Original Article

Functional Quality of Services Delivered In the Physical Therapy Departments

Sadia Aziz[1,2], Aziz Ullah Bhatti[3], Tariq Malik[4] and Zeshan Yusuf[5*]

[1]Riphah College of Rehabilitation Sciences, Riphah International University, Lahore, Pakistan
[2]Bahawal Victoria Hospital, Bahawalpur, Pakistan
[3]Multan Medical & Dental College, Multan, Pakistan
[4]Civil Hospital, Bahawalpur, Pakistan
[5]Islamia University, Bahawalpur, Pakistan

ABSTRACT

Quality in healthcare sector is mandatory and highly desirable in order to provide the patients with utmost care and empathy. **Objective:** To assess the functional quality of services delivered in the physical therapy department of private hospitals in Bahawalpur **Methods:** It's a cross-sectional investigation. Non-probability convenient sampling was used as a sampling approach. In this survey-based study, patients were interviewed to learn about their perceptions and expectations of the quality of physical therapy treatments provided in various hospitals. **Results:** There was a total of 101 patients, 60 were males and 41 were females. The age range was 31-60 years. The total gap of all items in tangibility, responsiveness, assurance, empathy, and access/affordability was 0.83, 1.58, 2.52, 0.98, and 0.95 respectively. The overall gap was 0.55 **Conclusions:** The reliability component has the largest gap between expectation and perception, whereas the access and affordability dimension has the smallest.

INTRODUCTION

The structure, process, and outcome of care are all evaluated in the process of determining the quality of care [1]. Quality has become an important determinant in attaining maximum return on investments in both the industrial and service sectors, and it has also played a significant role in cost depletion [2]. Healthcare, like other service industries, has become a globally competitive and quickly growing industry. Determining and assessing service quality is the most difficult difficulty that healthcare markets face. Quality has long been considered a strategic advantage for companies seeking market success and help [2]. In health care, patient satisfaction is one of the most important quality attributes and critical success indicators [3]. Perceived service quality, which is a broad perception or attitude regarding the service's superiority, is the difference between service quality and contentment. On the other hand, satisfaction is tied to a single transaction [4]. Patient satisfaction can be calculated as the difference between patients' expectations and impressions of the services supplied [3]. The value of service quality has been acknowledged, and its implementation aids organizations in improving organizational performance, customer satisfaction, and fidelity. The most difficult problem that healthcare markets face is describing and measuring service quality. Because of the importance of unrestricted service quality in achieving success, the most frequently asked question is, "How can service quality in hospital enterprises be assessed?" [5] It's difficult to recall service quality. While consumers struggle to articulate their desires for it, service providers struggle to define, control, and, most importantly, measure it [6]. However, preliminary research revealed that 'SERVQUAL' is a broad scale for empirically measuring the level of quality services provided to consumers and that it works well in the hospital setting. Empathy,

tangibles, assurance, timeliness, and assurance were the five service quality characteristics utilized to calculate the patient's impressions of the service quality of a public hospital in Bahawalpur, Pakistan [2].

Almost every business's profitability is influenced by good client satisfaction. Customers, for example, will often tell nine to ten people about the good service they receive. Informal, "word-of-mouth" communication is estimated to account for over half of all American business [7]. Quality is increasingly being viewed as an investment by businesses, with the fight to improve it leading to new clients, higher levels of buy from existing consumers, and a rise in earnings [8].

Reliability, responsiveness, empathy, and the ability to correct mistakes are all important traits that people value highly [9]. Patient satisfaction with information is a critical patient outcome that is linked to the physician's capacity to elicit patients' concerns, assess their psychological needs, and involve patients in treatment decision-making [10]. SDM, in which the doctor and the patient go through all steps of the decision-making process together, communicate treatment preferences, and come to an agreement on treatment choice, is gaining popularity [11]. Outpatients, as healthcare customers, make judgments regarding the quality of service delivery based on their initial experiences with such services [12]. Patients who are satisfied are more receptive to medical recommendations and more loyal to doctors, but evidence reveals that there is no link between patient satisfaction and health care quality and outcomes [13].

Patient satisfaction with primary care states that patients value patient-centered care, which includes time spent with the physician, the clinician's willingness to listen to the patient, and treatment assumptions [14]. Public healthcare providers' organizational structures must enable the implementation of a responsive and adaptable healthcare system that is people-centered, with the publics, patients', and clients' interests accompanying decision-making at every stage [15]. Hospitals commit to developing marketing methods that promote brand image among patients in order to improve patient satisfaction and fidelity, as well as boost performance [16]. The majority of public hospitals in Pakistan are located in urban regions, particularly in large cities, and while this has been facilitated by a small number of urban residents, these facilities are still insufficient to meet the needs of those living in densely populated areas [2]. Regulation, professionalism, and market forces all appear to be driving factors in hospital quality improvement [17]. The SERVQUAL scale is an important indicator in the literature on service quality and has been widely used in a variety of service settings [18]. This mechanism has been widely criticized, with particular attention on the situational instability demonstrated by the dimensions in specific circumstances [19]. Cronin & Taylor (1992) claimed that assessing service quality based on Parasuraman et al(1985)'s expectation-performance gap is insufficient because most empirical research has aided performance-based measurements of service quality [20]. Regardless of the debate over SERVQUAL's validity and reliability, with or without moderations, it demonstrated to be a successful background in health care [21].

SERVQUAL was created as a tool for measuring quality in the service industry in general, and it has been widely utilized in studies on the quality of healthcare services [22]. The five latent elements of SERVQUAL had a considerable impact on total service quality, with responsiveness having the highest influence, followed by empathy, tangibles, assurance, and reliability [23]. Parasuraman et al. (1988) proposed the five dimensions of SERVQUAL [24]. Refined SERVQUAL defines five dimensions of service quality, these are:

(1) Tangible – physical facilities, equipment, and personnel appearance.
(2) Reliability – ability to perform the promised service consistently and accurately.
(3) Responsiveness – willingness to assist customers and provide prompt service.
(4) Assurance – employee knowledge and courtesy, as well as their ability to inspire trust and confidence.
(5) Empathy - compassion, the firm's personalized attention to its customers [25].

The model is mainly to describe the reason that the service quality of the service industry can't meet the customer requirements, and adjudge that in order to meet the customer needs, it is necessary to break through the five service quality gaps in the model [26]. Accordingly, the gap will be the result of the dissimilarities between perception and expectation scores [21].

A positive gap score indicates that expectations have been met or exceeded, whereas a negative score indicates that expectations have not been satisfied [27]. In today's changing world, describing the pinnacle of healthcare quality is more difficult than describing the pinnacle of quality in other service sectors such as hotels, libraries, and so on. It is critical for

both public and private hospitals to provide higher-quality services to their consumers in accordance with their expectations and prior experiences [28]. Professional proficiency in the application of current knowledge, available technology, and resources; efficiency in resource usage; minimal risk to the patient; responsiveness to the patient; optimal contribution to health outcomes should be established [29]. If the system cannot be trusted to provide a minimum level of quality, it will be underutilized, bypassed, used only as a last resort, or used only for minor disorders [30]. Companies will strive their hardest to captivate customers in the future, as they do now because customer satisfaction will not be enough to keep them [31]. As a result, it's critical for hospital executives to figure out what their clients want and don't want [32]. The expected service is based on the customer's particular wants as well as first-hand and second-hand information about the service contributor. The perception of service is dependent on the provider-client relationship as well as true service delivery [33]. Satisfying the consumer isn't enough: if a competitive edge is to be gained, there's a compelling need to delight the customer. Delivering high-quality service that results in satisfied customers is the key to sustaining a competitive advantage in today's competitive climate [34]. This study seeks to replicate Parasuraman's SERVQUAL measurement in finding the gap between service recipients' perceptions and expectations in BVH hospitals [35]. In this study, a modified version of SERVQUAL with six dimensions, including accessibility and cost, was employed, which has been tweaked to fit the needs of the healthcare business and, thus, physical therapy practice.

The purpose of this study was to assess the functional quality of physical therapy treatments delivered in public hospitals.

METHODS

The study was conducted over a four-month period. The study comprised patients between the ages of 20 and 60 who were receiving physical therapy from certain public hospital physical therapy departments. A convenience sample technique was used to gather data from patients. The sample size was calculated to be 108 using the Sample Size Calculator, with the confidence level at 95%, the confidence interval at 5, and the population size at 150. As a data-gathering instrument, the SERVQUAL questionnaire was used. This was a set of 22 itemized questionnaires with tangibility, assurance, reliability, responsiveness, empathy, and accessibility/affordability as dimensions. In this study, a modified version of servqual with six dimensions was employed, which was tweaked to fit the needs of the healthcare industry, and therefore physical therapy practice. The patient's demographics included his or her age, gender, and geographic location. e SERVQUAL instrument has two components that are intended to examine people's views and expectations about the care they receive. Optional responses for a 5-point Likert scale have been suggested. Option 5 denotes a strong agreement, whereas option 1 denotes a strong disagreement.

The questionnaire's content has already been validated in the literature. Items that are appropriate for a hospital context have been chosen. The internal consistency of the SERVQUAL scale was confirmed by calculating Cronbach's alpha values for each of the study's dimensions. To test the reliability and clarity of the tools used in the study for data collection, a survey was conducted with a representative sample of 10 patients to measure sheet filling time and questionnaire clearance by the therapist. The researcher held a 5- to 10-minute discussion with each patient in the physiotherapy department to introduce them and briefly explain the nature of the study to the volunteers who met the criteria for inclusion in the sample.

Respondent patients were asked to give their informed permission. Furthermore, no personal information is requested in the questionnaire. As a result, it poses no risk to participants' privacy. To protect the data, each questionnaire was assigned a code number. The Statistical Package of Social Sciences was used to analyze the data collected (SPSS 16.00).

RESULTS

A total of 101 patients, among which 60 patients were male (59 %) and 41 patients were female (40%). 55 patients (54%) aged 20 to 35 years; 46 patients (45%) aged 31 to 60 years old. If we dedicate the phrases strongly disagree, disagree, neutral, agree and strongly agree to the scores of the questionnaire respectively one to five, we find that the average patients' perception of service quality is higher than expected.

Variables	Mean	SD
Equipment	101	.643
Environment	101	.712
Appearance	101	.727
Brochure	101	1.139
Privacy	101	.986
Time	101	.876
First time	101	.929
Professional	101	.987
Documents	101	.916
Charges	101	1.007
Prompt	101	.804
Responsive	101	1.016
Confidence	101	1.071
Exceed	101	.852
Friendly	101	.735
Knowledge	101	.889
Respect	101	4.151
Explain	101	1.184
Feedback	101	1.168
Clock	101	.882
Interest	101	1.090
Needs	101	1.161
		3.120
Parking	101	.841
Accessible	101	.960
		.970
Affordable	101	
Quality	101	

Table 1: Mean perception of all items

Perception mean and standard deviation of individual item is given in table 1. Maximum and minimum mean values are 4.29 in exceed and 1.94 in brochure respectively (Table 2).

Tangibility	Expectation(mean±SD)	Perception(mean±SD)	Gap(P-E)
Equipment	3.69±.967	4.13±.643	0.44
Environment	3.72±.950	4.05±.712	0.33
Appearance	3.79±.864	4.03±.727	0.24
Brochure	2.71±1.275	1.94±1.139	-0.77
Privacy	3.14±1.020	3.73±.986	0.59

Table 2: Mean expectation of tangibility

In the tangibility dimension, the maximum and minimum gap is in brochure (-0.77) and in appearance (0.24) respectively (Table 2). The total gap of all items is 0.83.

Reliability	Expectation(mean±SD)	Perception(mean±SD)	Gap(P-E)
Time	3.55±1.034	4.05±.876	0.5
First time	2.83±.873	4.24±.929	1.41
Professional	3.47±.923	3.84±.987	0.37
Documents	3.27±.859	3.68±.916	0.41
Charges	3.33±.918	3.81±1.007	0.48
Prompt	3.28±.763	3.71±.804	0.43

Table 3: Mean expectation of reliability

In the reliability dimension, the maximum and minimum gap is in first time (1.41) and in professional (0.37) respectively. The total gap of all items is 3.6 (Table 3).

Responsiveness	Expectation(mean±SD)	Perception(mean±SD)	Gap(P-E)
Responsive	3.18±.942	3.74±1.016	0.56
Confidence	3.34±.962	3.43±1.071	0.09
Exceed	3.36±.855	4.29±.852	0.93

Table 4: Mean expectation of responsiveness

In the responsiveness dimension, the maximum and minimum gap is in exceed (0.93) and in confidence (0.09) respectively. The total gap of all items is 1.58 (Table 4).

Assurance	Expectation (mean±SD)	Perception (mean± SD)	Gap(P-E)
Friendly	3.33±.939	4±.735	0.67
Knowledge	3.25±.853	3.54±.889	0.29
Respect	2.97±.854	3.95±4.151	0.98
Explain	3.02±.927	3.60±1.184	0.58

Table 5: Mean expectation of assurance

In the assurance dimension, the maximum and minimum gap is in respect (0.98) and in knowledge (0.29) respectively (Table 5). The total gap of all items is 2.52.

Empathy	Expectation(mean±S.D)	Perception(mean±S.D)	Gap(P-E)
Feed back	3.11±1.009	2.07±1.168	-1.04
Clock	3.27±.882	3.27±.882	0
Interest	2.85±1.090	2.85±1.090	0
Needs	2.99±1.109	3.05±1.161	0.06

Table 6: Mean expectation of empathy

In the empathy dimension, the maximum and minimum gap is in feedback (-1.04) and in clock and interest (0) respectively (Table 6). The total gap of all items is 0.98

Access/Afford	Expectation (mean±SD)	Perception (mean±SD)	Gap(P-E)
Parking	3.26±3.133	3.53±3.120	0.27
Accessible	3.26±.833	3.29±.841	0.03
Affordable	3.26±.808	3.91±.960	0.65

Table 7: Mean expectation of Accessibility/affordability

In the access/afford dimension, the maximum and minimum gap is in affordable (0.65) and in accessible (0.03) respectively (Table 7). The total gap of all items is 0.95

Quality	Expectation(mean±SD)	Perception(mean±SD)	Gap(P-E)
	3.25±.853	3.8±.970	0.55

Table 8: Overall gap in service quality

The gap in overall service quality is 0.55 (Table 8). Here the expectation is 3.25 and the perception is 3.8.

DISCUSSION

In health care, patient satisfaction is one of the most important quality attributes and key performance indicators. After developing the concept of service quality, researchers needed an instrument to quantify the level of service quality. The tool's purpose was to identify the features that needed to be modified in order to improve quality, evaluate the degree or

amount of change that was required, and assess the impact of service quality improvement programmes. SERVQUAL's five latent qualities had a significant impact on overall service quality, with responsiveness having the highest impact, followed by empathy, tangibles, assurance, and reliability.

This study was conducted to identify the quality gap in services in an educational hospital in Bahawalpur, Pakistan, based on patient perceptions and expectations, as well as to assist health policymakers in developing appropriate programming for hospital medical services. Descriptive statistics representing the mean and standard deviation for each of the service quality constructs were used to better understand the disparities in service quality delivered to patients by public hospitals in relation to each of the service quality dimensions. In this study, a modified version of SERVQUAL with six dimensions, including accessibility and affordability, was employed, which has been tweaked to fit the needs of the healthcare industry and, hence, physical therapy practice.

The reliability dimension had the highest expectation score. Because the reliability dimension had the greatest expectations and perceptions, it dealt with services supplied on time, services completed correctly on time, physiotherapists with sickness expertise, an error-free and speedy system, and cost consistency.

The highest and minimum gaps in the tangibility dimension are found in the educational pamphlet (-0.77) and the look of staff, physiotherapist, and department (0.24), respectively. Up-to-date equipment and privacy are also included in this dimension. In responsiveness dimension, we measure prompt services given to patients, physiotherapist/assistant are responsive, their attitude and also waiting time does not exceed one hour. Here physiotherapist instill confidence shows the least gap and time exceed one hour shows maximum gap. The smallest gap is related to the affordability and accessibility dimension followed by responsiveness. The maximum gap is in the reliability dealing with time regulation, physiotherapist professionalism, fast home document of exercise planning and consistency of services charges dimension. The hospital managers should think of measures to better handle clients.

Here only the empathy dimension shows low perception score than expectation and also the gap between both is negative. The negative gaps show that patients' expectations of the treatments they receive are higher than their perceptions [36]. Low perceived empathy values jeopardize the hospital's ability to achieve patient satisfaction; therefore, if the hospital wants to improve hospital services and increase patient satisfaction, first and foremost, staff training on patient needs is critical. The highest gap of expectation and perception was in reliability dimension and lowest in access and affordability dimension. The results show that patient perception in is higher than expectation, as patients having less expectation regarding public sector services.

As a result, the image of a hospital has both direct and indirect consequences on patient loyalty. It indicates that a positive hospital brand image not only boosts patient loyalty directly, but also enhances patient happiness by improving perceived service quality, which raises patients' desire to return [16]. Users exhibit greater pleasure with some aspects of health care than with others; consequently, health planners and health service researchers should take these perspectives into account when developing strategies and solutions to improve patient satisfaction [37].

Increasing financial help alone will not enhance healthcare systems; instead, significant reform based on strong government and management principles is required. Public healthcare providers' organizational structures must enable the implementation of a responsive and adaptable healthcare system that is people-centered, with the public's, patients', and clients' interests guiding decision-making at all levels [15]. To effectively and efficiently resolve patients' complaints, hospital administrations must collect systematic input from their patients and establish visible and transparent complaint procedures [24].

CONCLUSIONS
The majority of patients were pleased with the quality of physical therapy services they received.

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