



# To measure the impact of service quality on patient satisfaction in Government Allopathic Hospital Jamnagar, Gujarat

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**Abstract:** *This study focuses on the relationship between service quality and customer satisfaction of those who come to receive treatment in selected public hospital in Jamnagar, Gujarat. The objectives of this study were (1) To examine the impact of service quality perception on patient satisfaction and (2) determine which dimension from 5 dimensions (tangible, reliability, responsive, assurance, and empathy) has the greatest impact on patient satisfaction. To test the hypothesis, multiple regression analysis was carried out. Analysis of variance here, revealed that the overall result showed a statistically significant impact of health service quality on patient satisfaction ( $p=0.000$ ). The beta-weights (beta) suggested that the empathy dimension had the greatest influence on patient satisfaction ( $\beta=0.476$ ), followed by tangible ( $\beta=0.198$ ) and responsiveness dimensions ( $\beta=0.164$ )*

**Key words:** *Customer Satisfaction, Public Hospital, Service Quality.*

## I. INTRODUCTION

Service quality is considered a significant strategy to satisfy the customer and encourage repeated service which attracts loyal customers. Thus, the continual improvement of service is needed in order to compete with other players in the hospital industry. In the hospital industry, most hospitals provide common services but differ in service quality which is an indicator to gain a competitive advantage in the business. Currently, there are many hospitals in the market. This gives customers or clients more options to choose the best service with the reasonable price they require. Therefore, hospitals have to improve their service quality and other functions in every small detail to succeed. However the medical service in developing countries is often managed by the government and faced with a limited budget, and also lacks human resources. This leads to customers' dissatisfaction with the level of service quality. The hospital service industry has a perceived level of excellent service quality, and this leads clients to expect these levels of excellence. Customer satisfaction is found when the level of a customer's expectations is met by the actual quality of the service provided. Thus, service quality is the actual service quality the customers or clients perceived when measured against their expectations before receiving a service.

## II. CONCEPTUAL FRAMEWORK AND RELEVANT LITERATURE

### A. Service Quality Concept

Service quality is the ability to satisfy customer needs which is intangible, of great variety, and cannot be stored or separated. Therefore, service quality can be evaluated from the process and outcome of a particular service. This is especially true for the interaction between service provider and client, which is called "quality of care" instead of "quality of service" in the health and hospital business. Since 1983, the service quality model and dimensions of service quality have been developed. The service quality model measures the perception of clients towards their expectations. The model and dimensions were developed and applied to the type of service from clients' expectations, which come first, and dimensions of service quality are evaluated from clients' 10 dimensions. Second, the service measurement tool is called "SERVQUAL" which analyzed the statistics results and provided conclusions under five main indicators or "RATER" (reliability, assurance, tangibles, empathy & responsiveness) with which the clients could evaluate the service quality from their five dimensions.

- ✓ Tangibles are physical objects that indicate the facilities of a service.
- ✓ Reliability is the ability to provide the promised service to the clients.
- ✓ Responsiveness is the readiness and willingness to provide a service in a particular moment.
- ✓ Assurance is the skill and knowledge related to a service which could make the clients trust and believe that they will receive the best service.
- ✓ Empathy is the ability to treat, care for, and cure an individual client.

SERVQUAL is defined as the measurement tool of Service Quality (SQ), which can be divided into two parts; the first part is for evaluating the Expected Service Quality (E), and consists of 22 items. Another 22 items are in the second parts and are used to



evaluate the Perceived Service Performance (P), which can be represented as  $SQ = P - E$ . If  $P > E$ , the service is excellent. If  $P < E$ , the service is considered bad. When  $P = E$ , the service is good. In medical service evaluation, the clients cannot evaluate the quality in terms of professional techniques according to the requirements of professional knowledge and treatment process knowledge. Therefore, the SQ will be evaluated from the experience and perception of patients when they receive a particular service. If the perception of performance is equal to their expectation, the service is considered good quality. That is, any SQ shows the qualification of that particular service which could satisfy clients' needs and necessities; thus the client's perception is the indicator to estimate or evaluate SQ.

## B. Theory of Health Service Satisfaction

The satisfaction is the results of participating in some particular activity. A positive attitude will lead to satisfaction with that service. On the other hand, a negative attitude will lead to dissatisfaction with that service. The accessibility of the medical system, concluded in five parts, which are

- ✓ Availability is the sufficiency ability to serve clients' needs.
- ✓ Accessibility is the location that could be easy to access.
- ✓ Accommodation is the convenience for the clients while receiving service.
- ✓ Affordability is the ability to pay for a treatment or service.
- ✓ Acceptability is the overall acceptance of the Service Quality, including the type of providers or doctors.

## C. Measuring the Service Quality in Hospitals

The literature has shown that numerous studies used the SERVQUAL instrument to measure service quality in hospitals. Wong evaluated the service quality provided for ambulatory clients at the Bone Densitometry Unit in the Royal Brisbane Hospital and found that there were high satisfaction ratings with both perception scores and expectation-minus-perception gap scores. Of the five dimensions, responsiveness, assurance and empathy factors were more important predictors of overall service satisfaction. Perception scores better predict overall satisfaction than gap scores. Sadiq Sohail examined and measured the service quality provided by private hospitals in Malaysia. Patients' perceived value of the services exceeds expectations for all the variables measured. Butt and Run indicated a moderate negative quality gap for overall Malaysian private healthcare service quality with the SERVQUAL model. Results also indicated a moderate negative quality gap on each service quality scale dimension. Yesilada tested the dimensionality of the SERVQUAL instrument in the Northern Cyprus healthcare industry, to assess the service quality provided in public and private hospitals in Northern Cyprus and to identify the service quality dimensions (reliability-confidence, empathy and tangibles) that play an important role in patient satisfaction. This result does not support the five dimensions model of the original SERVQUAL. Gap analysis showed that private hospitals have smaller gaps than public hospitals in all three service quality dimensions. K. Yousapronpaiboon determined the dimensions used in judging hospital service quality. The results indicated that SERVQUAL's five latent dimensions had a significant influence on overall service quality. Responsiveness had the most influence, followed by empathy, tangibles, assurance and finally reliability.

## III. METHODOLOGY

This study was conducted in Govt. Allopathic Hospital, Jamnagar from December 2016 to January 2017, on 183 patients (91 males, 92 females). The ages ranged from 18-61 years. The criteria for sample selection were: an adult of 18 years or above and visiting government hospitals seeking health services in the past 12 months. In maintaining confidentiality for all participants, an informed consent was obtained from all participants before the process of collecting the data; and the anonymity of all participants was also preserved. The study sample was selected using the convenience sampling technique. There were 210 questionnaires distributed to the participants by the researcher, out of that 183 were included in the study, with a response rate of 87%.

The current study utilized a cross-sectional method. A modified Assessment of Service Quality (SERVQUAL) questionnaire was applied to measure the quality of hospital services. It has been empirically evaluated in the hospital setting; hence, it is proven to be a reliable and valid method in a hospital service environment. This method includes 5 dimensions: tangible (physical facilities, equipment, and appearance of the personnel), reliability (the ability to perform the promised service dependably and accurately), responsiveness (the willingness to help customers and provide prompt services), assurance (employee knowledge and courtesy and their ability to convey trust and confidence), and empathy (caring, individualized attention a hospital provides to its customers). The response was recorded on a 5-point scale wherein "one" indicates "strongly disagree" and "5" indicates "strongly agree". In addition to these items, global satisfaction was measured by a single item asking participants how they felt after the delivery of health services. Multiple regression analysis was used to examine the impact of health service quality on patient satisfaction, and to determine which dimension from 5 dimensions (tangible, reliability, responsiveness, assurance, and empathy) has the greatest impact on patient satisfaction. The significant level was set at the 1% level ( $p < 0.01$ ).

## IV. RESULTS

To test the study hypothesis, multiple regression analysis was carried out. Analysis of variance revealed that the overall result was statistically significant ( $p = 0.000$ ) (Table 1).



Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	224.569	5	44.914	143.496	0.000*
Residual	55.401	177	0.313		
Total	279.970	182			

\*Predictors: (Constant), Empathy, Tangibility, Responsive, Assurance, Reliability  
Dependent Variable: Satisfaction

(Table 1.)

The study hypothesis, stating that there is a statistically significant impact of health service quality on patient satisfaction was supported. Moreover, the beta-weights (Beta) suggested that the empathy dimension had the greatest influence on patient satisfaction ( $\beta=0.476$ ), followed by tangible ( $\beta=0.198$ ), and responsiveness dimensions ( $\beta=0.164$ ) (Table 2).

Model	Non standardized Coefficients		Standardize Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.929	0.185		-5.008	0.000
Tangibility	0.295	0.077	0.198	3.810	0.000
Reliability	0.095	0.089	0.071	1.063	0.289
Responsive	0.214	0.074	0.164	2.913	0.004
Assurance	0.120	0.071	0.095	1.698	0.091
Empathy	0.498	0.065	0.476	7.630	0.000

Dependent Variable: Satisfaction

(Table 2)

## V. CONCLUSION

Service providers are progressively facing a wide range of social, financial, political, regulatory and cultural challenges, associating with demands for greater efficiency, better quality, and lower costs. Health care institutions have to go beyond a medical view and replace it with a holistic social approach to healthcare. Precise diagnosis and treatment are not enough; patients will look for performance for services they are rendered. It is argued that the focus on the patients is the first among 5 attributes of healthcare quality.

The results of the current study support the emerging literature regarding health service quality and patient satisfaction. Patients rendered a high level of service quality would report a high satisfaction rate. The empathy dimension had the greatest influence on patient satisfaction, followed by tangible and responsiveness dimensions. This study suggested that when patients perceived that the healthcare provider cares for them and pays special attention to them, there would be a higher level of satisfaction. Physical facilities, equipment, and appearance of the doctors and other staff also contribute to patient satisfaction. As study proposed, the willingness to help patients and provide prompt services would make patients more satisfied with health services. Interestingly, knowledge, courtesy, and ability of doctors and other staff to convey trust and confidence (assurance dimension), as well as the ability to provide the promised services dependably and accurately (reliability dimension), had the lowest influence on patient satisfaction. While the effects of assurance and reliability dimensions were comparatively lower than the effects of empathy and tangible dimensions, this does not imply that they are not important and should be ignored in improving service quality in the hospitals. This only proposes that greater gains in patient satisfaction can be realized through attending to empathy and tangible dimensions in the government hospitals' environment.

The limitations of this study center on the fact that patient satisfaction may change overtime; hence, a cross-sectional design may not be suitable for tracking such variables. Additionally, other variables may be more important in determining patients satisfaction than those presented in this study. Finally, using a convenience sampling technique may limit the ability to generalize our results.

## VI. SUGGESTIONS

Government hospitals and policymakers need to turn their attention to the fact that more efforts should be made to train doctors and other staff for different interpersonal skills to deal with patients, especially paying individual attention, listening effectively, communicating well, and responding to their requests kindly and politely. Without any additional costs, showing truthful interest in patients would greatly reap benefits. In terms of tangible dimension, an improvement of physical facilities, equipment and appearance of doctors and other staff should be given priority. It is important to note that a stronger modern managerial orientation should be introduced in the hospitals to assist delivering the quality services and patient satisfaction.



## REFERENCES

1. Parasuraman A, Zeithaml V, Berry L. Servqual. Alternative scales for measuring service quality? A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*. 1994;70:193–199.
2. Zamil A, Areiqat A, Tailakh W. The impact of health service quality on patients' satisfaction over private and public hospitals in Jordan: a comparative study. *International Journal of Marketing Studies*. 2012;4:123–137.
3. Ramez W. Patients' perception of health care quality, satisfaction and behavioral intention: an empirical study in Bahrain. *International Journal of Business and Social Science*. 2012;18:131–141.
4. Raposo M, Alves H, Duarte P. Dimensions of service quality and satisfaction in healthcare: a patient's satisfaction index. *Service Business*. 2009;3:85–100.
5. Zebiene E, Razgauskas E, Basys V, Baubiniene A, Gurevicius R, Padaiga Z, et al. Meeting patients' expectations in primary care consultations in Lithuania. *Int J Qual Health Care*. 2004;16:83–89.

