

A Comparative Study of Service Quality on Patient Satisfaction Between Public Hospital in Johor Bahru, Malaysia

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Abstract: One of the important concepts in management and business is service quality. Service quality in hospitals should be directed towards the satisfaction of patients. By using two public hospitals in Johor Bahru as case studies this study want to compare the quality of services provided by two public hospitals in Johor Bahru. This study also wants to identify the service quality dimensions which play important role on customer satisfaction. In order to measure service quality on patient satisfaction, 100 questionnaires were distributed. The data were collected from public that had experience got medical service from both public hospital in Johor Bahru. It comprised question about demographic factors and perception of service quality dimensions (process of clinics care, trustworthiness of hospital, competence, interaction, courtesy and safety). Randomly selected patients filled up these questionnaires and collected data was analysed by descriptive analysis. Results showed that public hospital A better quality service to their patients as compared to public hospital B.

Key words: Hospital A, hospital B, patients, service quality, service quality

INTRODUCTION

Service quality has been studied by many researchers for over two decades. To be successful in service sector the firms should pay attention on delivering a high service quality in order to gain customer satisfaction. Healthcare sector of a country needs special attentions from the government as quality of healthcare provides hope and relief to the patients and their dependents. It also helps to maintain a healthy human capital that contributes in the development of the country. Now quality has become an icon for customers while availing any services or buying a product and it is also a strategic advantage for the organizations to gain success and remain competitive in the market by delivering superior quality of services or products based on customer requirements (Irfan and Ijaz, 2011). In healthcare, patient perceptions are considered to be the major indicator in order to assess the service quality of a healthcare organization (Connor *et al.*, 1994). It means that customer satisfaction is the major device for critical decision making in selecting a services (Gilbert *et al.*, 1992) and quality of services delivered to the customers should meet their perceptions (Zeithaml *et al.*, 1993).

The concept of patient satisfaction is not new. Patients are one of the main stake holders among the ever

expansive modern world of medicine. Although, the roles of patients and doctors have remained fixed the contexts and backdrops have undergone tremendous changes overtime. Traditionally there were no clear boundaries between patient care and patient cure. With changing patterns of disease, newer therapies and patient's perceptions, care and cure are now entirely separate concepts. A patient may never get cured but may feel very well-cared for and vice versa.

Literature review

Service quality: The literature shows the service quality is complex processes and difficult to evaluate. It is because high-involvement relationships and some services are high in credence qualities, making customer evaluations complex and difficult. Since, healthcare has unique nature the researcher decided to apply a conceptual framework of service quality in healthcare by Padma *et al.* (2009). The researchers developed and tested Perceived Service Quality (SERVPERF) among customer using service at hospitals and healthcare institutions, based on the original Service Quality Literature (SERVQUAL). Khanchitpol and William defined service quality as the discrepancy between customer's perceptions of services offered by a particular firm and their expectations about firm's offering such services.

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According to Irfan and Ijaz (2011) service quality is assumed to be the difference between customer expectations and perceptions either it is received or being received by the customer. Generally, service quality is a topic of discussion by both academicians and researchers for the last couple of decades but still no comprehensive definition has emerged. Service quality dimension original ten dimension identified by Parasuraman and his colleagues and these dimensions comprise what is known as the SERVQUAL Model. Another studies by Parasuraman *et al.* (1988) resulted a more parsimonious five dimensions of service quality namely tangibles, reliability, responsiveness assurance and empathy. The SERVQUAL scale is one of the best and most widely used tools for evaluating customer expectations and their perceptions of the service quality. In this study the researcher divided healthcare service quality into six dimensions: process of clinics care, trustworthiness of hospital, competence, interaction, courtesy and safety of hospital.

Process of clinical care: This dimension deals with the functional quality that how the health care organization provides the core service (the technical). This dimension measures how well activities of the health care are implemented practically. Process of clinical care is a core service or technical quality of healthcare service that enumerates the detail of a primary service including the width and depth of services (Padma *et al.*, 2009). It comprises admission process; discharge processes and waiting time carry over by staff. It signifies the research carried over from admission to discharge to avail the core service while the fair time taken into consideration. Dagger and Sweeny (2007) found administrative qualities have the greatest impact on service quality perceptions. The customer will not perceive or pay attention to any other dimensions unless the process of clinical care was satisfactory. Even the hospital staffs are perfectly friendly; the service may not be perceived as high quality if the doctor lacks of the necessary competence and skill. In addition, Sohail (2003) contained safety, reliability, technical ability and skills of dental practitioners as "skill and ability" dimension.

Trustworthiness of hospital: The trustworthiness of hospital influences the confidence the patient has on the hospital which measured by the sense of customer's well-being feeling in the overall of service provided. Trust captures the level of trust patient reposes in hospital in the expectation that the firm will act in the customer's best care. Besides that, trustworthiness of hospital represents that how far the service provider consistent to the patient

in delivering service. Ramsaran-Fowder (2008) derived an instrument called "PRIVHEALTHQUAL" and identified a new dimension as "Fair and equitable treatment/reliability" is the most important variable which impact on private health service quality. Zineldin (2006) found that trust that patient's feel in the hospital as the third most important factor of patient's perception of quality in healthcare where this has a negative image in Turkey. Furthermore, defined trust as existing when confidence occurs in a partner's reliability and integrity.

Competence: The quality of healthcare services mainly depends on practitioners' knowledge and technical skills: "the most important factors influence the quality of my research are my knowledge, expertise, commitment and examining the patient properly". Healthcare professionals should improve their competencies, (i.e., the attitudes, knowledge and skills) to deliver high-quality services. Professional quality denotes the service providers' competence and the treatment consequences. Studies revealed that technical quality was the most important factor in both private and public hospitals (Gronroos, 1984; Rose *et al.*, 2004). Dagger and Sweeny (2007) found that technical qualities have greatest impact on service quality perception. They suggest that through empowering customers knowledge of treatment process and improving customers perceptions of service providers expertise technical service quality can be improved. Added to that physicians should be involved continuous learning programs to improve their knowledge professionally (Rohini and Mahadevappa, 2006).

Interaction: Health care services are intangible and often require patient involvement in the treatment process. Therefore, in health care service the interaction between patients and care providers is very important (Zineldin, 2006). This dimension of service quality measures the quality of information exchange, (e.g., the percentage of patients who are informed when to return for a check-up, amount of time spent by physicians or nurses to understand the patient's needs, etc.) and social exchange, etc. Perceived quality of interaction and communication reflects a patient's level of overall satisfaction. In this study, interaction is defined as patient's dealings with doctors and nurses during their stay in the hospitals. The interaction between patients and care providers have an effect on the patient's perception of quality of care. To support this idea Dam *et al.* (2003) found that in the systematic review they establish that patient's interaction with care providers affect their perception on service quality and patient outcome.

Courtesy: To improve patient's perceptions of the hospital, friendly and courteous staff viz., doctors, nurses, paramedical and support staff are needed (Padma *et al.*, 2009). Caring and respect are the important elements which are directly related to perception of motivation. Some medical doctors develop good rapport with their patients using some personality characteristics such as respect, helpfulness, reliability, intelligence and confidence. In a public hospital that the demand for medical services is very high, physicians are not motivated to improve their communication skills. Furthermore, friendly and courteous staffs who are doctors, nurses, paramedical and support staff tend to increase or improve patient's perception of the hospital. Therefore, Hasin *et al.* (2001) applied "courtesy" and "respect and caring" to represent personnel quality as quality characteristics in their research on healthcare in Thailand. Besides that, Issac *et al.* (2003) also identified employee competence and client focus as a software quality from a customer's perspective. Additionally, Sohail (2003) indicated contact personnel as one of service quality factors of business schools in the Middle East.

Safety: The safety is critical as it relates to the survival concerns which are basic individual's needs and which impact a customer's psychological condition. The service firm should make sure that staff and customers feel safe and secure. Otherwise a service firm will lose everything if the firm fails to make the customers feel safe (Padma *et al.*, 2009). Therefore, firms must provide customers with basic necessities including safety. According, indicated "safety and security" as a crucial factor of service quality in Malaysian hotel. Trust in the context of healthcare associated with healthcare errors and patient harm i.e., patient safety. A hospital has to set safety as critical issues in order to provide a good service because clients visit hospitals to improve health status which relate to the quality of life. Therefore, Padma *et al.* (2009) stated that the kind of safety measures to safeguard the patients physically such as patients allergy or reaction to certain drugs, hygiene maintained, handrails in aisles, ramps designed for wheelchairs can influence the quality perception of patients.

Patient satisfaction: The health care system is fundamentally a service based industry and customer satisfaction is an important characteristic. Patient satisfaction has been considered as one of the most important quality dimensions and key success indicators in health care. Customer satisfaction is about nurturing

and meeting customer preferences and expectation to enhance customer-delivered value. Besides that, patient satisfaction is referred as the judgement made by a recipient of care as to whether their expectations for care have been met or not. Patient satisfaction with medical care is a multidimensional concept with a dimension that corresponds to the major characteristics of providers and services (Majeed *et al.*, 2011). Within the health care industry, patient satisfaction can be considered as an important component and measure of the quality of care. Patient satisfaction is a cumulative construct which embraces satisfaction with various hospital facets such as technical, functional, infrastructure, interaction and atmosphere (Zineldine, 2006). Patient satisfaction plays an important role in the continuity of service utilization and positively influences the patient's trust (Alrubaiee and Alkaaida, 2011).

According Oswald studied quality dimension "human performance" found significantly related to customer (patient) satisfaction. Added to that, observers (visitors) were found more likely to be satisfied with hospital services than consumers. Found that the ability of patients to evaluate process quality than clinical quality has its own impact on patient satisfaction. While, Duggirala *et al.* (2008) identified that service quality has significant impact on patient satisfaction. Therefore, customer satisfaction can be achieved through employee perceptions when they were empowered in a positive environment to deliver high-quality customer service (Scotti *et al.*, 2007).

Usually, service quality is considered mostly a cognitive construct while satisfaction has been considered a more complex concept that includes cognitive and affective components. Satisfaction is believed to be an attitudinal response to value judgments that patients make about their clinical encounter (Kane *et al.*, 1997). However, satisfaction is perceived as a global consumer response in which consumers reflect on their pleasure level. Satisfaction is based on service delivery predictions/norms that depend on past experiences, driven by conceptual cues. Although perceived service quality may be updated at each specific transaction or service experience, it tends to last longer than satisfaction which is understood as being transitory and merely reflecting a specific service experience.

MATERIALS AND METHODS

Data collection: In this study, we used quantitative survey methods based on literature review. This study is conducted in to evaluate the difference between the service quality level between the two public hospitals in

Table 1: Frequency distribution of gender

Gender	Frequency	Percent
Male	50	50
Female	50	50
Total	100	100

Table 2: Frequency distribution of age

Gender and age	18-30	31-50	51 and above
Male	16	28	6
Female	22	23	5
Total	38	51	11

Johor Bahru, Malaysia. The patients having experience of both the public hospitals were included in the study in order to make a close comparison between the public hospitals. In this research the researcher used the survey technique to collect the primary data. A cross-sectional study was conducted between February and March 2012 in Johor Bahru. Total 200 questionnaires were distributed in two public hospitals in Johor Bahru. Randomly selected patients filled up these questionnaires.

The study questionnaire was composed of 2 parts; the first part assessed demographic characteristics of the hospital patient such as gender and age. In the second part for service quality or service performance the questionnaire composes of twenty two questions classified into six dimensions including process of clinics care, trustworthiness of hospital, competence, interaction, courtesy and safety. Each dimension was measured by the level of service quality or service performance by using 7 point Likert scale. The score ranges from “very low level of service quality” to “very high level of service quality”. The score ranges from “strongly disagree” to “strongly agree”. The researcher used analysis of descriptive statistics by using the Statistical Package for Social Science (the SPSS program) to analyse the data that were collected. For descriptive statistics, frequency, percentage and mean were applied. Table 1 and 2 provide the descriptive statistics of the respondents of this study. Table 1 provides the frequency distribution of the gender comprised of male and female. The total of 100 respondents were included in this study out of which 50 participants were male and for female participants also same.

Table 2 shows the frequency distribution of the participant's age. Out of 100 respondents, 38 participants were 18-30 year old, 51 participants 31-50 year old and 11 participants 51 and above.

RESULTS AND DISCUSSION

To understand the difference between the service quality delivered by two public hospital in Johor Bahru, descriptive statistics representing the mean for each of

Table 3: Comparison of service quality dimensions between public hospital a and hospital b in Johor Bahru

Factors	N	Mean
Process of clinics care		
Hospital A	50	4.65
Hospital B	50	4.25
Trustworthiness of hospital		
Hospital A	50	4.80
Hospital B	50	3.67
Competence		
Hospital A	50	4.60
Hospital B	50	2.90
Interaction		
Hospital A	50	4.63
Hospital B	50	2.03
Courtesy		
Hospital A	50	3.67
Hospital B	50	2.07
Safety		
Hospital A	50	4.20
Hospital B	50	3.80

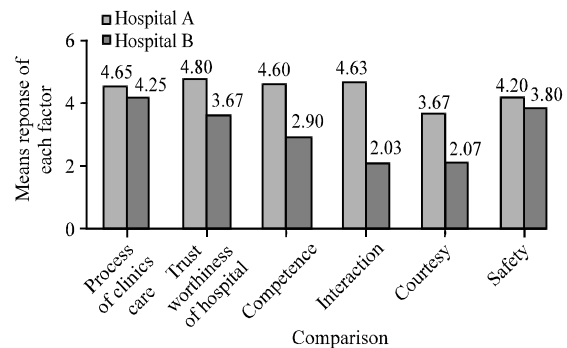


Fig. 1: Comparison between public hospital A and hospital B

dimensions in order to increase the understanding regarding the difference in service quality delivered to patient by both public hospitals in Johor Bahru.

Table 3 provide the mean of the dimensions used in this study. These results indicate that overall mean values of service quality dimensions representing public hospital A are higher than public Hospital B. This shows that majority of the respondent availing facilities from public hospital A perceive that public hospital A are providing better services to their patients as compare to the public hospital B. These public hospitals are the top public hospital in Johor Bahru. Highly qualified professors and expert in in the field of medicines or surgery are serving in this hospital as permanent employees. This factor has increased the level of courtesy among patients while visiting or selecting the services from the public Hospital A for treatment. Figure 1 shows graphical representation of means provide a clear understanding about the service quality delivered by the both public hospital in Johor Bahru based on patient perceptions.

CONCLUSION

From the above results and discussions; the empirical findings are evident that public hospital a are aimed at providing better healthcare facilities to the patients. According (Parasuraman *et al.*, 1994) the results showed public hospital A just meets desired service level since the average for all means are 4.43. Therefore, Public hospital A need to improve their service quality dimension in this study.

Whereas the moderate quality of healthcare services delivered to patients by public hospital a are due to the many factors. These factors include: government funding and overburdened public hospital a due to rapid growth in population and people tend to move from rural areas to major cities. These factors are affecting the service quality of public hospital a. It requires government attentions to improve the existing quality of the public hospital and develop more hospitals in johor bahru to maintain the healthcare needs of the people.

RECOMMENDATIONS

In this study based on the SERQUAL instruments which is based on five service quality dimensions and a more comprehensive study may be conducted by adding more dimensions like Andaleeb (2001) used commutations discipline and other than five service quality dimensions. Secondly, this study is limited to one city only. Therefore, it is needed to develop a comprehensive study in order to gain clear understanding about the service quality of public hospital. This will provide more accurate response regarding their perceptions about the services delivered to them.

REFERENCES

- Alrubaiee, L. and F. Alkaaida, 2011. The mediating effect of patient satisfaction in the patients perceptions of healthcare quality patient trust relationship. *Int. J. Marketing Stud.*, 3: 103-127.
- Andaleeb, S.S., 2001. Service quality perceptions and patient satisfaction: A study of hospitals in a developing country. *Soc. Sci. Med.*, 52: 1359-1370.
- Connor, S.J., R.M. Shewchuk and L.W. Carney, 1994. The great gap. *Marketing Health Serv.*, 14: 32-39.
- Dagger, T.S. and J.C. Sweeny, 2007. Service quality attribute weights: How do novice and longer-term customers construct service quality perceptions? *J. Serv. Res.*, 10: 22-42.
- Dam, V.H.A., V.D. Horst, F.V.D. Borne, B.R. Ryckman and H. Crebolder, 2003. Provider patient interaction in diabetes care: Effects on patient self-care and outcomes: A systematic review. *Patient Educ. Counseling*, 51: 17-28.
- Duggirala, M., C. Rajendran and R.N. Anantharaman, 2008. Patient-perceived dimensions of total quality service in healthcare. *Benchmarking: Int. J.*, 15: 560-583.
- Gilbert, F.W., J.R. Lumpkin and R.P. Dant, 1992. Adaptation and customer expectations of health care options. *J. Health Care Market.*, 12: 46-55.
- Gronroos, C., 1984. A service quality model and its marketing implications. *Eur. J. Market.*, 18: 36-44.
- Hasin, M.A.A., R. Seeluangsawat and M.A. Shareef, 2001. Statistical measures of customer satisfaction for health care quality assurance: A case study. *Int. J. Health Care Q. Assurance*, 14: 6-14.
- Irfan, S.M. and A. Ijaz, 2011. Comparison of service quality between private and public hospitals: Empirical evidences from Pakistan. *J. Qual. Technol. Manage.*, 7: 1-22.
- Issac, G., C. Rajendran and R.N. Anantharaman, 2003. Determinants of software quality: Customer's perspective. *Total Qual. Manage. Bus. Excellence*, 14: 1053-1070.
- Kane, R.L., M. Maciejewski and M. Finch, 1997. The relationship of patient satisfaction with care and clinical outcomes. *Med. Care*, 35: 714-730.
- Majeed, A.A., H. Alquraini and R.I. Chowdhury, 2011. Factors influencing patient satisfaction in primary healthcare clinics in Kuwait. *Int. J. Health Care Qual. Assur.*, 24: 249-262.
- Padma, P., C. Rajendran and L.P. Sai, 2009. A conceptual framework of service quality in healthcare: Perspectives of Indian patients and their attendants. *Benchmarking: Int. J.*, 16: 157-191.
- Parasuraman, A., V.A. Zeithaml and L. Leonard L. Berry, 1994. Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *J. Retail.*, 70: 201-230.
- Parasuraman, A., V.A. Zeithaml and L.L. Berry, 1988. SERVQUAL: A Multiple-item scale for measuring customer perception of service quality. *J. Retailing*, 64: 12-40.
- Ramsaran-Fowdar, R.R., 2008. The relative importance of service dimensions in a healthcare setting. *Int. J. Health Care Qual. Assur.*, 21: 104-124.
- Rohini, R. and B. Mahadevappa, 2006. Service quality in Bangalore hospitals-an empirical study. *J. Serv. Res.*, 6: 59-84.

- Rose, C.R., J. Uli, M. Abdul and N.K. Looi, 2004. Hospital service quality: A managerial challenge. *Int. J. Health Care Qual. Assur.*, 17: 146-159.
- Scotti, D.J., J. Harmon, S.J. Behson and D.J. Messina, 2007. Links among high-performance work environment, service quality and customer satisfaction: An extension to the healthcare sector practitioner application. *J. Healthcare Manage.*, 52: 109-124.
- Sohail, S.M., 2003. Service quality in hospitals: More favourable than you might think. *Manag. Serv. Qual.*, 13: 197-206.
- Zeithaml, V.A., L.L. Berry and A. Parasuraman, 1993. The nature and determinants of customer expectations of service. *J. Acad. Market. Sci.*, 21: 1-12.
- Zineldin, M., 2006. The quality of health care and patient satisfaction. *Int. J. Health Care Qual. Assurance*, 19: 60-92.