An Assessment Of Service Quality In Selected Base Hospitals In Regional Director Of Health Service Division Kalmunai-Sri Lanka

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Abstract
A cross-sectional study was conducted to assess the service quality in the Out-Patients Department of the selected base hospital in Sri-Lanka. The data were derived from 303 patients using the modified SERVQUAL questionnaire. The result provided the level of service quality at the OPD and the perception of the OPD patients' quality dimension. The results revealed that the majority of the participants were females (54.8%). The level of service quality was moderate in all the selected hospitals. According to the study domain, "Reliability "was highly correlated with {Mean; 5.5861) service quality and patients perceived law level of "Courtesy" (Mean;3.6583) in the hospitals. The monthly income of the patients influences the perception of quality. High-income patients had a higher correlation with domain "Assurance" (p=0.002) and low-income patients feel more domain "Responsibility" (p=0.002). Training programs for employees on motivation, attitudinal changes and effective communication and developing a rewarding system to strengthen service quality will improve patient satisfaction.
Keywords: Hospital service quality: quality dimension: outpatients' department

1. INTRODUCTION

Sri Lanka is an island with 20,359,439 and located to the south of the Indian subcontinent in the Indian Ocean [1]. It provides free health facilities, free education, substantial gender equality, and the opportunity for social mobility. The country is marching forward to achieve better health towards the 13 targets under Sustainable Development Goal #3, in which the quality of health service has been given much prominence[2]. However, certain drawbacks in the hospital-based healthcare delivery system of the country affect the quality of the services. The overcrowding in the higher-level institutions, deficiencies of amenities and patient dissatisfaction are evidence of quality failure. [3]. Quality of services would contribute to the growth, success and persistence of an organization by satisfying the patients. [4], [5] The quality of health services has two dimensions; "Technical quality and functional quality" [6], [7]. The "Technical quality" of health care services is based on the authenticity of identification and management procedures." "Functional quality" is related to non-clinical aspects. It is essential to evaluate the explicitly and implicitly of the services based on

consumer's viewpoints [8].

1.1 Model SERVQUAL

SERVQUAL is one of the best models used to determine the healthcare service quality and expectations of patients and it assesses the patients' detailed insight about the services they receive and compares it with their ideal expectation [9].

1.2 Dimensions of Service Quality

There are five dimensions customers use when evaluating service quality [9], [10].

- Tangibles: Appearance of physical facilities, equipment, personnel and communication.
- Reliability: It promises delivery, service provision, problem resolving and cost.
- Responsiveness: It emphasizes attentiveness and promptness in dealing with customers' requests, questions, complaints and problems [11].
- Assurance: It is defined as the employee's knowledge of the firm and its employee's capacity to inspire trust and confidence in the customer.
  - Empathy: Empathy is conveying through personalized services.

1.3 Patients' Satisfaction

Patient's satisfaction is influenced by attitudes of employees toward patients, the capacity to deliver prompt service without wasting time, ability to disseminate information to patients, availability of up-to-date equipment, hospital's ability to render 24-hour service, the patience of the doctor to clearly explain what was wrong with patients before giving treatment and providing patients with information about their medication and attractiveness and cleanliness of the hospital [12]. Parasuraman explained that service quality was defined as the gap between predicted or expected service (customer expectations) and perceived service (customer perceptions). Service quality manifest when expectations are met (or exceeded), resulting in satisfaction and a service gap occurs if expectations are not met, causing dissatisfaction [9]. Thus the provision of care that exceeds patient expectations and achieves the highest possible clinical outcomes with the resources available is defined as health care service quality [13].

The objective of this study was to assess the current healthcare service quality from the perspective of patients at the OPD in Base Hospitals in Kalmunai Regional Director of Health Services division, Sri-Lanka.

2. MATERIALS AND METHODS

2.1. Sampling and data collection

This was a hospital-based cross-sectional descriptive study. The study population consists of all the adult patients attending OPD in selected Base Hospitals in the Kalmunai region. Patients with psychiatric illness and those who need emergency treatment were excluded. The systematic random sampling method was used to select the patients. The number of the questionnaire distributed were 350 and 303 patients responded. The non-response rate was 13.42%.

2.2 Study Instruments

A self-administered questionnaire was used as a study instrument. A modified SERVQUAL questionnaire validated for use in the health sector was adapted for the study. The questionnaire consists of 05 variables with 36 indicators under 05 concepts and one outcome variable with ten indicators. A six-point Likert scale was used. There were two components in the questionnaire. Part 'A' component was on socio-demographic characteristics such as age, gender, marital stage, educational level and income. Part 'B' consisted of five sub-dimension dimensions and a section to assess overall service quality. Self-administered questionnaires were filled by the participants and confidentiality of the

information was assured. SPSS version 21statistical software was used for statistical analysis. Descriptive statistic for the socio-demographic data of the respondents and survey items of modified SERVQUAL was analyzed. Basic measurements such as Mean and Standard Deviation were calculated. Pearson Correlation analysis was conducted to test a statistical relationship between each quality dimension and overall service quality. One way ANOVA was used for the mean difference in every 05 dimensions positive response scores among the selected hospitals.

3. RESULT

A total of 303 patients responded to the questionnaire giving a response rate of 86.58 %. Initially, descriptive analysis was carried out.

3.1 Socio-demographic profile of the respondents

The majority of the respondent were females (54.8 %) patients. A considerable number of patients(36.3%) belong to 16-32 years. Most of the patients were non educated or having primary education (54.8 %). The majority of respondents (60.7 %) had no monthly income and 21.5% had an income of <10000/- SLR per month.

3.2 . Description of the variable- Overall Hospital service quality

Table 01: Description of the Perception of Overall service quality

No	Sub dimension of Variables		Mean	SD
01	I am willing to recommend this hospital to others who seek my advice .		5.52	0.77
02	I will encourage my friends and my relatives to go to this hospital		5.49	0.841
03	If I need medical treatment in future ,I will consider this hospital as my first choice.		5.66	0.734
04	If I feel sick in future I don't come to this hospital		1.29	0.72
05	I will make complain to others if I experience problem with the service at this hospital.		5.46	0.948
06	I think that I did the correct thing when I get the treatment from this hospital.		5.46	0.852
07	My choice to select this hospital for my treatment is wise one.		5.47	0.806
08	I am very satisfied with my decision to get treatment from this hospital.		5.48	0.797
09	The overall feeling about the health care services in this hospital is better than I expected.		5.44	0.843
10	This hospital did not satisfied my need		1.65	1.13

Source: Survey data

Most of them have felt that they would consider this hospital as their first choice (mean: 5.66) and would recommend these hospitals to others(mean:5.52). A considerable number of OPD patients were having the impression that if they would experience any problem in the hospital could make complaints to the staff.(mean:5.44,Table 01).

3.2 . Description of the independent variable

Tangibility; the Greater part of the OPD patients' perceived that the staff maintains their privacy (mean; 5.79) and appearance of the hospital staff was good.

Responsibility; Majority of the OPD patients perceived that their problems were solved effectively by the staff (mean; 5.5).

Reliability; This study also revealed that patients could rely on the staff due to the practices such as dispenser confirmed the patient's identity before issuing the medication (mean.5.69) and re-check it and provide instruction for use before issuing (mean;.5.65).

Assurance; The indicator "doctors examine and investigating my diseases before prescribing a treatment and I believe the treatment will cure my diseases" (mean.5.58) had a high mean value.

Courtesy; All the indicators of this dimension show law mean values.

3.3   Perception of overall Hospital service quality

The total mean score of Overall perception, the dependent variable of S Q was 4.68±0.49 in a six-point range (3.5 is the midpoint). This result indicated that OPD patients perceived that the service quality in the hospitals was reasonably good.

3.4 Perception of Hospital service quality and Socio-Demographic Factors

There is no difference in the experience of SQ among the OPD patients concerning age, gender , marital stages, and educational level except the income status of patients.

Perception of SQ of patients who had an income of ≤ 10000 (SLR) per month was higher (mean;4.682) than those who had an income of >10000(SLR) (mean;4.521).To verify the relationship between the perception of S Q and the income of patients, ANOVA test was used .F value was 9.687 and the p-value was 0.002. Therefore the perception of S Q varied with the income of the patients.

3.5 Perception of Overall Hospital service quality and independent variables

Table 03: Mean and Standard Deviation of Variables

Variables	Mean	SD
S Q perception in Base Hospitals *(Dependent)*	4.6869	0.49614
Tangibility	5.3694	1.01978
Responsibility	4.6982	0.59598
Reliability	5.5861	0.67501
Assurance	5.5373	0.75531
Courtesy	3.6583	0.48407

Source: Survey data

Overall in this study, Tangibility had a mean value of 5.36±1.01. Its correlation with the overall perception of S Q was 0.498 and was statistically significant (0.000). This result indicated that the availability of physical facilities and equipment in working condition was satisfactory in all the base hospitals. "Responsibility" had a mean of 4.69±0.59. Its correlation with the Perception of S Q was weak (cc=0.679;p=0.00) and it was statistically significant. This indicated that though these selected BHs had a significant responsibility level, providing the promised service would be essential for a positive S Q (Table 03 & 04).

Table 04: Correlation Coefficient of variables in Selected Base Hospitals

Variables	Pearson Correlation	Sig. (1–tailed)
	S Q perception	S Q perception
Tangibility	.498	0.000
Responsibility	.679	0.000
Reliability	.614	0.000
Assurance	.585	0.000
Courtesy	.167	0.002

Source: Survey data

Reliability had a mean of 5.58±0.67 and Its correlation with the perception of S Q was (cc= 0.614) and it was statistically significant (p=0.000). Reliability in healthcare quality service plays a crucial role, and the participants valued Reliability. Courtesy had the lowest mean value of 3.658±0.484 and its correlation with the perception of S Q was 0.167, which was also the lowest but statistically significant. This itself indicated the existence of poor positive attitudes among health staff. All five independent variables all had a significant but weak correlation with SQ.

3.6 Limitations
1. The study was carried out only among OPD patients. The variability associated with other categories of patients was not seen. Therefore, a generalization of the findings of this study may not be possible.
2. A close-ended questionnaire was used; hence it might restrict the real perception of the respondent.

4. CONCLUSIONS

The study found out that the perception of Hospital service quality was moderate and the same among all the selected Base Hospitals. The perception of service quality by females was more than males. The elderly population perceived service quality more than other age group patients. When the marital stage was considered, widowed patients perceived more quality than other categories. Poorly or non-educated patients perceived more service quality. The monthly income also influenced Hospital service quality. Those who were with >10000 (SLR) income perceived less SQ than other categories. Overall in the study, "Reliability "and "Assurance "had a high correlation with Hospital service quality. It was noteworthy to observe that "Courtesy' had the lowest correlation with the Hospital service quality.

5. RECOMMENDATIONS FROM THE STUDY
1. "Courtesy' was very much lower than other variables and can be improved through a well-organized education system. Religious activities should be encouraged.
2. Another drawback in all Hospitals was the poor responsibility of the staff. Repeated education and attitudinal changes should be addressed
3. There should be proper communication and feedback methods. Communication gaps among employees, leaders, subordinates, and patients need to be addressed and rectified.
4. Though there was a strong perception of tangibility among the patients, individual perception between categories differs. Management has to look into the formation of a reliable contingency plan. The tangibility score is greater than the average, but some of the indicators were low. Physical facilities are required to be improved. Activities like Practices of Japanese 5 "S," arranging lectures, providing learning material, and setting up a model unit with safety components will improve service quality.
5. Rewarding-system for the employees who contribute to system development.

6. Hospital service quality is a multidimensional phenomenon and further research should be encouraged to study the excluded variables that affect Hospital service quality in government hospitals of Sri Lanka.

Strengthening all the service quality domains will give rise to a better satisfactory service in the hospitals where the employees willingly participate in Total Quality Improvement.

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