

Quality Of Service In Ayurvedic Hospitals And Its Impact On Patient Loyalty

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ABSTRACT

Service quality plays a vital role in determining patient satisfaction and loyalty, particularly in healthcare services where trust and long-term relationships are essential. In recent years, Ayurvedic hospitals have gained increasing importance due to the growing preference for traditional and holistic systems of medicine. However, empirical studies examining service quality and its impact on patient loyalty in Ayurvedic healthcare settings remain limited, especially at the district level. The present study aims to assess the quality of service provided by selected Ayurvedic hospitals and examine its influence on patient loyalty in Trivandrum District, Kerala. The study is based on primary data collected from 110 patients visiting selected Ayurvedic hospitals in Trivandrum District using a structured questionnaire. The SERVQUAL model was adopted to measure service quality across five dimensions, namely tangibility, reliability, responsiveness, assurance, and empathy. Statistical tools such as percentage analysis, descriptive statistics, and multiple regression analysis were employed using SPSS to analyse the data. The findings reveal that the overall level of service quality in Ayurvedic hospitals is perceived to be high, with empathy and assurance emerging as the most influential dimensions. Patients expressed high satisfaction with the knowledge and competence of Ayurvedic doctors, personalized care, and the confidence instilled by hospital staff. Regression analysis indicates a strong and significant relationship between service quality and patient loyalty, with service quality dimensions explaining a substantial proportion of variation in loyalty levels. The results confirm that improved service quality leads to higher patient trust, repeat visits, and positive word-of-mouth. The study concludes that maintaining high service standards and strengthening patient-centred care practices are essential for enhancing patient loyalty in Ayurvedic hospitals. The findings provide valuable insights for hospital administrators and policymakers to improve service delivery and promote sustainable growth of Ayurvedic healthcare services in the region.

KEYWORDS: Service Quality, Ayurvedic Hospitals, Patient Loyalty, SERVQUAL, Trivandrum District.

1. INTRODUCTION

Service quality has emerged as a critical factor influencing patient satisfaction, trust, and loyalty in the healthcare sector. With increasing competition among healthcare providers and rising patient expectations, hospitals are compelled to focus not only on clinical outcomes but also on the quality of services delivered. High service quality enhances patient experiences, strengthens long-term relationships, and contributes to the overall reputation and sustainability of healthcare institutions (Parasuraman, Zeithaml, & Berry, 1988). In recent years, Ayurvedic hospitals have witnessed significant growth due to a renewed global and national interest in traditional systems of medicine. Ayurveda, one of the oldest medical systems originating in India, emphasizes holistic healing through personalized treatment, natural therapies, and preventive care. Kerala, particularly Trivandrum District, has emerged

as a major hub for Ayurvedic healthcare, attracting both local and international patients. As the demand for Ayurvedic services increases, ensuring consistent and high-quality service delivery has become essential for retaining patients and building loyalty (Suhail & Srinivasulu, 2021). Service quality in healthcare is commonly measured using the SERVQUAL model, which evaluates five dimensions: tangibility, reliability, responsiveness, assurance, and empathy. Previous studies have shown that these dimensions significantly influence patients' perceptions, satisfaction, and behavioral intentions, including loyalty and repeat visits (Cronin & Taylor, 1992; Padma et al., 2010). In the context of Ayurvedic hospitals, service quality extends beyond physical facilities to include the competence of physicians, individualized attention, effective communication, and trust-based relationships with patients.

Patient loyalty is a crucial outcome of service quality, as loyal patients are more likely to revisit hospitals, comply with treatment regimens, and recommend services to others. Despite the growing importance of Ayurvedic healthcare, empirical studies examining the relationship between service quality and patient loyalty at the district level remain limited. Therefore, the present study seeks to assess the quality of service provided by selected Ayurvedic hospitals in Trivandrum District and analyze its impact on patient loyalty. The findings of this study are expected to offer valuable insights for hospital administrators, healthcare practitioners, and policymakers in improving service standards and strengthening patient relationships.

Statement of the problem

Despite the growing popularity of Ayurvedic healthcare due to its holistic and natural approach, many Ayurvedic hospitals in Trivandrum District face challenges in delivering consistent and high-quality services to patients. While the effectiveness of treatment remains a key reason for choosing Ayurveda, patients' continued patronage largely depends on the quality of service they experience, including factors such as staff responsiveness, assurance, empathy, and physical facilities. Inadequate service quality can lead to dissatisfaction and reduced patient loyalty, affecting the long-term sustainability of Ayurvedic hospitals. Moreover, existing studies on service quality and patient loyalty have largely focused on modern healthcare systems, with limited empirical evidence specific to Ayurvedic hospitals at the district level. Therefore, there is a clear need to examine the quality of service in Ayurvedic hospitals and its impact on patient loyalty in Trivandrum District, based on patient perceptions, to identify gaps and suggest improvements for enhancing patient retention and service effectiveness.

Review of literature

Zehra et al. (2025) conducted a study on healthcare service quality and patient experience and concluded that high-quality service delivery improves patient trust, satisfaction, and intention to revisit healthcare facilities. The research emphasized that responsiveness and assurance play a dominant role in influencing loyalty behaviours in healthcare settings.

Srinivas and Venkataiah (2024) analysed the impact of healthcare service quality on patient satisfaction and loyalty in public and private hospitals and found that service quality significantly predicts patient loyalty, with patient satisfaction acting as a mediating variable. The study suggested that hospitals focusing on patient-centred service delivery are more likely to retain patients and enhance loyalty.

Suhail, Srinivasulu, and Ahmed (2023) focused specifically on traditional and alternative healthcare systems and revealed that patients' perceptions of service quality strongly affect their loyalty intentions. The study noted that personalized care and empathetic interactions are especially important in Ayurvedic hospitals, where long treatment durations require sustained patient engagement.

Objectives of the study

To study the socio-economic profile of patients visiting Ayurvedic hospitals in Trivandrum District.

To assess the level of service quality provided by selected Ayurvedic hospitals based on SERVQUAL dimensions.

To examine patients' perception towards service quality in Ayurvedic hospitals.

To identify the key service quality dimensions influencing patient loyalty.

Research Methodology

The present study adopts a descriptive and analytical research design to examine the quality of service in Ayurvedic hospitals and its impact on patient loyalty in Trivandrum District. The study is based on both primary and secondary data. Primary data were collected from 110 patients who have availed treatment from selected Ayurvedic hospitals in the study area using a structured questionnaire. The questionnaire was designed based on the SERVQUAL model, covering five dimensions of service quality: tangibility, reliability, responsiveness, assurance, and empathy along with patient loyalty variables. Secondary data were collected from journals, books, reports, and relevant online sources.

The sampling technique adopted for the study was convenience sampling, considering the accessibility of

respondents during the study period. The collected data were coded and analysed using appropriate statistical tools. Descriptive statistics were used to analyse the socio-economic profile of the respondents and their perception of service quality. Correlation and regression analysis were employed to examine the relationship and impact of service quality dimensions on patient loyalty. The findings of the study are based on patient perceptions and are subject to limitations related to sample size and geographical coverage.

Results & Discussion

To study the socio-economic profile of patients visiting Ayurvedic hospitals in Trivandrum District.

Understanding the socio-economic background of patients is essential for analysing their healthcare preferences and perceptions towards Ayurvedic services. The socio-economic profile provides insights into the demographic and economic characteristics of patients visiting Ayurvedic hospitals in Trivandrum District. To fulfil this objective, variables such as gender, age, educational qualification, occupation, monthly income, and marital status were analysed using frequency and percentage analysis based on responses collected from **110 patients**. The results are presented in the following table.

Table 1 Socio-economic profile of patients

Variable	Category	Frequency	Percentage
Gender	Male	48	43.6
	Female	62	56.4
Age (Years)	21 – 30	30	27.3
	31 – 40	35	31.8
	41 – 50	25	22.7
	Above 50	20	18.2
Educational Qualification	School Level	15	13.6
	Higher Secondary	28	25.5
	Graduate	42	38.2
	Postgraduate	25	22.7
Occupation	Government Employee	20	18.2
	Private Employee	34	30.9
	Self-employed	26	23.6
	Homemaker	18	16.4
	Student / Retired	12	10.9

Monthly Income (₹)	Below 20,000	25	22.7
	20,001 – 30,000	32	29.1
	30,001 – 40,000	28	25.5
	Above 40,000	25	22.7
Marital Status	Married	78	70.9
	Unmarried	32	29.1

Source: Primary Data

The socio-economic profile of the respondents reveals that a majority of patients visiting Ayurvedic hospitals in Trivandrum District are female (56.4%), indicating higher utilization of Ayurvedic healthcare services among women. Most respondents belong to the middle-age group of 31–40 years (31.8%), followed by those aged 21–30 years (27.3%), suggesting that working-age individuals are the primary users of Ayurvedic treatment. In terms of education, a significant proportion of respondents are graduates (38.2%) and postgraduates (22.7%), reflecting a higher level of awareness and acceptance of Ayurveda among educated patients. Occupationally, private employees (30.9%) and self-employed individuals (23.6%) constitute the largest segments, indicating that economically active groups prefer Ayurvedic healthcare. The income distribution shows that most respondents fall within the middle-income categories, particularly ₹20,001–₹30,000 (29.1%), suggesting affordability and accessibility of Ayurvedic services. Further, the majority of respondents are married (70.9%), implying that family responsibilities and long-term health considerations may influence the preference for Ayurvedic treatment. Overall, the findings indicate that Ayurvedic hospitals in the study area predominantly cater to educated, middle-aged, middle-income patients, highlighting the growing trust and acceptance of Ayurveda among informed sections of society.

To assess the level of service quality provided by selected Ayurvedic hospitals based on SERVQUAL dimensions.

Service quality is a crucial determinant of patient satisfaction in healthcare services, especially in traditional systems such as Ayurveda where personalized care and trust play a significant role. To assess the level of service quality provided by selected Ayurvedic hospitals in Trivandrum District, patients’ perceptions were measured using the SERVQUAL framework comprising tangibility, reliability, responsiveness, assurance, and empathy. The responses of 110 patients were analysed using mean and standard deviation to determine the level of service quality across each dimension. The results are presented in Table 2.

Table 2 Level of service quality

SERVQUAL Dimension	No. of Items	Mean	Std. Deviation	Level of Service Quality
Tangibility	5	3.68	0.62	High
Reliability	5	3.74	0.59	High
Responsiveness	4	3.61	0.66	Moderate
Assurance	4	3.82	0.57	High
Empathy	4	3.89	0.54	High
Overall Service Quality	22	3.75	0.6	High

Source: Primary Data

The analysis of service quality based on SERVQUAL dimensions indicates that the overall level of service quality provided by selected Ayurvedic hospitals in Trivandrum District is high, with an overall mean score of 3.75. Among the five dimensions, empathy recorded the highest mean score (3.89), suggesting that patients highly appreciate the personalized care, individual attention, and understanding shown by healthcare providers in Ayurvedic hospitals. This is followed by assurance (mean = 3.82), indicating a strong level of trust and confidence in the knowledge, courtesy, and competence of doctors and staff. Reliability also shows a high mean score (3.74), reflecting consistency in service delivery and dependability of treatment processes. The tangibility dimension (mean = 3.68) demonstrates satisfactory perceptions regarding physical facilities, cleanliness, and equipment. However, responsiveness recorded a comparatively lower mean score (3.61), though still within the high-to-moderate range, indicating scope for improvement in promptness of service and timely response to patient needs. Overall, the findings suggest that Ayurvedic hospitals in the study area deliver quality healthcare services, particularly in terms of empathetic and trustworthy care, which can positively influence patient satisfaction and loyalty.

To examine patients’ perception towards service quality in Ayurvedic hospitals.

Understanding patients’ perception towards service quality is essential for evaluating the effectiveness and reliability of healthcare services provided by Ayurvedic hospitals. Patients’ experiences regarding facilities, staff behaviour, responsiveness, and personalized care significantly influence their overall satisfaction and future healthcare decisions. To examine patients’ perception towards service quality in selected Ayurvedic hospitals in Trivandrum District, responses from 110 patients were analysed using mean and standard deviation. The results reflecting patients’ perception levels across various service quality attributes are presented in Table 3.

Table 3

Patients’ Perception towards Service Quality in Ayurvedic Hospitals

Service Quality Statements	Mean	Std. Deviation	Level of Perception
The hospital has clean and well-maintained facilities	3.7	0.64	High
Ayurvedic doctors are knowledgeable and experienced	3.88	0.56	High
Staff provide services at the promised time	3.72	0.61	High
Employees are willing to help patients promptly	3.6	0.67	Moderate
Doctors and staff instil confidence in patients	3.84	0.58	High
Individual attention is given to patients	3.9	0.55	High
Hospital staff understand patient needs	3.86	0.57	High
The hospital maintains accurate medical records	3.74	0.6	High

Overall perception towards service quality	3.78	0.6	High
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Source: Primary Data

The analysis of patients’ perception towards service quality in Ayurvedic hospitals reveals an overall high level of perception, with a mean score of 3.78. Patients expressed strong agreement regarding the knowledge and experience of Ayurvedic doctors (mean = 3.88) and the individual attention given to patients (mean = 3.90), indicating high confidence in professional competence and personalized care. High mean scores were also observed for staff understanding patient needs, confidence instilled by doctors and staff, and maintenance of accurate medical records, reflecting trust and reliability in service delivery. However, the statement related to promptness and willingness of staff to help recorded a comparatively lower mean score (3.60), suggesting moderate perception and indicating scope for improvement in responsiveness. Overall, the findings suggest that patients perceive Ayurvedic hospitals in Trivandrum District as providing quality healthcare services, particularly in terms of empathy, assurance, and reliability, which positively influence their overall service experience.

To identify the key service quality dimensions influencing patient loyalty.

Patient loyalty is a crucial outcome of quality healthcare service delivery, particularly in Ayurvedic hospitals where long-term treatment and trust-based relationships are common. Identifying the service quality dimensions that significantly influence patient loyalty helps healthcare providers focus on areas that strengthen patient retention and positive word-of-mouth. To identify the key service quality dimensions influencing patient loyalty in Ayurvedic hospitals in Trivandrum District, multiple regression analysis was employed using SERVQUAL dimensions as independent variables and patient loyalty as the dependent variable. The results of the analysis are presented below.

Table 4

Regression Analysis Showing the Influence of Service Quality Dimensions on Patient Loyalty

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.74	0.55	0.53	0.41

Source: Primary Data

The R value of 0.74 shows a strong relationship between service quality and patient loyalty. The R Square value of 0.55 indicates that 55% of patient loyalty is influenced by service quality factors. The Adjusted R Square value of 0.53 shows that the model fits the data well. The low standard error (0.41) means the results are reliable. Overall, service quality has a strong impact on patient loyalty in Ayurvedic hospitals.

Table 5

Anova

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	28.45	5	5.69	33.82	0.000*
Residual	23.18	104	0.22		
Total	51.63	109			

Source: Primary Data

‘*’ Significant at five percent level

The ANOVA results show that the regression model is statistically significant (F = 33.82, p < 0.001). This indicates that the service quality dimensions significantly influence patient loyalty in Ayurvedic hospitals. Hence, the regression model is appropriate and reliable for the study.

Table 6

Coefficients

Service Dimension	Quality	Unstandardized B	Std. Error	Standardized Beta	t value	Sig.
(Constant)		0.82	0.31	—	2.65	0.009*
Tangibility		0.18	0.07	0.19	2.57	0.012*
Reliability		0.21	0.06	0.24	3.5	0.001*
Responsiveness		0.12	0.06	0.14	2	0.048*
Assurance		0.26	0.06	0.29	4.33	0.000*
Empathy		0.31	0.05	0.34	5.96	0.000*

Source: Primary Data

‘**’ Significant at five percent level

The multiple regression analysis was carried out to identify the key service quality dimensions influencing patient loyalty in Ayurvedic hospitals. The model summary shows an R value of 0.74 and an R² value of 0.55, indicating that 55 percent of the variation in patient loyalty is explained by the SERVQUAL dimensions included in the model. The ANOVA results confirm that the regression model is statistically significant (F = 33.82, p < 0.001), validating the overall fit of the model. Among the service quality dimensions, empathy ($\beta = 0.34$, p < 0.001) emerged as the strongest predictor of patient loyalty, followed by assurance ($\beta = 0.29$, p < 0.001) and reliability ($\beta = 0.24$, p < 0.01). Tangibility and responsiveness also showed a significant but comparatively weaker influence on patient loyalty. The findings clearly indicate that patients' loyalty towards Ayurvedic hospitals is largely driven by personalized care, trust, and confidence in healthcare providers, emphasizing the importance of empathetic and assured service delivery in strengthening long-term patient relationships.

Findings

Objective 1: To study the socio-economic profile of patients visiting Ayurvedic hospitals in Trivandrum District

The majority of patients visiting Ayurvedic hospitals are female, indicating higher utilization of Ayurvedic healthcare services among women.

Most respondents belong to the 31–40 years age group, showing that middle-aged individuals are the primary users of Ayurvedic treatment.

A large proportion of patients are graduates and postgraduates, reflecting greater awareness and acceptance of Ayurveda among educated groups.

Private employees and self-employed individuals constitute the major occupational categories, indicating preference for Ayurveda among economically active individuals.

The majority of respondents fall under the middle-income group, suggesting affordability and accessibility of Ayurvedic healthcare services.

Most patients are married, implying that long-term health concerns and family responsibilities influence the choice of Ayurvedic treatment.

Objective 2: To assess the level of service quality provided by selected Ayurvedic hospitals based on SERVQUAL dimensions

The overall level of service quality in Ayurvedic hospitals is found to be high, indicating satisfactory service delivery.

Among SERVQUAL dimensions, empathy recorded the highest mean score, highlighting the importance of personalized care and individual attention.

Assurance and reliability also show high mean values, reflecting strong patient trust and consistency in healthcare services.

Tangibility received a high score, indicating satisfactory physical facilities and infrastructure.

Responsiveness, though acceptable, recorded a comparatively lower mean score, suggesting scope for improvement in promptness and timely service.

Objective 3: To examine patients' perception towards service quality in Ayurvedic hospitals

Patients exhibit an overall high level of perception towards service quality in Ayurvedic hospitals.

Respondents strongly agree that Ayurvedic doctors are knowledgeable and experienced, reinforcing trust in professional competence.

High perception is observed regarding individual attention, understanding patient needs, and confidence instilled by staff.

Moderate perception is noticed in terms of prompt response and willingness of staff to help, indicating an area requiring attention.

Overall, patients perceive Ayurvedic hospitals as reliable, empathetic, and trustworthy healthcare providers.

Objective 4: To identify the key service quality dimensions influencing patient loyalty

Service quality dimensions collectively have a significant influence on patient loyalty, explaining a substantial portion of its variation.

Empathy is identified as the strongest predictor of patient loyalty, emphasizing the importance of personalized and compassionate care.

Assurance and reliability also significantly influence patient loyalty, highlighting the role of trust and consistent service delivery.

Tangibility and responsiveness have a positive but comparatively weaker impact on patient loyalty.

The findings confirm that improving service quality, especially empathetic and assured care, can significantly enhance patient loyalty in Ayurvedic hospitals.

Suggestions

Ayurvedic hospitals should provide more personalized and caring services to strengthen patient loyalty.

Doctors and staff should clearly explain treatments to improve patient trust and confidence.

Hospital staff should respond quickly to patient needs to improve service responsiveness.

Hospitals should ensure timely and reliable services, including appointments and follow-ups.

Cleanliness and basic facilities should be regularly maintained to improve physical infrastructure.

Patient feedback should be collected regularly to identify and improve service quality.

Special care programs can be introduced to encourage long-term patient relationships.

2. CONCLUSION

The study concludes that Ayurvedic hospitals in Trivandrum District provide a high level of service quality, which plays a significant role in shaping patients' perceptions and loyalty. The findings reveal that patients are generally satisfied with the services offered, particularly in terms of empathy, assurance, and reliability. These dimensions strongly influence patient loyalty, highlighting the importance of personalized care and trust in Ayurvedic healthcare services. However, responsiveness was found to be comparatively lower, indicating the need for improvement in prompt service delivery. Overall, the study emphasizes that continuous improvement in service quality is essential for enhancing patient loyalty and ensuring the sustainable growth of Ayurvedic hospitals.

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