



The Influence of Service Quality on Customers' Satisfaction in Ghayathi Medical Centers

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Customer satisfaction is commonly used as an indicator to assess healthcare quality. Also, the client's perception of service quality is crucial in enhancing the healthcare customer experience. Therefore, this study aims to examine the effect of service quality on customers' satisfaction in Ghayathi medical centers. And exploring the moderating effect of customers' gender in the relationship between service quality and customers' satisfaction. The proposed measurement items for SERVPERF were tested using data collected from a sample of 410 customers in Ghayathi city. Descriptive statistics were used to determine the level of service quality provided by the medical centers, and multiple regression analysis, ANOVA, and T-test were used to test the research hypotheses. The findings indicate that the service quality of Ghayathi medical centers is perceived as satisfactory, and service quality significantly affects customer satisfaction. Service quality dimensions (Tangibility, Reliability, Assurance, Responsiveness, and Empathy) are statistically significant in influencing customer satisfaction; responsiveness has the greatest influence on customer satisfaction, followed by empathy. It also indicated that gender moderates the relation between service quality and customer satisfaction. In addition, the result also found that female customers have a higher level of satisfaction than male customers.

Keywords: *Health care; customer satisfaction; service quality; Ghayathi, UAE.*

1. INTRODUCTION

Service quality has a significant impact on customer satisfaction. Companies increasingly focus on enhancing service quality to increase consumer satisfaction [1]. Concerns about hospital service have grown recently as human living standards have evolved, necessitating more outstanding medical care to alleviate lifestyle. To offer improved patient services, hospitals must improve their service quality to satisfy and attract service users. Medical care is becoming a priority for healthcare, and hospitals must improve their service quality to operate effectively in the market [2].

Service quality refers to fundamental disparities between a client's perception and expectation of a business and the actual services delivered by the company; it impacts the client's satisfaction and behavioral intention [3]. The client's perception of service quality is crucial in enhancing the healthcare system's customer experience. It improves healthcare outcomes, resulting in more satisfied clients and a higher patient retention rate [4]. Numerous researchers have propounded different service quality constructs in their research. According to Faezipour and Ferreira [5], customer perceptions of Service Quality and customer satisfaction have a substantial correlation. While the findings of the Ferrand et al. [6] study also suggest that Service Quality has a beneficial impact on patient satisfaction in the healthcare industry. According to Alrubaiee and Alkaa'ida [2], service quality is a five-dimensional notion that includes tangible, reliability, responsiveness, assurance, and empathy. He contends that these variables affect customer loyalty trends. Healthcare systems and authorities all across the globe strive for widespread access to high-quality care and a complete patient experience [7]. However, due to economic, technical, and inadequate personnel capacity, many emerging nations fall considerably behind industrialized countries.

Many studies covered the relationship between service quality and customer satisfaction in general, while few covered the health sector mainly. However, there are still a limited number of studies dealing with the relationship between service quality and customer satisfaction in some industries and a lack in other sectors in the UAE, such as the health sector. Hence, this study came to fill the theoretical gap and provide recommendations to decision-makers at the practical level. This research evaluates patients'

views of service quality and customer satisfaction in Ghayathi City.

2. LITERATURE REVIEW

In this age of competitiveness, improved service quality is a vital component that can help differentiate and enhance an institution's effectiveness [1]. Several latest pieces of evidence have looked into the subjective aspect of service quality and its components and assessment challenges. Scholars have placed a considerable interest in the conceptual and practical correlation between service quality and client satisfaction, making it one of the most effective tools for customer engagement [1]. Even though service quality evaluation has gained a lot of attention, the service quality of the health care sector of developing countries requires further evaluation.

2.1 Customer Satisfaction

Understanding consumers' wants and needs and what they perceive and seek is essential for organizational success and service management [7]. Customer satisfaction is vital to a company's reputation since it contributes to customer loyalty and retention [8]. Companies must understand their customers' experiences and views of their offerings to improve their services and please current customers while attracting new ones [9]. Every company's primary goal is customer satisfaction to pursue long-term relationships and acquire new consumers [7]. Client happiness is vital for sustainability and profitability in the healthcare industry since customer contact is among the most critical business operations [9]. The customer's perception of the quality of service is an essential aspect of enhancing the customer experience. Customer satisfaction is comparing customers' expectations and subsequent perceptions of service quality performance [11].

Customer satisfaction has always been a top priority [12]. User satisfaction is founded on the idea that it must first please its consumers for the organization to be profitable in the long run [5]. Customer satisfaction is a good indicator of how helpful a service or product is to consumers [8]. Furthermore, customer satisfaction can assess a company's current and future effectiveness. Customer happiness is intimately linked to customer loyalty, referrals, and customer retention [7].

Similarly, Suki et al. [11] claim a clear correlation between customer happiness, loyalty, and repurchase intention). Also, a study by Masoud & Al Khateeb [13,14] found that managerial competencies (communication, planning and organizing, strategic thinking and scenario building, teamwork, and customer focus) are essential in contributing to business efficiency and sales performance satisfaction. As a result, customer satisfaction is vital in the healthcare industry to guarantee long-term operation and customer engagement [15].

However, measuring consumers' views of service quality is a complicated process requiring a comprehensive model [16,17]. The framework must provide tangible and measurable customer perceptions of an intangible service requiring significant empirical and conceptual analysis [18]. Even though several models are used in various service sectors, there is now widespread agreement in the literature on a holistic model to assess service quality [19]. This literature review discusses some of the most influential theories and models

2.2 Service Quality

In recent years, researchers in service management have been paying close attention to service quality [20]. Furthermore, its concept and measuring scales have also gained much traction [5]. The factor of service quality, in particular, has been intensively researched in a multitude of sectors, including online banking, healthcare, telecommunications, learning, hoteling, and leisure [18]. Because service quality is not a one-dimensional notion, it is based on several factors, each of which fluctuates in relevance regarding total service quality and its influence on patient satisfaction [7]. Consumer satisfaction and word-of-mouth marketing have become more dependent on the quality of service provided [19].

According to the first viewpoint, excellent service has functional and technical quality. On the other hand, the second viewpoint claims that there are five elements: tangibility, reliability, responsiveness, assurance, and empathy [3]. Assurance assesses the medical center's effectiveness and the competence of the employees to provide treatments. It is reliant mainly on the staff's expertise and politeness and their desire to leverage the trust and respect of consumers [18]. The tangibility dimension covers the medical center's facilities and equipment,

medical equipment, and the staff's appearance [15]. The responsiveness component assesses how well the medical center responds to the patients' needs. It comprises the eagerness of the employees to assist clients and deliver prompt service [6]. In terms of reliability in healthcare provision, reliability entails confidence in the services. It is the capacity to deliver on a promise with consistency and accuracy [20]. Empathy is concerned with the staff's attitude and caring for patients and whether or not customized care is offered [7].

Service quality measurement is an effective managerial tool for better understanding consumers' needs and expectations [19]. It can be measured by comparing consumer expectations to the service provided. Service quality measurement assists businesses in recognizing their service offering strengths and limitations, which they can then employ to improve customer experience [6]. Furthermore, service quality is thought to impact customer satisfaction directly and, as a result, customer retention. Higher service quality improves customer satisfaction by influencing consumers' intent to return to the business [3]. Therefore, businesses must periodically measure service quality to analyze and improve customer experience [19].

Since Gronroos introduced the first service quality assessment model, measuring service quality has received much attention [21,22] stated that when evaluating service quality, technical features resulting from service performance should be differentiated from functional attributes as a subjective evaluation of the service given. Later in another model, Parasuraman et al. [23] propounded ten dimensions of service quality measurement, but five were later discarded due to their lack of importance. Over the last 30 years, scholars have produced many models and indicators for service quality [24].

2.2.1 Gronroos model

Gronroos [22] was the first to propose a service quality measurement model. His model primarily relies on the dis-confirmation theory, which compares perceived service quality with actual service provision. The disconfirmation model is founded on product quality research, which serves as the foundation for service quality [19]. According to Gronroos [22], understanding the customers' opinion of the service offered is

critical for success. Service quality management entails matching perceived quality with desired quality to satisfy consumers. This approach divides service quality into three dimensions. Customers anticipate technical (outcomes) after interacting with businesses, whereas functional (processes) are technical services received by customers [24]. The third component of service excellence is the corporate image, which is the consumers' perception of the company and determines their expectations. As a result, technical and functional quality contribute to the brand image [24]. Traditional advertising initiatives, for example, are less essential aspects that can impact a business's reputation [19]. One of the first efforts to create a reliable model for assessing consumer perceptions of service quality [18].

2.2.2 Service quality GAP model

Parasuraman et al. [23] proposed a gap model for measuring service quality premised on the disconfirmation model. The gap between customer expectation and service performance is measured through gap analysis. They suggested measuring five gaps between the customer's expected service quality and the service provision [25].

Later, Frost and Kumar [26] expanded the gap model to assess the aspects and interactions that affect service quality in employees (lower level workers) and internal suppliers (support personnel) in a services company. Additionally, Luk and Layton [25] expanded on Parasuraman et al. [23] standard GAP framework by integrating two more gap aspects. The first is the gap between consumers' anticipated services and personnel's views of consumers' demands. The second is the gap between employees' views of consumers' expectations and managerial perspectives of consumers' anticipations [27-30]. Researchers improved the model into the SERVQUAL model in 1988, but the underlying principle remained the same, with the dimensions decreasing to five: reliability, responsiveness, assurance, tangibles, and empathy [5]. The new model was changed in 1991 and 1994, but its structure and the five specified dimensions stayed the same [31]. Although SERVQUAL is the most widely used model in service quality measurement, scholars propound that analyzing the gap between expectation and perception does not give a precise psychometrically assessment of service quality [31, 5, 26].

2.2.3 SERVPERF model

Even though the SERVQUAL model is suitable in many sectors, researchers discovered that it is insufficient in other applications, such as retail outlets [1]. Cronin and Taylor proposed a more improved model in 1992, focusing on service performance as the only aspect to be examined for measuring service quality [32]. Service quality is from a consumer's perspective, and service performance should be the only metric for measuring service quality [31]. They proposed that service quality is a predictor of consumer satisfaction, and they propose SERVPERF, a novel model for service quality based on SERVQUAL [33,34]. Cronin and Taylor [32] used this revised method to assess performance (perceived services) using the same aspects for measuring service quality rather than the "expectation-perception" gap. According to scientific studies, SERVQUAL components are variable, and SERVPERF is a more comprehensive evaluation of service quality than SERVQUAL [33,34].

2.3 Service Quality and Customers' Satisfaction

Service quality is regarded as a customer evaluation based on the overall attractiveness of services [21]. Most research emphasizes the significance of service quality provision in developing customer loyalty and satisfaction. However, there is no agreement in the literature on a model for assessing service quality [5]. Service quality is a diverse, dynamic phenomenon with measurable components based on the service industry. Service quality insights give managers adequate knowledge to identify problem areas in their service delivery, improve service delivery, and ensure customer satisfaction and retention [24]. While most of the presented models are appropriate for service quality measurement in various service sectors, experts discovered that most are not generalizable to all organizations [6]. Significant metrics, such as SERVPERF, assist in implementing and testing in many enterprises. However, even that well-known assessment has particular limitations for some individual industries [33,34]. According to the research, firms should better employ context-specific service quality measurement to better understand consumers' perceptions of service quality.

The literature supports the correlation between service quality provision and customer retention. The SERVPERF framework is widely used to assess service quality in service areas, including hospitality, transportation, and healthcare [8]. Similarly, Kasiri et al. [35] found that all SERVPERF model dimensions are highly connected to patient satisfaction. However, patient satisfaction varies greatly between governmental and non - governmental institutions. According to Kassim and Asiah Abdullah's [33,34] study, perceived service quality considerably impacts customer retention and new customer acquisition. Also, the service quality dimensions, reliability, assurances, and responsiveness are significant predictors of customer satisfaction in mobile phone customers in the UAE [13,14]. There is no agreement on conceptualizing the service quality-satisfaction link; nonetheless, service quality provision is an antecedent to company reputation and is the prevailing viewpoint in recent research, particularly in service context industries such as healthcare [8]. Service quality is measured by the SERVPERF instrument [8] and is adopted in this research. Thus, it can be hypothesized that:

H1. Service quality is statistically significant in influencing customer satisfaction.

Demographic variables, such as age, gender, education, and socioeconomic status, are known as customer characteristics. To a certain extent, these characteristics are significant determinants of consumer behaviors. Among these characteristics, gender appears to be one of the few features that are easy to recognize and access and is a large enough segment to be profitable for market strategy (Juwaheer, 2011; Mokhlis, 2012). Therefore, this study seeks to

exploit gender differences to determine the level of satisfaction in response to service quality.

H2: Gender significantly moderates the relationship between service quality and customers' satisfaction.

3. CONCEPTUAL MODEL

The model used in this study was developed to examine the influence t of service quality on customers' satisfaction in health care service in Ghayathi, as shown in Fig. 1.

4. METHODOLOGY

The current study adopted the quantitative research method because it aims to highlight the perspectives and interests of the study sample concerning the research topic. It allows the researcher to collect the required data and quickly produce the outcomes needed for an appropriate time. The quantitative method serves as a significant stepping stone for comprehensive research. The quantitative research methods help perform practical research data collection tools (e.g., questionnaires, surveys) from respondents to get useful findings and assessments. Literature shows that the descriptive type of quantitative method helps collect numerical data and examine proper outcomes [36]. In a quantitative approach, it is usual to present similar questions to all respondents to collect comparable data to ensure a systematic data assessment. The data is provided in a numerical format and can be examined, and the outcomes can be generated utilizing statistical methods [37].

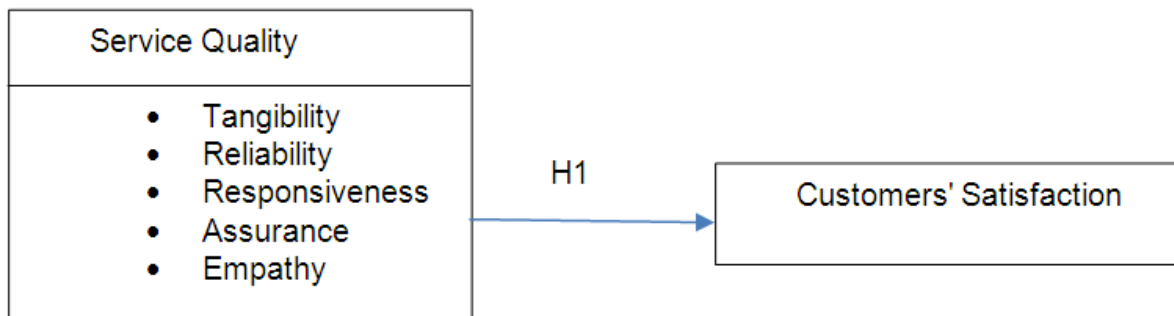


Fig. 1. Conceptual model

4.1 Sampling and Data Collection

The population of this study includes the customers of Ghayathi city to collect individual opinions, experiences, and behaviors and measure the level of quality of service provided by health care centers to make critical decisions. Because it is helpful to obtain factual data on questions from several perspectives and models, it is necessary to get the relevant information from the selected sample. The maximum amount of data collection could be possible with an enhanced questionnaire and the items' validity. Customers at Ghayathi city offered a questionnaire using online Google forms. It is helpful to understand their concerns and benefits of using high-end quality services and their importance from their point of view (if it exists). This study's sample is the customers of Ghayathi medical centers. The sample was carefully selected by making the right proportion of customers to ensure the inclusion of all possible customers to show varying perspectives and views about the quality service at the medical centers [38]. This research uses the quantitative method to gather numerical data by distributing the survey to a convenience sample of 410 participants from the target populations for this paper, customers who have visited one of the medical centers allocated in the Ghayathi area; the questionnaire was shared through Social media and WhatsApp groups.

4.2 Data Collection Method

This study uses a questionnaire to inquire about respondents' views about the health care service quality in Ghayathi city. In addition, it serves as an effective tool to collect information from the study respondents. The data collection process could be as simple as possible to assess the desired outcomes. While this method could ensure complete confidentiality, respondents feel relaxed and offer factual information. According to the literature, the questionnaire method develops a challenging collection of questions from well-informed and authentic respondents handling or observing the conditions. It is due to survey questions offering enhanced efficiency and creativity in the research. The primary advantage is that an online questionnaire could assist in collecting a variety of responses within a substantially less time duration. This study aims to use a five-point Likert scale where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The questionnaire included two parts to collect data and measure the

constructs in this study to decide the effect of service quality on customers' satisfaction in Ghayathi medical centers. The first section comprised some demographic information, and the second part included a question related to quality service and customer satisfaction.

4.3 Data Management Strategies

This study adopted the online data management strategy. The collected data from the study sample was stored automatically in the Google drive parallel to receiving responses from respondents, as the link was shared with them to respond online. The respondents' email addresses have not been asked to maintain the responses' anonymity. Moreover, it assists in accessing the data if needed in the future without any difficulties and could be used.

4.4 Limitations

Response bias issues, assessing the errors at the respondents' end, and the formal validity issues based on the questions are common perfection issues. In specific, the questionnaire administration approach also affects the findings. The online questionnaire could produce changed outcomes compared to surveys' physical or face-to-face administration. In administering the online or physical questionnaire, bias issues are crucial. The moral implication is also essential for the researcher to practice ensuring the respondents' anonymity and privacy issues. Such efforts lead to critical ethical guidelines related to data collection methods and asking for confidential information of the respondents.

Moreover, the study is limited to the context of Ghayathi medical care centers and implementing the quality services leading to higher customer satisfaction. The outcomes are specific to the medical care center s' population or similar health care service context; thus, the generalizability of the findings is limited. Future research may focus on utilizing other data collection methods and including more services in the data collection process to offer more generalized outcomes, which could be implemented under any circumstances.

5. RESEARCH ANALYSES

Collected data were codified into a digital file, and Statistical Package for the Social Sciences version 26 was used to analyze the data. Internal consistency was used to establish the

questionnaire reliability. Descriptive statistical analyses were utilized to reach conclusions from respondents' demographic profiles. Descriptive analysis was utilized to conclude from these data whether there was a statistically significant difference between customers' perceptions of service quality and satisfaction of medical centers in Ghayathi. In the end, multiple linear regression analyses were also carried out to test hypotheses whether service quality is statistically significant in influencing customer satisfaction.

6. RESULTS AND DISCUSSION

6.1 Sample Characteristics

The first part of the questionnaire asked for some demographic information from the respondents. The findings show that around 26.7% of the respondents were from 25-29. The results also revealed that 33.3% of respondents were from 30-34 years, and 40% were from 35-39 years of age. The findings show that around 51.7% of respondents were female, and 48.3% were male. The results show that about 31.7% of respondents have a diploma or fewer degrees, 53.3% had bachelor's degrees and 15% had a master's or Ph.D. degree.

6.2 Reliability Test

The most common measure of internal consistency used by researchers is a statistic called Cronbach's α ; the reliability measures the response consistency. Moreover, we employ the composite reliability coefficient to inspect the reliable condition, as Sholihin and Ratmono [39] explained. If this coefficient exceeds 0.7 as its cutoff point, the valid answer to the question items is consistent. The reliability estimates of the study for the various constructs are presented in Table (1), and all of them exceed the cutoff point.

6.3 Descriptive Statistics

The second part of the questionnaire is about the service quality dimensions of tangibility, reliability, assurance, responsiveness, and empathy (SERVQUAL). The five dimensions of service quality:

- Tangibility: Appearance of physical facilities, equipment, personnel, and communication materials
- Reliability: Ability to perform the promised service dependably and accurately
- Responsiveness: Willingness to help

customers and provide prompt service

- Assurance: Knowledge and courtesy of employees and their ability to convey trust and confidence
- Empathy: Caring, individualized attention the firm provides its customers

Table (2) shows the descriptive analysis of the Reliability dimension; the result shows the lowest scores were related to providing services as promised and if Ghayathi Medical Centers are dependable in handling patient service problems and performing services right from the first time. Addressing these points will increase the quality of the services that depend on the reliability dimension. Visual management tools can be used to communicate expectations, performance, standards, or warnings in a way that requires little training to interpret. By implementing visual management, employees will be able to perform service more efficiently and more effectively and will be able to do it right from the first time. Also, it will offer more guidance to perform the services as promised without missing any step in the process. Also, it will give the patient more assurance that the medical center is dependable in handling any patient service problems as the proper steps of addressing any issue will be visualized in the medical center.

The second dimension of service quality is responsiveness which relates to the Willingness to help customers and provide prompt service. Table (3) shows that the lowest score in this dimension is whether Ghayathi Medical Centers offers prompt service to patients. Which means that the patients do not get the services instantly, and immediately the reason for not providing fast service is the waiting time to get the service done. To decrease waiting time. Value stream mapping could identify non-value-adding activities and seven deadly wastes and eliminate them from the process. It will significantly help reduce the patient waiting time by using the 5s methodology that organizes the workplace and makes it easier to move and perform the service more efficiently without wasting time looking for medical tools or charts and files.

As shown in Table (4), the third dimension is assurance, which is employees' knowledge and courtesy and ability to convey trust and confidence. The lowest score is related to whether employees in Ghayathi Medical Centers are consistently courteous. This part is crucial as it directly affects patient satisfaction and trust regarding the medical centers' services. Showing

commitment toward lean and towards the patient must be done; also, it could mean putting more effort into implementing lean culture, and continual improvement to engage employees will increase employees' courtesy towards patients.

The fourth dimension shown in Table (5) is empathy, which means the caring, individualized attention the firm provides its customers. The lowest score in this part regards employees in Ghayathi Medical Centers understanding their

patients' needs. The use of continuous improvement and kaizen, a lean management tool that, when used correctly, fosters continuous improvement in quality, technology, processes, productivity, company culture, and safety. Also, it helps create a continuous improvement culture and empowers employees to make changes whenever needed. Moreover, proper employee training will increase employees' empathy toward customers needs and serve them in the best way possible.

Table 1. Reliability estimates of service quality dimensions and customers' satisfaction

Measured variables	No of Questions	Cronbach's Alpha
Reliability	5	0.825
Responsiveness	4	0.807
Assurance	4	0.831
Empathy	5	0.844
Tangibility	4	0.871
Customer Satisfaction	4	0.890

Table 2. Descriptive analysis of reliability dimension

Question	N	Mean	Std. Deviation
Ghayathi Medical Centers provide service as promised to patients	410	3.90	1.136
Ghayathi Medical Centers is dependable in handling patient service problems	410	3.90	1.261
Ghayathi Medical Centers provide the services at the promised time	410	4.17	1.070
Ghayathi Medical Centers perform services right from the first time	410	3.90	1.281
Ghayathi Medical Centers are maintaining error-free medical services	410	4.07	1.010
Reliability		3.990	.98686

Table 3. Descriptive analysis of responsiveness dimension

Question	N	Mean	Std. Deviation
Ghayathi Medical Centers keep patients informed as to when the services will be performed	410	3.90	1.261
Ghayathi Medical Centers prompt service to patients	410	3.85	1.352
Ghayathi Medical Centers willingness to help patients	410	3.90	1.357
Ghayathi Medical Centers manages patient requests effectively.	410	4.12	1.053
Responsiveness	410	3.945	1.03609

Table 4. Descriptive analysis of assurance dimension

Question	N	Mean	Std. Deviation
Are you confident with the employee working in Ghayathi Medical Centers?	410	3.80	1.249
Ghayathi Medical Centers makes patients feel safe in their transactions	410	4.12	1.187
The employee in Ghayathi Medical Centers are consistently courteous	410	3.78	1.235
The employee in Ghayathi Medical Centers have the knowledge to answer patients' questions	410	3.83	1.302
Assurance		3.884	1.07398

Table 5. Descriptive analysis of empathy dimension

Question	N	Mean	Std. Deviation
Ghayathi Medical Centers give customers individual attention	410	4.05	1.182
The employee in Ghayathi Medical Centers deal with patients in a caring fashion	410	4.07	1.127
Ghayathi Medical Centers are serving patients in their best interest	410	3.93	1.170
Ghayathi Medical Centers have convenient business hours	410	3.93	1.292
The employee in Ghayathi Medical Centers understand the need of their patients	410	3.83	1.181
Empathy		3.961	1.01904

Table 6. Descriptive analysis of tangibility dimension

Question	N	Mean	Std. Deviation
Ghayathi Medical Centers have advanced medical equipment for the treatment	410	4.02	1.235
Ghayathi Medical Centers have visually appealing facilities	410	3.88	1.308
Employees in Ghayathi Medical Centers have a neat, professional appearance	410	3.93	1.349
Ghayathi Medical Centers have visually appealing materials associated with the service	410	3.90	1.319
Tangibility		3.932	1.10683

Table 7. Descriptive analysis of service quality dimensions

Dimension	N	Mean	Std. Deviation
Reliability	410	3.990	.98686
Responsiveness	410	3.945	1.03609
Assurance	410	3.884	1.07398
Empathy	410	3.961	1.01904
Tangibility	410	3.932	1.10683
Service Quality	410	3.942	.97556

The fifth and last dimension is tangibility, as shown in Table (6), which is the appearance of physical facilities, equipment, personnel, and communication materials. The improvement needed is to make the hospital facilities more visually appealing because it is the lowest score in this dimension. Table (7) summarizes the descriptive analysis of the quality service dimensions.

Similarly, Table (8) shows that the services at the medical center are up to the mark, which has a mean of 4.200. The nursing staff of the medical center offers quality services and a positive communication attitude to offer higher satisfaction to its customers/patients, which has a mean of 4.110. The medical center is mainly successful in meeting customer satisfaction through providing quality services and has a mean of 4. Ghayathi medical center offers

satisfactory healthcare services, and its mean value of 4. The findings reveal that the study objectives are met. Most respondents think That Ghayathi medical center provides quality services, and its customer satisfaction rates are quite high.

6.4 Hypothesis Testing

Multiple regression analysis was used to test the study's hypotheses to analyze the relationships between the independent variable (Service Quality) and customers' satisfaction in Ghayathi Medical Centers. Table (9) shows the multiple linear regression results of testing the significance of the relationship between service quality and customer satisfaction, service quality was a statistically significant influence on customer satisfaction ($p < 0.05$), and therefore, hypothesis (H1) is accepted.

Table 8. Descriptive analysis of customer satisfaction

Question	N	Mean	Std. Deviation
The services at the medical center are up to date	410	4.200	.8982
The nursing staff offers quality services and better communication	410	4.110	.8596
The medical center fulfills the quality standards.	410	4.317	.8334
The healthcare services are satisfactory	410	4.350	.7988
Customer Satisfaction		4.244	0.847

Table 9. Multiple Regression analysis for Service Quality (Tangibility, Reliability, Responsiveness, Assurance, Empathy) and Customers' Satisfaction in Ghayathi medical centers

Model	B	Std. Error	Sig.	β	t	R ²
(Constant)	-.860	.183	.000		-4.691	.616
Reliability	.046	.013	.000*	.152	3.680	
Responsiveness	.081	.012	.000*	.282	6.614	
Assurance	.038	.011	.000*	.131	3.518	
Empathy	.083	.012	.000*	.279	6.698	
Tangibility	.054	.012	.000*	.173	4.623	

Note: * Denotes significance at the 0.05 level

Table 10. Independent samples test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.562	1	1.562	4.122	.043*
Within Groups	150.841	408	.379		
Total	152.403	409			

Note: * Denotes significance at the 0.05 level

Table 11. T test

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Customer Satisfaction	Female	212	3.53	1.184	0.079
	Male	198	3.49	1.109	0.082

The t-test is used to determine the relationship between service quality and customers' satisfaction according to gender (male and female) as a moderating variable. Table (10) shows that gender significantly moderates the relationship between service quality and customers' satisfaction, and H2 is accepted. In addition, the result of Table (11) found that female customers have a higher level of satisfaction than male customers.

7. DISCUSSION

The questionnaire used in this research comprised a modified version of the SERVPERF, a more comprehensive evaluation of service quality than SERVQUAL to measure service quality [33,34]. Regardless of these modifications

and adaptations, the reliability analysis showed that the questionnaire could be a reliable measure of medical centers' customers' expectations and perception of service quality and satisfaction. The results of the multiple linear regression (hypothesis 1) suggest that service quality dimensions (Tangibility, Reliability, Assurance, Responsiveness, and Empathy) are statistically significant in influencing customer satisfaction; responsiveness has the greatest influence on customer satisfaction, followed by empathy [40,41]. Furthermore, a positive influence of service quality on customer satisfaction is in line with the studies of Slack & Singh [10,13,14], and Maharsi [42]. Meanwhile, a positive impact of service quality on customer satisfaction confirms the earlier research [8,33-35].

8. CONCLUSION

It can be concluded that various models and industry-specific models from the literature were discussed depending on the structure of generic models. Almost all assess consumers' perceptions of the services supplied, indicating that they are more productive and convenient in measuring service quality [4]. However, the necessity for industry-specific frameworks with dimensions linked to specific services has grown as generic models' dimensions do not fulfill all of the requirements for distinct service industries such as the healthcare business. From 1984 to the present, the evolution of the service quality model revealed that many changes took place in giving services, from traditional to contemporary services [43]. It was also found that outcomes of service quality and its evaluation are greatly reliant on the aspects of the service type, environmental circumstances, time, objectives, and some other elements, adding to the complexities. Therefore, there are expectations for a constant attempt to discover and evaluate current service quality ideas [1]. Moreover, the findings reveal that the quality of service influences customer satisfaction levels in Gayathri medical centers positively and significantly. If the quality of service is high, it impacts satisfaction positively and vice versa. It also indicated that gender moderates the relation between service quality and customer satisfaction. In addition, the result also found that female customers have a higher level of satisfaction than male customers.

In light of this study, medical centers should improve service quality to increase customer satisfaction. Therefore customers should be kept updated about the service quality through personalized emails by engaging customers in a genuine manner. Motivate the team to study how to solve problems efficiently and rapidly and exceed prospects. Emphasis on how to advance the outcomes by structuring a dependable customer experience. Set suitable key performance indicators (KPIs) and then guarantee that the team distinguishes what they are and why they should be employed to hit those metrics. Managing complaints and compliments of clients, businesses should see occasions in every client's grievances. Each time clients reach out, agents have the casual to grow permanent, robust relations with customers and enhance the business' reputation. And motivating the Customer Service Team; countless things

occur to clients when employees are happy. When individuals are pleased with their jobs and happy to be part of the team, they will work inflexibly to attain more for the organization.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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