# A STUDY ON THE SERVICE QUALITY OF BASE HOSPITAL VALAICHCHENAI

*Najeema.M.A[1]*

## ABSTRACT

Hospital services have the priority as which involves with the human health. The service provided by the hospital should have the proper quality. Therefore, this study was carried out to measure the service quality of the Base Hospital Valaichenai. Service quality can be assessed by measuring the discrepancies or "gaps" between what the consumer expects and what the consumer perceives. The research problem formulated for this study was as "whether there is a service quality gap in the case of Base Hospital Valaichenai?". For the measurement of the service quality of this hospital, two variables are considered such as perceived service and expected service quality. Each variable is measured through five dimensions as reliability, responsiveness, assurance, empathy, and tangibles.

Specifically, this study seeks to determine the expectations of the patients, perceptions of them, identifying the service quality gap through comparing the expectations, and perceptions, and recommend implementation of appropriate service quality performance improvement procedures where necessary.

The data for the study was got from the selected samples among the population of patients. Through random sampling method, 200 samples were selected and 200 questionnaires were issued to collect the personal and research information relevant to this study. The questionnaire was based on the multiple-item SERVQUAL model for measuring customer perceptions, and expectations of service quality, modified and tailored to specific service quality requirements of this hospital service.

The data were analyzed through comparing the expectations, and perceptions. For the purpose of data analysis SPSS package and Microsoft Excel 2003 were used. Analyzed data were presented through using the tables, and charts.

Data evaluation made through comparing the expectations and perceptions. The negative service quality gap was identified in this study through subtracting the expectations from the perceptions. This study concludes that there is a statistically significant difference or gap between the services offered by Base Hospital Valaichenai as perceived by patients, and the expectations of them.

This study substantiates the need for management of this hospital service to take into account patients' perceptions of service quality and their expectations, and upon identification of gaps, to implement appropriate service quality improvement processes to improve the patients' satisfaction with the service.

**Key Words:** Perceived Service Quality, Expected Service Quality, Service Quality Gap

## 1.INTRODUCTION

Services embrace a huge diversity of activities and involve many intangible inputs and outputs. A service is an act or performance offered by one party to another. Although the process may be tied to a physical product, the performance is transitory, often intangible in nature, and does not normally result in ownership of any of the factors of production. A service is an economic activity that creates value and provides benefits for customers at specific times and places. Government offers services through banking, courts, employment services, communication, transportation, insurance, education, postal services, and hospital services in Sri Lanka,. Those firms are customer-oriented and therefore they should better serve their clients through meeting the clients' expectations. This enforced those firms to adopt the concept of service quality since the continuous operation of the service firms depends on it. Hospitals are not concentrating on income generation or profit maximization, those are non-profit service organizations.

There are number of different "definitions" as to what is meant by service quality. One that is commonly used

[1] Department of Management, Faculty of Commerce and Management, Eastern University, Sri Lanka. (najeema26@yahoo.com)

defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell,1990; Dotchin and Oakland, 1994;Asubonteng et al, 1996; Wisniewski and Donnelly, 1996).

## 2. PROBLEM STATEMENT

According to MOH Planning Report (2007), Base Hospital Valaichenai has lack of facilities needed for providing its' services properly to the patients. There are high demands for this hospital's services; at the same time the supplies of medical services are inadequate to meet those demands due to the shortages of the critical and important medical service facilities. Therefore, these facts are questioning the service quality of Base Hospital Valaichenai. This can be led to the gap between the expected and perceived service by the patients of that hospital. Therefore, this study concerns about an analysis on the level of service quality of Base Hospital Valaichenai, based on the service quality gap analysis.

## 3. CONCEPTUAL FRAMEWORK
### Figure 3.1  Conceptual Framework
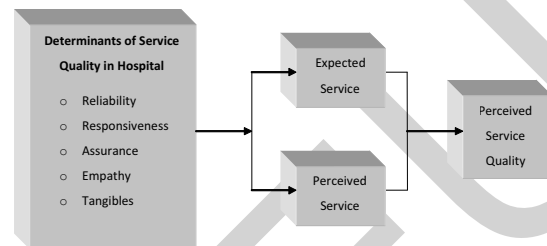


**Source:** Developed for this study (From Theoretical Framework)

### 1.1 Reliability (Delivering on Promises)
Parasuraman et al (1985) defined reliability as "the firm performs the services right the first time and the firm honors its promises".

### 1.2 Responsiveness (Being willing to help)
Responsiveness is the willingness or readiness of employees to help customers and to provide prompt service. (Valarie A. Zeithaml and Mary Jo Bitner,2001).

### 1.3 Assurance (Inspiring trust and confidence)
According to Valarie A Zeithaml and Mary Jo Bitner (2001), assurance is defined as "employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence".

### 3.4 Empathy (Treating customers as individuals)
Empathy is defined as the caring, individualized attention the firm provides its customers (Valarie A Zeithaml, Mary Jo Bitner, 2001).

### 3.5  Tangibles: Representing the Service Physically
Tangibles includes the physical evidence of the service, physical facilities, appearance of personnel, tools or equipment used to provide the service, physical representations of the service (Berry et al, 1985).

### 3.6 Expectations and Perceptions of the Service Quality
*Perceived service quality* is the result of the consumer's comparison of expected service with perceived service. *Expected service* of the service refers to what the customers expect to get from the service they are actually received. And the *perceived service* refers to what service the customers currently receiving regarding the service.

## 4. RESEARCH METHODOLOGY

### 4.1 Sample Selection
The sample was selected from the population of patients in OPD treatment and clinical patients. The in-patients were not considered and selected as sample for this study.

### 4.2 Sampling
For the purpose of data collection from the respective patients, the 200 patients of particular hospital were selected as sample from patients' population. This study had been organized to collect information from the respective patients who are currently taking treatment from this hospital. Random sampling method had been used for the sample selection.

| Categories of patients' treatment | Number of patients | Percentage (%) Of the Sample | Sampling (Patients) |
|---|---|---|---|
| OPD Treatment | 115000 | 77 | 154 |
| Hypertensive clinic | 8500 | 5.7 | 11 |
| Diabetic clinic | 9000 | 6 | 12 |
| Dental clinic | 12000 | 8 | 16 |
| Medical clinic | 3800 | 2.5 | 5 |
| E.N.T clinic | 1200 | 0.8 | 2 |
| **Total** | **149500** | **100** | **200** |

**Source:** Developed from Hospital Records, 2006

### 4.3 Data Collection

This study was carried out based on primary and secondary data sources. Primary data were collected through the questionnaires (included personal and research data) prepared for the patients, observations and also interview with patients. The secondary data for this study were obtained from Text books, Web sites, Hospital records, and Health reports.

### 4.4 Method of measurement, analysis and evaluation

#### 4.4.1 Method of measurement
In this research, one of the ordinal measures called "Likert's five points rating scale" was used to measure the variables. The numerical values were given for the purpose of quantification of quantitative variable. Responses for questionnaires were marked by using 5 scales or scores such as, Strongly disagree (1), Disagree (2), Not decided (3), Agree (4), and Strongly agree (5).

#### 4.4.2 Method of Data Analysis
Data analysis used basically the Univariate analysis in this study. Univariate analysis consists of mean, standard deviation, and percentage, etc. The Univariate analyze measured influence of the each of the differentiation variables individually on perceived service quality.

### 4.4.3 Method of Data Evaluation
Following method was used for the evaluation purpose since the service quality gap was analyzed in this study.
*SERVQUAL Score (Service Quality Gap) = Perception Score – Expectation Score*
$Q = P - E$

By using above equation the service quality gap was identified. Therefore the decision rule for this study can be formulated as follows:

- If mean value of perception exceeds the mean value of expectation that is referred as the "positive service quality gap" and which is most favorable sign for the existing service
  *(Xi P > Xi E - Positive service quality gap).*

- If mean value of perception equates the mean value of expectation that is referred to as the "zero service quality gap" and which is favorable sign for the service.
  *(Xi P = Xi E – Zero service quality gap).*

- If mean value of perception equals the mean value of expectation that is referred to as the "negative service quality gap" and which is mostly an unfavorable sign for the existing service performance
  *(Xi P < Xi E – Negative service quality gap).*

### 5. RESULTS

**Table 1: Mean Scores of Service Quality Dimensions**

| Dimension | Perceptions (P) | Expectations (E) | Ranking (P) | Ranking (E) | Service Quality Gaps | Ranking of Gap |
|---|---|---|---|---|---|---|
| Reliability | 2.69 | 4.30 | 1 | 2 | -1.61 | 5 |
| Responsiveness | 2.49 | 4.26 | 3 | 4 | -1.77 | 3 |
| Assurance | 2.58 | 4.34 | 2 | 1 | -1.76 | 4 |
| Empathy | 2.43 | 4.27 | 4 | 3 | -1.84 | 1 |
| Tangibles | 2.38 | 4.20 | 5 | 5 | -1.82 | 2 |

Source: Developed from the survey data

**Table 2: Overall Expectations, Perceptions, and Service Quality Gap**

| Variables | Number | Mean | Standard Deviation |
|---|---|---|---|
| Expectations | 200 | 4.27 | 0.150 |
| Perceptions | 200 | 2.51 | 0.196 |
| **Service Quality Gap** | **200** | **-1.76** | **0.046** |

Source: Developed from the survey data

## 6. DISCUSSION

### 6.1 Reliability

Reliability dimension was measured through seven statements. This includes the Information about service availability, Interest on problem solving, Timing of service, Consistent level of service, Error free service, Records keeping, and Exact specification of requests.

The service quality gap between the total expectations and the total perception is negative gap as -1.61. The following reasons can be attributed to this gap. Regarding the information, practically, this hospital provides the information about the date of service availability specially, in the case of clinical service. But the time is not indicated because of uncertainty about the start and finish time of treatment for different nature of diseases. The OPD service is mostly conducted during the week days. The time for these services is mostly from 8.30 a.m to 2.30 p.m in this hospital. The clinical service conducting on weekdays, and they are also informed about the service availability, but not the time indicated.

Considering the interest, patients are expecting more that doctors should show the true interest on the patients in their problem solving. In the case of this hospital, the doctors numbers are minimum than the requirement. Needed number of physicians is 50, but the actual is only 14. In this hospital, the huge number of patients comes for the treatment, and so that the limited numbers of doctors are compelled to treat all the cases. So that the rush of doctors cause to the deep interest on every one's problem solving is in the moderate level. Considering the error free service, however it is a base hospital the service provided to patients almost free of errors such as in this hospital, the death cases were rare during the past years. And also the service providing are favorable with the limited facilities existing in this hospital.

### 6.2 Responsiveness

This dimension was measured though six statements as Readiness to treat emergency cases, Time spending on treatment, Attention to complaints, Waiting time for treatment, Helpfulness of employees, Patience of staff.

The service quality gap between the total expectations and the total perception for responsiveness is negative gap as -1.77. The following reasons can be led to this gap. Regarding the readiness, in this hospital, however shortage of staff availability the emergency cases take the priority of attention in the treatment. In the case of most severe health condition of patients, this hospital staffs have the immediate consideration on the treatment of those patients without delay.

Considering the attention, especially in the case of inpatients service, many complaints raised about the quality of food, place, and water facilities, etc. In the case of OPD patients they have complained about the service such as, medicines availability, and the waiting time, etc. But there is a shortfall in the proper attention to the patients' complaints or problem, and the lack of proper actions to solve them. In this hospital, the patients especially in the case of OPD and clinical services have standing in a longer queue for getting the treatment. Therefore, waiting time is longer for the patients.

### 6.3 Assurance

Assurance dimension was measured through ten dimensions as Explanation about medical tests and procedures, Thoroughness in tests and results, Knowledge of staffs, Information about methods of using medicines, Consistency of courteous and friendliness, Un burden when distress, Confidence behavior of employees, Safe keeping of information and records, Careful handling of materials, Safety information when infectious diseases.

The service quality gap between the total expectations and the total perception for assurance is negative gap as -1.76. When considering the explanation, in this hospital, the important reason for the medical procedures is explained without the full information. Because of the patients cannot understand the medical and technical terms related with the medical procedures.

Regarding the thoroughness of the tests, and results such as X-ray, ECG, and blood tests, etc, these terms cannot be understood by the patients easily. But through show the report of tests provided by this hospital to other physicians the patients can have the knowledge to answer this statement. In this hospital, due to the lack of staffs and the time limitation the proper information about the prescribed medicines is also not provided adequately. The short description is only provided.

Considering the courteous, generally in most of the hospitals, the politeness, and friendliness behavior of employees with the patients is less. In this hospital also this aspect is in low level because of employees are not treated the patients with respectively and also patients are ignored. Regarding the safekeeping of information, this hospital staffs are generally not

expressing the any information about the patients to outside.

### 6.4 Empathy

Empathy was measured through seven statements. Those are: Individualized attention, Regular treatment for cure, Information about health condition, Using of understandable words, Advices to improve health condition, Convenience of service hours, and Easy access to medical staff.

The difference between the whole mean values of perception and expectation for this dimension is also identified as negative as -1.84. The reasons can be stated as follows. Generally in hospitals, the individualized attention is not more possible because the large number of patients. As like, in this hospital also the individualized attention on the every patient is low. All patients in this hospital are seemed to be as equal without considering their special priority. Regarding the advices, there is a lack of possibility to advice every patient.

In government organizations, the service hours were already fixed without consult the clients. This is also government hospital, so the convenience of patients is not considered. The patients should get treatment when the service available even the time has inconsistency to them. The next statement in this dimension is about easy access to the medical staff at all level of the hospital. The patients cannot reach all the staffs when they needed their service because of the authority and the busy nature of their work.

### 6.5 Tangibles

This dimension is measured through eleven statements. Such as: Visually appealing premises, Modern medical equipment, Capacity of wards, Adequacy of furniture facilities, Cleanliness of hospital environment, Standard of water and sanitation facilities, Effectiveness of vehicle facilities, Availability of prescribed medicines, Number of staffs for service, Appearance of staff, and Availability of health related information materials.

The service quality gap between the total expectations and the total perception for tangibles is negative gap as -1.82. The reasons can be attributed as follows. Regarding the premises, in this hospital, many buildings are existed. However, some (two) of them are only seem to be visually appealing. Other buildings are seemed as old. This led the patients' perception as low satisfaction. However, the x-ray unit is functioning,

the effectiveness of that is not at adequate level, and the benefits get through this are also less.

Third statement in this dimension measures the capacity of wards. Capacity of wards includes the lighting facilities, adequacy of number of beds, and the place facilities. There are 5 wards and 110 beds are available including male, children, and female wards. The next statement measures the adequacy of furniture facilities especially in the case of waiting for the OPD, and clinical treatments. In this hospital, most of the patients are waiting for the treatment as in the standing position.

Major problem in this hospital is the deficiency of water facilities, and the poor quality of sanitation facilities. The standards of water and sanitation facilities are below than the standard level. So, there is a gap in this case. When considering the vehicle availability, in this hospital, the emergency cases are transferred to Batticaloa Teaching hospital specially the severe cases through ambulance. Few delays in the transport also can cause to the severe damages to the patients' health. But the preparation for the transport in this hospital is not enough.

In this hospital, another problem which is faced by the patients is the unavailability of some important medicines. However there the dispensary is functioning; some medicines prescribed by the doctors are unavailable. Due to this the patients face the compulsory situation as buy those medicines outside the hospital. Regarding the staff appearance, however, all staffs are professionally dressed, always it is not possible.

When considering the amount of staffs, there is a need for 393, but available number of those is 102. Regarding the information materials as fosters, or medical picture should available in the reception areas in which the patients are waiting for get the treatment especially in the case of OPD, and clinical patients. However, those are also inadequate.

### 7. CONCLUSION

In this study the five dimensions used such as reliability, responsiveness, assurance, empathy, and tangibles. Through the comparison between the expectations and perceptions of patients with these 5 dimensions, negative service quality gap was identified in this study. According to these findings, this organization should make the effort to reduce all gaps.

These findings elaborate that the patients have the dissatisfaction with the services.

Therefore, these all gaps should be reduced according to the rank. There is no possibility to close the gaps fully at one attempt. However, that can be reduced as step-by-step process.

## 8.RECOMMENDATIONS

The recommendations for this reduction of service quality gaps can be suggested as following as each dimension wise.

### 8.1 Reliability
- There should be earlier information provided to the patients regarding to the date and day of the treatment. For the provision of this information there should be a separate section from which patients can know about the service availability time.

- The patients always need the deep interest of physicians on their problem solving regarding their health. However there is the shortage of staff, the doctors can make the sincere interest on patients' problem solving as further in satisfactory level.

- The service providing staff should be always aware of any mistake even if it is a small one so as to provide the accurate service.

- Regarding the timing of service, the staff can make strive to accomplish the task with quickness, and punctuality.

- The staff can perform the service as same level continuously without any shortage in the work during the day.

- Records' keeping about the patients is not very hard task. Therefore, the responsible staff should provide their attention on knowing the information of patients, and they should keep that information accurately without misrepresentation.

### 8.2 Responsiveness
- The readiness to serve the emergency cases can be further improved through the use of all the capacity of the service, staff, and facilities.

- The main problem in this hospital is the shortage of service staff and the large crowd of the patients. The crowd can be administered through proper

time management. So the physicians can spend enough time on asking the problem of patients without rush.

- Proper attention to complaints should be increased, and the remedial activities also should be taken by the service providers. Therefore the staff should make the increased attention to complaints of the patients immediately.

- Increased Waiting time for the service cannot be reduced suddenly. But through the proper management of the patients within the specified time period, and the quick service this gap of waiting time can be reduced in an adequate level.

- The attitude of the staff can easily be changed as the patients' requirement. The employees can adopt the proper disciplinary activities themselves as to improve the helping and patience behavior of them on behalf of the patients.

### 8.3 Assurance
- Enough explanations about the patients' health can be provided by the physicians. However, the thoroughness in accuracy and tests results shows the least gap that should also be minimized through the exploitness of laboratory facilities.

- The adequate information should be provided to patients when they given prescribed medicines. The information about the using method of medicines, pills, and drugs, times of the taking, and the day of the use should be provided.

- The employees can increase their politeness behavior with the patients as consistent manner.

- The service providers can make the efforts to recruit the patience' helping, and knowledgeable people to the work, and they should have trained regarding the humanism behavior.

- To make the care handling, the medicines should be handled always by wearing the gloves in their hands.

- The patients should be provided about the infectious diseases earlier when their affection in the hospital environment.

### 8.4Empathy
- The patients should have to be taken into consideration as individual. But there is no

possibility to make individualized attention on every patient. However if the staff can work together to fulfill this need of the patients as possible as well.

- The enough information and proper advices should be provided to the patients regarding their health condition without ignores their problem.

- The staff can make the attempt to talk with the patients by using mostly the normal words, and avoiding the technical jargon.

**8.5 Tangibles**

- To minimize the gap of tangibles the government activities should be needed. Because, the government can make the more appointment of staff to this hospital as needed, and supply the available modern physical facilities to this hospital.

- In this hospital, the environment should be maintained as cleaned always and put more furniture needed for the service providing.

- There should be made the effective use of ambulance facilities.

- There should be an arrangement for the patients to get up-to the standard of water and sanitation facilities.

- This hospital is situated in the area in which most of the people are poor. So, the government should take activities to make the enough supply of medicines regularly.

- The hospital should exploit the x-ray unit facilities in maximum level from which all the patients can get the benefits.

**REFERENCES**

Arnauld, E. J., Price, L.L., Zinkhan, G. M. (2002). *Consumers*, New York, Mc-Graw-Hill Higher Education.

Balachandran, S (1999). *Customer- Driven Services Management*, First edition

Christopher Lovelock and Jochen Wirtz (2004). *Services Marketing- people, technology, strategy*, 5th Edition, Pearson Education.

Cronin, J., and Taylor, S. (1992), "Measuring service quality: a reexamination and extension", *Journal of Marketing.*

Donabedian, A (1980). Explorations in Quality Assessment and Monitoring, *MI: Health Administration Press*, Vol-1.

Kenneth, E.Clow, David L. Kurtz (2004). *Services marketing operation, management and strategy*, 2nd Edition, Bitztantre Innovations and Management publications.

Murfin, D.E., Schlegelmilch, B.B., Diamantopoulos, A (1995). Perceived Service Quality and Medical outcome: An interdisciplinary review and suggestions for future research, *Journal of Marketing Management.*

Philip Kotler (1988). *Marketing Management- Analysis, Planning, Implementation, and Control*, 6th edition, Prentice- Hall Publication.

Philip Kotler, Siew Meng Leong, Swe Hoon Ang and Chin Tiong Tan (1996). *Marketing Management, An Asian Perspective*.

Peter Mudie and Angela Cottam (1993), *The Management and Marketing of Services*.

Parasuraman, A, Zeithaml, V.A and Berry, L.L (1988), "SERVQUAL:A Multiple item scale for measuring consumer perceptions of service quality", *Journal of retailing*, Volume.64.

Pathmaranjan, R (2006), *A Structured Approach to Write Dissertion: A Guide for Research Students in Management*, 1st edition.

Roger G. Schroeder (1993), *Operations Management.*

Richard F, Gerson (2004), *Measuring customer satisfaction*, 1st Indian edition.

Steve Baron and Kim Harris (1995). *Services Marketing text and cases*, Macmillan Business Publication, 1st edition.

Steffen, G., (1988). "Quality of Medical Care : A Definition", *JAMA*, Vol.260

Synay, T., (2002). Access to Quality Health Services: Determinants of Access, *Journal of Health Care Finance*, Vol-28

Zeithaml, V.A, and Mary Jo Bitner (2001). *Services Marketing- Integrating Customer focus across the firm*, Second edition, TATAMcGraw-Hill Edition http://intghc.oxfordjournals.org (Accessed 10/09/2007) http://www.en.wikipedia.org/wiki/Cross-sectional_studies (Accessed 02/12/2007)