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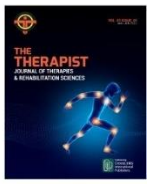

Original Article

Assessment of Service Quality of public Physical therapy practice based on SERVQUAL model

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ABSTRACT

Quality has become a major determinant in both the industrial and service sectors in order to maximize returns on investments while also contributing significantly to cost reduction. Healthcare, like other service industries, has become a highly contested and rapidly increasing service industry around the world. **Objective:** The objective of this study was to analyze the functional quality of services provided in the hospital departments of physical therapy in public sector. **Methods:** The study design was Cross Section Survey. The patients were interviewed through non-probability convenience sampling technique. The respondents were contacted in public hospital in Bahawalpur. The content of questionnaire was validated through literature and SPSS version 16.0 was used for data analysis. The results were extracted by determining patient satisfaction through patient perception and expectation gap, conclusion was drawn, suggestions and recommendations were made. **Results:** A total of 101 patients, among which 60 patients were male (59 %) and 41 patients were female (40%) were studied. 55 patients (54%) aged 20 to 35 years, 46 patients (45%) aged 31 to 60 years old. Maximum and minimum mean values of expectation are 3.79 in appearance and 2.71 in brochure respectively. The overall quality expectation mean is 3.25. Maximum and minimum mean values of perception are 4.29 in exceed and 1.94 in brochure respectively. The overall quality perception mean is 3.8. **Conclusions:** The present study concluded that patients' perception was satisfied with the physiotherapy services rendered to them. The highest level of patients' perception was the reliability, followed by assurance, responsiveness, accessibility/affordability, tangibility, and the lowest patients 'perception was the empathy dimension.

INTRODUCTION

The evaluation of quality of care is complex in nature, involving evaluation of the structure, process, and outcome of care [1]. Quality has become a major determinant in both the industrial and service sectors in order to maximise returns on investments while also contributing significantly to cost reduction [2]. Healthcare, like other service industries, has become a highly contested and rapidly increasing service industry around the world. The most difficult problem that healthcare markets face is defining and calculating service quality [2]. Quality has long been regarded as a strategic advantage for businesses seeking success and assisting in the commercial world. [2]. This is based on the concept where the service organizations' ability to exceed and maintain a large and loyal customer base is necessary for their long-lasting success in a market. In the face of such critical importance of customer fidelity being valued for business survival [3]. Due to competition and fast advancement of service quality, developed and developing countries both has made it remarkable for companies to calculate and measure the quality-of-service encounters [4].

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Patient satisfaction is one of the most significant quality attributes and major success indicators in health care [5]. The distinction between perceived service quality and contentment is that perceived service quality is a broad perception or attitude about the superiority of the service. Satisfaction, on the other hand, is linked to a specific transaction [6]. Calculating the gap that arises between patients' expectations and views about services supplied is one technique to gauge patient satisfaction [5]. It is essential that customer expectations are properly understood and measured under the constraints that organizations must manage [7]. Managers in the service industry are under pressure to represent their services as customer-focused and that they are committed to continual performance improvement [7]. Typically, we investigate experiences with health-care conditions, such as costs and quality, as though they occur in isolation, one at a time [8].

Health care institutions in almost all developed and developing economies are under tremendous pressure to convert their old fad working system to cost-effective, patient-focused, efficient, and high-quality services due to rising health care costs, difficulties in diseases and their diagnostics, huge equipment, and treatment costs, and high customer requirements for quality. As a result, quality has taken a prominent role in delivering high-quality healthcare services and gaining patient and family satisfaction. There is an increasing trend among health care facilities to establish quality standards and systems in order to ensure quality, patient safety, infection prevention, and patient and family satisfaction. To solve the aforementioned issue, the majority of well-known hospitals around the world have implemented or adapted quality management systems [9]. Rapid changes in the environment have put a lot of pressure on hospitals to include patient satisfaction in their strategic planning and hunt for market share and long-term profitability [10].

Various studies have recently demonstrated that the quality of health care is variable and frequently inadequate [11]. Only 21% of patients with a severe disease seek treatment at a public sector first-level health facility, and one of the main reasons is a lack of quality care [12]. As a result, more emphasis should be placed on the creation of systems that track the activities of healthcare providers, particularly hospitals, which account for more than half of the overall healthcare budget in most European nations [13]. 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 businesses be assessed?" [14]. Service quality is difficult to remember. While consumers have difficulties in articulating their needs for it, the service providers have their problems in defining, controlling, and, most of all, measuring it [15]. In this study modified form of servqual with 6 dimensions including accessibility/affordability was used which is modified according to its use in the healthcare industry and thus in physical therapy practice.

METHODS

A cross-sectional study was conducted for the duration of 4 months following approval. The patients aged between 20 to 60 years and taking physical therapy treatment from specific public physical therapy departments in hospitals were included. Convenience sampling technique was used to get data from patients. Using Sample Size Calculator, keeping Confidence Level 95%, Confidence Interval 5 and Population Size 150, the sample size calculated as 108 but up to my convenience I got 101. The SERVQUAL questionnaire was used as data collection tool. This was 22 itemized questionnaires consisting of dimensions of tangibility, assurance, reliability, responsiveness, empathy, and accessibility/affordability. In this study modified form of servqual with 6 dimensions were used which is modified according to its use in health care industry and thus in physical therapy practice. Demographics consisted of age, gender and region of the patient. Two sections include the SERVQUAL instrument to measure the perceptions and expectations of the care quality provided.

A 5 point Likert-type response options have been considered. Option 5 means I strongly agree and option 1 is strongly disagree. The content of the questionnaire has already been validated through literature. Suitable items have been selected for hospital setting. The internal consistency of SERVQUAL scale was validated by calculating cronbach's alpha values for overall for every dimension included in the study. A survey was conducted with a representative sample of 10 patients to measure sheet filling time and questionnaire clearance by the therapist in order to assess the reliability and clarity of the tools used in the study for data collection. The researcher conducted a meeting with the patients in the physiotherapy department to introduce them and briefly explained the nature of the study to the volunteers who met the criteria for inclusion in the sample and each meeting took for 5-10 minutes with each patient. Informed consent was taken from respondent patients. Further, the questionnaire doesn't ask for any personal content. So, it contains no threat to participants' privacy in any way. However, a code number was given to each questionnaire to secure the data. The collected data were analyzed by the Statistical Package of Social Sciences (SPSS 16.00).

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RESULTS

A total of 101 patients, among which 60 patients were male (59 %) and 41 patients were female (40%) were studied. 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.

Cronbach's Alpha for Perception	N of items
.696	26
Cronbach's Alpha for Expectation	N of items
.488	26

Table 1: Cronbach's Alpha for Perception and Cronbach's Alpha for Expectation

Variables	**Mean**	**SD**	**N**
Equipment	3.69	.967	101
Environment	3.72	.950	101
Appearance	3.79	.864	101
Brochure	2.71	1.275	101
Privacy	3.14	1.020	101
Time	3.55	1.034	101
First time	2.83	.873	101
Professional	3.47	.923	101
Documents	3.27	.859	101
Charges	3.33	.918	101
Prompt	3.28	.763	101
Responsive	3.18	.942	101
Confidence	3.34	.962	101
Exceed	3.36	.855	101
Friendly	3.33	.939	101
Knowledge	3.24	.853	101
Respect	2.97	.854	101
Explain	3.02	.927	101
Feedback	3.11	1.009	101
Clock	3.27	.882	101
Interest	2.85	1.090	101
Needs	2.99	1.109	101
Parking	3.26	3.133	
Accessible	3.26	.833	
Affordable	3.26	.808	
Quality	3.25	.853	

Table 2: The total mean of expectation of all items

The expectation mean and standard deviation of an individual item is Table 1. Maximum and minimum mean values are 3.79 in appearance and 2.71 in brochure respectively. The overall quality expectation mean is 3.25 (Table 1).

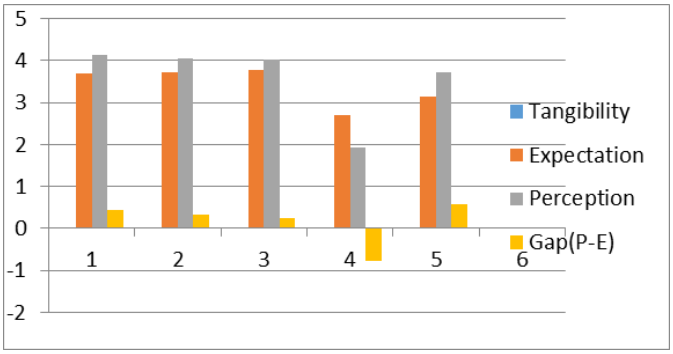

Figure 1: Tangibility dimension

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In tangibility dimension, the maximum and minimum gap is in brochure (-0.77) and in appearance (0.24) (Figure 2).

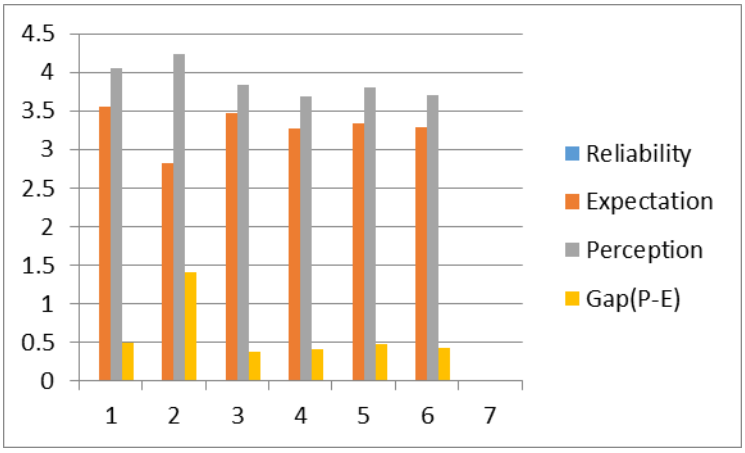

Figure 2: Reliability dimension

In the reliability dimension, the maximum and minimum gap is in first time (1.41) and in professional (0.37) (Figure 3).

DISCUSSION

The customer‘s perception is your reality. - Kate Zabriskie [16]. Service quality is generally visualized as the sum of customer perceptions of the service experience [6]. Due to competition and fast advancement of service quality, developed and developing countries both has made it remarkable for companies to calculate and measure the quality-of-service encounters. Patient satisfaction is the most significant quality element and critical success indicator in health care. After defining the concept of service quality, researchers needed a tool for measuring the quality level of services. The tool was expected to key out the attributes that require improvement in order to enhance quality, identify the degree or amount of improvement required, and identify how the impact of service quality improvement efforts can be assessed. SERVQUAL’s five latent features had a significant impact on overall service quality and that responsiveness had the most influence; followed by empathy, tangibles, assurance, and finally reliability. The five dimensions of SERVQUAL [17,18].

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. The standard deviation for each of the service quality constructs was used to better understand descriptive statistics representing the mean in order to better understand the differences in the service quality delivered to patients by public hospitals against each of the service quality dimensions [19,20]. In this study modified form of servqual with 6 dimensions including accessibility/affordability was used which is modified according to its use in the health care industry and thus in physical therapy practice. The highest expectation score was related to the reliability dimension. Dimension dealing with service provided at the appointed time, services carried right at the time, the physiotherapist has knowledge of the disease, a system of error-free, and also the consistency of charges since the highest expectations and the highest perceptions was in the reliability dimension. In the tangibility dimension, the maximum and minimum gap is in the informative brochure (-0.77) and in the appearance of staff, physiotherapist, and department (0.24) respectively. Other items included in this dimension are up-to-date equipment and privacy.

CONCLUSIONS

The present study concluded that patients' perception was satisfied with the physiotherapy services rendered to them. The highest level of patients’ perception was reliability, accessibility/affordability, and tangibility.

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