1a: Medical Services positively influence Patient Satisfaction

Here, statements of medical services are treated as an independent variable, and patient satisfaction is treated as a dependent variable. The results of the multiple linear regression are presented below.

5.1. Model estimation

The results of the regression model summary are presented in Table 1.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718 ^a	.516	.513	.759

a. Predictors: (Constant), MS8, MS4, MS1, MS7, MS5, MS6, MS2, MS3

R-value explains the quality of the relationship between the independent variables and the dependent variable. The R value (0.718) implies a high positive relationship between

medical services and Patient satisfaction. R^2 value describes the explanatory power of the independent variables about the dependent variable. It reports the variance that results in the dependent variable due to all the predictors of the model. The R^2 value 0.718 indicates that nearly 72% (0.718 X 100) of patient satisfaction (dependent variable) in the model was derived from

medical services (independent) variables.

5.2. Model Validity and Usefulness

The results of the regression model ANOVA are presented in Table

Table 2: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	730.713	8	91.339	158.750	.000 ^b
Residual	685.257	1191	.575		
Total	1415.970	1199			

a. Dependent Variable: PS

b. Predictors: (Constant), MS8, MS4, MS1, MS7, MS5, MS6, MS2, MS3

F and significance values in the regression model describe the overall model significance and model fit. The F-value of 158.750 is high (not close to 1), and the p-value of 0.000 is less than 0.05, indicating that the regression model for predicting patient satisfaction through medical services is found to fit. It can be declared that the regression model can be used to predict

Patient satisfaction of hospitals in the study location.

5.3. Prediction

Item-wise contribution of medical services to predict Patient satisfaction, as stated in the coefficient table below:

Table 3: Regression coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.825	0.094		8.806	0.00
Doctors spending time	0.06	0.031	0.062	1.942	0.05
Doctors Punctuality	0.129	0.035	0.122	3.709	0.69
Doctor promptness	0.098	0.031	0.11	3.137	0.00
Treatment procedures and outcomes	-0.017	0.031	-0.018	-0.545	0.59
Availability of doctors and nurses	0.228	0.033	0.238	6.823	0.00
Doctors are Competent and skilled	0.132	0.031	0.139	4.264	0.00
Doctors listening behaviour	0.118	0.027	0.132	4.346	0.70
Doctors had a friendly and caring attitude	0.065	0.031	0.068	2.115	0.04

a. Dependent Variable: PS

From Table 3, it is found that five variables out of eight variables under medical services are significant, and the remaining are non-significant. The p-values for the variables Doctors spending time (0.000), Doctor promptness (0.000), Availability of doctors and nurses (0.000), Doctors are Competent and skilled (0.000), and Doctors had a friendly and caring attitude (0.004) are less than 0.05. Hence, these five variables contribute to patient satisfaction.

5.4. Contribution

To find out the strength of the prediction of these five variables, the concerned standardized regression coefficient beta values in Table 5.19c are examined. The following figure depicts the overall contribution of medical services towards patient satisfaction

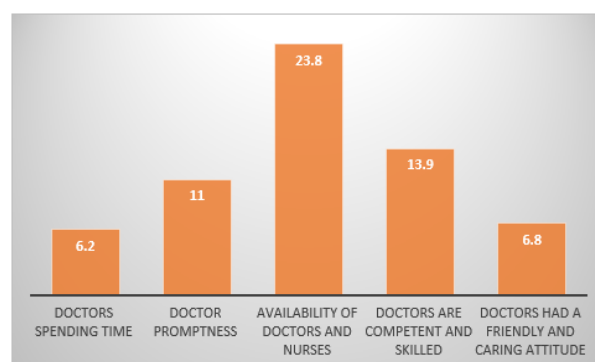


Figure 1: Medical services contribution in patient satisfaction

The beta values for doctors spending time (6.2%), Doctor promptness (11%), Availability of doctors and nurses (23.8%), Doctors are Competent and skilled (13.9%), Doctors had a friendly and caring attitude (6.8%) are proven as significant contributors towards street Patient satisfaction. It means that a 100% improvement in doctors' spending time, doctors' promptness, Availability of doctors and nurses, doctors being competent and skilled, and Doctors having friendly and caring atti-

tudes increases patient satisfaction by 6.2%, 11%, 23.8%, 13.9%, and 6.8%, respectively.

6. Implications

6.1. Theoretical implications

The findings support the view that patient satisfaction is a multidimensional outcome shaped by both functional and interpersonal aspects of healthcare delivery. The model's explanatory power of 51.6% indicates that medical-service attributes constitute an important component of satisfaction. At the same time, the unexplained variance suggests that satisfaction may also depend on nursing care, administrative processes, affordability, waiting conditions, physical facilities, cleanliness, demographic characteristics, and prior expectations.

The dominance of provider availability indicates that structural capacity and service accessibility may shape satisfaction more strongly than isolated physician behaviours. The findings also support the applicability of service-quality dimensions—particularly responsiveness, assurance and empathy—to healthcare settings.

6.2. Managerial implications

Hospitals should prioritise the adequate availability of doctors and nurses because this variable produced the strongest contribution to patient satisfaction. Management may improve availability through workload assessment, appropriate staffing ratios, duty-roster optimisation, backup arrangements and real-time monitoring of peak patient volumes.

Professional competence was the second-strongest contributor. Hospitals should therefore strengthen continuing medical education, clinical audits, competency assessments and evidence-based treatment protocols. However, technical competence should be communicated in ways patients can understand because patients frequently infer competence from confidence, clarity and consistency.

Listening behaviour also made a meaningful contribution. Hospitals should provide structured training in active listening, shared decision-making, explanation of treatment options and respectful communication. Patient feedback instruments can include brief questions about whether doctors listened carefully, addressed concerns and encouraged questions.

Punctuality and promptness should be addressed through appointment management, better coordination between departments and timely communication about unavoidable delays. Hospitals should distinguish between actual waiting time and unexplained waiting. Even where delays cannot be eliminated, providing accurate updates may reduce uncertainty and dissatisfaction.

Although friendly and caring behaviour produced a comparatively smaller coefficient, it remained significant. Hospitals should therefore incorporate compassion, courtesy and respect into performance assessment, induction programmes and service-quality standards.

6.3. Policy implications

Healthcare accreditation and quality-monitoring systems should combine technical performance indicators with patient-reported experience measures. Standard indicators can assess access to clinicians, response time, listening, respectful treatment and the adequacy of consultation time. Patient feedback should be analysed periodically at department and provider levels, while maintaining confidentiality and avoiding punitive use of the results.

6.4. Methodological implications

Future studies should test multicollinearity using variance inflation factors and tolerance values because the eight service attributes may be correlated. Researchers should also report scale reliability, construct validity, residual assumptions and confidence intervals. Structural equation modelling may be used to examine medical-service quality as a multidimensional latent construct and to test potential mediators such as trust, perceived value and treatment confidence.

7. Conclusion

The study confirms that medical services make a substantial contribution to patient satisfaction. Collectively, the eight service attributes explained 51.6% of the variance in satisfaction, and the overall regression model was statistically significant. The availability of doctors and nurses emerged as the most influential predictor, followed by professional competence, listening behaviour, punctuality, promptness and a friendly and caring attitude.

The findings demonstrate that patients value both clinical assurance and the manner in which healthcare is delivered. Hospitals seeking to improve satisfaction should therefore look beyond physical infrastructure and treatment procedures. They must ensure that healthcare professionals are available, responsive, competent, attentive and compassionate. A coordinated strategy that integrates workforce planning, professional development, communication skills and systematic patient feedback is likely to produce a more reliable and patient-centred healthcare experience.

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