

MEASURING HEALTH CARE QUALITY IN PUBLIC HOSPITALS

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ABSTRACT

As competition intensified in the health care market, health care institutions has no choice but try to improve their efficiency and competitive advantages by improving their cost-effectiveness and quality of care. Patient-based determinants of quality and satisfaction play an important role in choosing a health care provider. This study identifies attributes of health care delivery that define patients' perceptions of quality and satisfaction. This study looks into the service quality dimensions as postulated in the SERVQUAL model, focusing on the difference between customers' expectation and perception of service delivered. Postal survey was implemented to sample of patients and visitors who underwent inpatient care to evaluate their overall experience of the service care. The samples of the study are patients from two public hospitals namely. Findings from the survey could contribute to the understanding of customer's expectation of the health care industry.

Keywords: patient satisfaction, waiting time, health care, tangibles, reliability, responsiveness, assurance, empathy, service quality

INTRODUCTION

Health care institution is one of the industries competing in the current global market. The health institutions try to compete with each other to ensure they will give the best services in the market. Quality service is the most important keys to focus, not only for their patient or customer but also towards that institution itself. In simple terms quality refers to some attribute of what is offered, provided, produced whereas satisfaction or dissatisfaction refers to a customer's reaction to that offer. In this sense they are separate where quality is something that an organization is responsible for whereas satisfaction is in the customer's domain, it is an experience. However, these two concepts are clearly related in that organizations might use customer response (satisfaction or dissatisfaction) as a means of assessing whether quality has been delivered (Kasper, Helsdingen & Gabbot, 2007).

Patient-based determinants of quality and satisfaction play an important role in choosing a health care provider. The important of good quality of service is not only for the patients or visitors but also for the providers it's self. The goal of any service organization is creation of satisfaction among the customers. Customer satisfaction can be defined as the customer emotion throughout from what they feel and experienced

based on what they get from the service provider (Oliver, 1997). The concept of customer satisfaction is rapidly changing customer's delight which means the patient or the visitors is not only cured of his illness during the hospital treatment but also pleased with the facilities provided to him by the hospitals and its staff during the treatment which he or she fondly remembered after being discharge. The role manpower does play a very important role in customer satisfaction. The hospital is a complex institute and every person directly or indirectly involved in rendering services is important for the patient. The modern treatment based on advance technology is not only costly but full of complexities. Therefore patient satisfaction has a special consideration in treatment.

Healthcare in Malaysia is mainly under the responsibility of the Ministry of Health. Malaysia generally has an efficient and widespread system of health care, operating a two-tier health care system consisting of both a government-run universal healthcare system and a co-existing private healthcare system. Healthcare in Malaysia has undergone radical transformations. Earliest pre-colonial medical care was confined to traditional remedies current among local populations of Malays, Chinese and other ethnic groups. The advent of colonialism brought western medical practice into the country. Since the country's independence in August 1957, the system of medical care transferred from the British colonial rule has been transformed to meet the needs of emerging diseases, as well as national political requirements.

Healthcare in Malaysia is divided into private and public sectors. Doctors are required to perform 3 years of service with public hospitals throughout the nation, ensuring adequate coverage of medical needs for the general population. With a rising and aging population, the Government wishes to improve in many areas including the refurbishment of existing hospitals, building and equipping new hospitals, expansion of the number of polyclinics, and improvements in training and expansion of tele-health. Over the last couple of years they have increased their efforts to overhaul the systems and attract more foreign investment (*Healthcare in Malaysia, August 2009*). However, in spite of the dedication of the local government of Malaysia to provide the best possible health care, there are still some problems that are unsolved, and one of those is the unavailability of quality health care centers in remote areas.

Hospital Sungai Buloh is a hospital located in the district of Gombak, in Selangor, Malaysia. It is about 25 km from Kuala Lumpur city centre. The hospital has 620 beds and offered a variety of secondary and tertiary medical services. It was initially built to reduce the patient overcrowding at Kuala Lumpur General Hospital. The hospital began operations 1999 and the hospital is easily accessible by the Hospital Sungai Buloh Interchange of the North-South Expressway Northern Route.

Serdang Hospital is a government-funded multi-specialty hospital located in the district of Sepang in the state of Selangor, Malaysia. This hospital is located near Putrajaya, the Malaysian federal government administrative centre. The location of the hospital borders the South Kajang Valley Expressway (SKVE) to the east and the medical faculty of Universiti Putra Malaysia to the west. With 620 beds the hospital

began operations 2006. Serdang Hospital is one of Hospital which applied Technology Hospital Information System (THIS). It is clearly seen from the North-South Expressway at the Kajang Interchange. Among the service offered are emergency service, Pysio and Occupational Therapy Service, Haemodialysis Services, Day Procedure/Care, Inpatient Care and Specialist Services.

In order to measuring health care quality at public hospital, there are several objectives that must have to achieve. The aims of this study are to identify patient experience on service quality at public hospital and to measure customer satisfaction with the service quality at public hospital.

LITERATURE REVIEW

Gronroos (1984) asserts that there are two distinct constituents of service quality, technical and functional. Technical quality focuses on the technical accuracy of medical diagnosis and procedures. Functional quality alludes to the manner in which or process by which the health care is delivered. The distinction between these two aspects is widely accepted (Asubonteng et al., 1996; Babakus & Mangold, 1992, Parasuraman et al., 1985, 1991), although different terminology is occasionally used. Many researchers argue that functional service quality may be seen by the customer as the most important factor in a service transaction, given their frequent inability to judge technical quality of service (Asubonteng et al., 1996). Particularly in a health care context, technical quality may be difficult for a consumer with no technical expertise to evaluate, whereas functional quality (the manner in which the service is delivered) can, and will, be evaluated by the consumer (Gronroos, 1984). Because it may be difficult for the consumer to assess technical quality, they tend to rely on the “how” of service delivery, and attributes such as empathy, reliability, responsiveness associated with the service encounter become critical (Babakus & Mangold, 1992; Parasuraman et al., 1985, 1988). As long ago as 1975, Ware and Snyder (1975) found that most patients could not distinguish between the “caring” (functional) performance and the “curing” (technical) performance of health care providers. This resulted in most patients evaluating their care on the functional aspects of the technical performance. Other research has shown that technical quality falls short of being a truly useful measure for describing how patients evaluate the quality of a medical encounter (Bowers et al., 1994). Historically, measurement of functional service quality has been difficult (Parasuraman et al., 1985, 1988) and there have been a number of both academic and practitioner-based studies with a number of different approaches developed using a variety of methods and tools (Carman, 1990; Cronin & Taylor, 1992). Much of the discussion about service quality measurement has revolved around the concept of dimensions of service quality where dimensions refer to a set of attributes which consumers use in evaluating the quality of the service provided (Asubonteng et al., 1996).

Similarly, many of the definitions of service quality revolve around the identification and satisfaction of customer needs and requirements (Cronin & Taylor 1992; Parasuraman et al., 1988, 1985). Parasuraman et al. (1985) argue that service

quality can be defined as the difference between predicted, or expected, service (customer expectations) and perceived service (customer perceptions). If expectations are greater than performance, then perceived quality is less than satisfactory and a service quality gap materializes. This does not necessarily mean that the service is of low quality but rather that customer expectations have not been met hence customer dissatisfaction occurs and opportunities arise for better meeting customer expectations. Asubonteng et al. (1996) similarly define service quality as the difference between consumer expectations of service performance before the service encounter and their perceptions of the service actually received and a number of other researchers have reached the same conclusion.

Correspondingly, the use of service quality dimensions provides both a structure for designing a service quality measurement instrument and a framework for prioritizing results and findings (Hart, 1996). The SERVQUAL instrument was specifically designed to measure service quality using both the gap concept and service quality dimensions (Parasuraman et al., 1985, 1988) and was designed to be transportable, with minor adaptation, to organizations in any service sector. In its original form, SERVQUAL contains 22 pairs of Likert scale statements structured around five service quality dimensions:

Table 1: Dimensions of SERVQUAL model and its explanation

Dimension	Explanations
Tangible	<ul style="list-style-type: none"> All physical facilities, medical equipment and staff appearance that have in Public Hospital and all service environment that involve in serving service at Hospital.
Reliability	<ul style="list-style-type: none"> Capabilities and ability to all staff who involved in the process of providing service in Hospital based on what they were promised which are accurate and dependency
Responsiveness	<ul style="list-style-type: none"> Willingness to help patient and loyalty to all process that involved in providing services which are ability of service to respond to individual patient requirements such as delivery times, altering aspects of the delivery process and ensuring that patients remain involved.
Assurance	<ul style="list-style-type: none"> This includes competence, courtesy, credibility, and security.
Empathy	<ul style="list-style-type: none"> This includes access, communication and understanding towards patient at Hospital.

METHODOLOGY

A set of questionnaire was developed and consist of 22 questions that focus on service quality at Public Hospital. Each of questions represents five dimensions in SERVQUAL Model which are tangibles, reliability, responsiveness, assurance and empathy. The format of questionnaire is divided into two sections which are demographic or background of the respondents. Besides that, the likert scale in a structured format. Each item anchored at the numeral 1 with the verbal statement “strongly disagree” and the numeral 5 with the verbal statement “strongly agree”. 100 set of questionnaires was distributed among the respondent where 50 of respondents from Hospital Sungai Buloh and 50 of respondents from Serdang Hospital. The respondents are majority who live around the location of study. Questionnaire was developed and responses collected from the patients and also from the visitor from both hospitals and 100 of questionnaires were returned. Data thus collected was checked, analyzed using The Statistical Packages of The Social Science (SPSS) Version 17.0.

FINDING AND DISCUSSION

The profile of the respondents consists of 68% of male respondents and 32% are female and most of the respondent's age is from 26 to 30 years old which is 42%. For the education level mostly respondents have tertiary education which is 64% and the lowest race of respondents is Chinese which 12%. From the survey, 37% of respondents are from government sector and 3% of them are unemployed. Mostly the number of admission of respondents is more than thrice which accounts for 80% and 56% of respondents agreed that services at public hospital is good. Table 2 shows the profile of the respondents.

Table 2: Profile of Respondents.

	No	Profile	No	%
Age	16 – 20		10	10
	21 – 25		23	23
	26 – 30		42	42
	31 – 35		25	25
Sex	Male		68	68
	Female		32	32
Education	Secondary Education		36	36
	Tertiary Education		64	64
Race	Malay		66	66
	Chinese		12	12
	Indian		22	22
Occupation	Government		37	37

Sector	Private	27	27
	Self – Employed	15	15
	Unemployed	3	3
	Student	11	11
	Housewife	7	7
Admission	First Admission	2	2
	Second Admission	5	5
	Third Admission	13	13
	More than Third Admission	80	80
Services at Hospital	Good	56	56
	Poor	44	44

The reliability test was then implemented as it indicate the extent to which the questions of the questionnaires error free or no bias and ensure the consistencies measurement. In short, it is measuring the stability and consistency with which the instrument measures the goodness of a measure. The Cronbach alpha for all variables are above 0.70 where the value of Cronbach α was 0.95 for tangibility, 0.98 for responsibility, 0.97 for responsiveness, 0.79 for assurance and 0.94 for empathy.

Table 3: Five Dimension of Service Quality

No	Service Quality Elements	Mean
Tangibles	Public Facilities are in good condition	2.01
	Technology totally up to date	2.34
	Waiting area attractive and comfortable	1.88
	Staff (nurse/doctor) well dressed	2.57
Reliability	Greet patient with smile	1.33
	Complaint and problem solve with great concern	1.81
	Check up on schedule	2.07
	Duration to receive treatment is minimal (30 minute)	1.82
	Process flow is efficient	1.92
Responsiveness	Nurse give warm service	1.56
	Test result of medical treatment well explain	2.38
	Nurse are busy to help patient immediately	1.99
	Test result not complete in time frame	1.52
Assurance	Staff (doctor/nurse) are always friendly	1.78
	Knowledgeable staff are required	2.89
	Patient feel confident when in contact with staff	2.66
	Service parallel with nature of health care services	2.57

Empathy	Staff give fully attention towards patient	2.49
	Staff is to give personal attention towards patient	2.89
	Expected staff understand specific needs of patients	2.95
	Visiting hours are appropriate for all visitors	2.48
	Not realistic to expect from staff to only serve the interest of the patient	2.02

Table 3 shows the elements of five dimensions in SERVQUAL model. Overall the result depicts respondents as being dissatisfied with the services rendered in the public hospitals. The mean value for tangibility is 1.88 indicating that the respondents strongly feel that the waiting area at public hospital is not attractive and comfortable. The data analysis also showed that staff (doctor/nurse) did not greet patient with smile with the mean value of 1.33. Meanwhile for the responsiveness, the respondents felt that the test results were not completed in time with the mean value of 1.52. The assurance dimension reported a more favourable response to staff's on their work and responsibilities. The empathy dimension showed that respondents agreed that the staff understand specific need of patient and the mean value is 2.95. It can be summarized that the staff of the hospitals are well informed and knowledgeable; unfortunately the services rendered were without the magical touch of what customers expects. It is important to identify the reasons for this situation. A simple explanation would be the high expectation of public from the service providers on one hand while the service providers are facing problems of very high number of customers and very low number of staff.

SUGGESTION AND CONCLUSION

The data analysis indicated various steps that need to be taken by the public hospitals. The first step would be to take an audit the current service quality for all important aspects of service delivery. This audit will enable the organization to identify immediate areas that could benefit from improvement as well as identify areas and individuals at the organization that are currently offering excellent service quality. Secondly, encourage customers to report and share their opinion on their satisfaction level with the service delivery. This can be achieved in the form of a survey or other inquiry that focuses on both the internal and external customers. This focus will afford the organization with the opportunity to ensure that quality service is being provided to all customers equally. Thirdly, implement service quality training. Training needs to be implemented at all level of the management. Employees need to realize that the organization has specific standard to uphold. Lastly, continue to find ways to improve service quality. There will always be opportunities for improvement.

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