

A Comparison of Service Quality between Private and Public Hospitals in Thailand

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1. Introduction

Quality has become important for customers when deciding on a service or product and it has been considered as a strategic advantage for organizations to gain and maintain success in the business world (Irfan & Ijaz, 2011). Services are intangible and difficult to measure, so service quality depends on customer perceptions and expectations. The healthcare sector today has a highly competitive. The perceptions and expectations of patients are considered to be the major indicator to assess the service quality of healthcare organization (Cronin & Taylor, 1992; Irfan & Ijaz, 2011) and quality of service delivered to the patients should meet or exceed their perceptions and expectations (Parasuraman, Zeithaml & Berry, 1985, 1988; Zeithaml, Berry & Parasuraman, 1993).

Hospitals in Thailand are the part (one) of healthcare sector and in order to prepare for Asean Economic Community (AEC) membership (circa 2015) and to support the government policy to create a medical hub of Asia., service quality will become a key factor. Presently, the majority of both the private and public hospitals in Thailand are to gearing up for likely increased competition by enhancing both service quality and medical staff quality. The main purpose of this study was to compare the difference in service quality between the public and private hospitals in Thailand to determine the readiness to compete in this expanding Asian healthcare marketplace. The paper proceeds by first reviewing the related literature, followed by the methodology used, the study findings, and finally, a discussion of the results and conclusions

2. Literature Review

Service quality

Service quality is defined as the discrepancy between customer's perceptions of services offered by a company and their expectations about offering services of the company. The customers' expectations are derived from their perception of the ideal care standards of their previous experiences in the use of services. According to Grönroos (2001), service quality is the difference between customer expectations and perceptions as it is being received by the customer (Parasuraman et al., 1988; Irfan & Ijaz, 2011).

Thus it is necessary for healthcare providers to monitor how well the customers' expectations have been met after delivering the services (Zarei, Arab, Froushani, Rashidian, & Tabatabaei, 2012). Previous researchers developed various conceptualizations for service quality including Grönroos (1984) who identified service quality's two dimensions namely functional quality—how the service was performed and technical quality—the actual outcome of the service that can be objectively measured.

Garvin (1988) determined quality along 8 dimensions—performance, features, reliability, conformability, durability, serviceability, aesthetics, and perceived quality. Finally, Parasuraman, Zeithaml and Berry (1985) conceptualized service quality using a disconfirmation model that compared customer expectations and perceptions from data gathered in retail banking, financial services, and product repair and maintenance industries from which they developed the “gap model” (Zeithaml, Bitner, Gremler, 2012). The first gap is called the “listening gap”, which is the difference between customer expectations of service and company understanding of those expectations.

The second gap is called the “service design and standards gap” represents the difference between a company’s understanding of customer expectations and the development of customer-driven service designs and standards. The third gap is called the “service service-performance gap” which to be discrepancy between the development of customer-driven service standards and actual service performance. Next, the fourth gap is the “service delivery external communications gap” which is based on the firm’s capability to deliver what is promised and completely inform consumers. Finally, the fifth gap is the “expected service-perceived service gap” involves the difference between customers’ overall expectations and perceptions of service quality (Akter, Upal & Hani, 2008).

Measurement of service quality has been conducted in various service organizations and in different service sectors, the SERVQUAL model proposed by Parasuraman et al. (1985, 1988) has been used in a wide variety of studies to assesses both the customer’s service expectations and perceptions of the provider’s performance (Zarei et al., 2012; Ladhari, 2009; Pakdil & Aydin, 2007). According to Parasuraman et al. (1985), the SERVQUAL scale was based on the fifth gap and the original ten dimensions were further consolidated into five dimensions of service quality namely Tangibles, Reliability, Responsiveness, Assurance and Empathy. These dimensions are described as follows:

- (1) Tangibles – physical facilities, equipment, appearance of personnel and communication materials.
- (2) Reliability – the ability of the service provider to perform the promised service responsibly and accurately.
- (3) Responsiveness – the willingness of employees to help and provide prompt service to customers.
- (4) Assurance – the knowledge, courtesy and competence of employees and their ability to inspire trust and confidence in the customer towards the service provider.
- (5) Empathy – the caring, individualized and personalized attention provided to customers.

Polsa, Spens, Soneye and Antai (2011) argued that the SERVQUAL model is applicable for research in healthcare setting in terms of the following characteristics: reliability – the trustworthiness of service delivery, i.e., keeping promises being sympathetic and reassuring, and keeping records accurately; responsiveness – the exact delivery of service, willingness to help, and efficient allocation of time; assurance – safeness of diagnoses, politeness, and and relevant specialized knowledge; empathy – the ability of personnel to reflect the perceived needs of the patients; and tangibles – the physical environment of the hospital as well as the functional quality of diagnoses, and efficient communication with nurses and doctors, and the understanding of diagnoses (Polsa, Spens, Soneye & Antai, 2011).

The SERVQUAL scale contained 22 pairs of items spanning across five dimensions covering key issues of service quality. It comprises two sets of similar statements; the first is a customer expectations measure (E) and the second is a measure of customer perceptions as to the actual service delivered by the provider (P). The instrument measures the quality as the difference between expectations and perceptions (E - P). This tool has been widely applied by researchers in a diversity of service settings, including hospitals to assess the difference in service quality between the public and private hospitals (Andaleeb, 2000; Arasli, Ekiz & Katircioglu, 2008; Irfan & Ijaz, 2011; Polsa et al., 2011; Taner & Antony, 2006)

Several studies to assess service quality have been undertaken in both the private and public hospital sectors in various countries. Andaleeb (2000) studied on private and public hospitals in urban Bangladesh. The study found that the private hospitals provide better services than public hospitals on responsiveness, community, discipline and assurance (medical procedures), but the both groups offered poor evaluations regarding rooms, skills of the staff and general professionalism.

(Arasli, Ekiz and Katircioglu (2008) studied service quality in public and private hospitals in Northern Cyprus finding that the private hospitals were perceived better service than the public hospitals concerning the physical quality of equipment and facilities), quality of the service provide by doctors and nurses, and facility-related activities, i.e., building infrastructure and new equipment. Irfan and Ijaz (2011) studied hospitals in Pakistan, where the results of study indicated that private hospitals were delivering better service quality to their patients as compared to public hospitals, especially on the dimensions of empathy; tangibles assurance, responsiveness . Polsa et al. (2011) examined the perceived quality of private and public hospital services in Nigeria. The study results showed that service in private hospitals was considered to be superior to those of public hospitals, including having up-to-date environment, appearance of hospital employees, accurate storage of records, exact delivery of services, employees providing trust, politeness of employees, specialized knowledge and personal attention of hospital. Taner and Antony (2006) studied the differences in service quality between public and private hospitals in Turkey, finding that patients in the private hospitals were more satisfied regarding the assurance dimension, including doctors, nurses and supportive services than their counterparts in the public hospital.

3. Methodology

Method

A cross-sectional study was conducted between February and March 2012 in Bangkok, the capital of Thailand.

Survey instrument

The study questionnaire was composed of 2 parts; the first part assessed demographic characteristics of the hospital patient, such as gender, age, income and education. In the second part, the SERVQUAL questionnaire was used to assess the patients' expectations and perceptions of service quality that included 21 items across 5 dimensions: tangibles (5 items), reliability (5 items), responsiveness (3 items), assurance (4 items) and empathy (4 items). The SERVQUAL scale was translated into the Thai and back-translated into English from Parasuraman et al. (1991).

A 7-point Likert-type scale was used, ranging from strongly disagree (1) to strongly agree (7) to access the level of expectations and perceptions of patient service quality. The reliability of the scale was tested using Cronbach's alpha. The alpha values obtained were 0.91 and 0.93 for expectation scores and perception scores respectively. These results indicate good internal consistency (Arasli et al., 2008) as Cronbach Alpha values greater than 0.70 are deemed acceptable (Nunnally, 1978).

Sample design and data collection

A self-administrated questionnaire was administered to collect empirical data from patients from hospitals located in Thailand. According to the statistics issued by the Ministry of Public Health of Thailand (2010); total number of patients was 37,463,060. Thus, the sample size was determined using the following formula of Yamane (1967).

$$n = \frac{N}{Ne^2 + 1},$$

Here; N= 37,463,060, e² = 0.05

$$n = 339.97 \approx 400$$

The sample size of 400 was chosen because other scale developers in marketing have also drawn similar sized samples: Arasli et al. (2008); Rohini and Mahadevappa (2006). In order to collect quantitative data for the study, a total of 400 questionnaires were printed and distributed for the purpose of data analysis. A total of 10 hospitals were selected as part of the sampling as they were deemed to be part of the medical hub of Asia. A convenience sampling method was followed in select individual patients and the patients were assured that their responses would be kept confidential.

The demographic distribution of the outpatients indicated the following: Gender— 62.5% were female; education-- 43% had bachelor degree; and income -- 51.8% had income of 30,000 baht or higher. In terms of ages-- 33% were 51 years or higher, followed by 31 to 40 years (24.8%), 41 to 50 years (23.5%), 21 to 30 years (17.3%), and lower than 21 years (1.5%).

Ethics

This study was approved by the hospital ethics committee and the hospital administrative officer

4. Results

The SPSS 17.0 for Windows was used to analyze data. The mean scores for the expectations and perceptions of the five dimensions are presented in Table 1 to 5 for both public and private hospitals with the mean service quality gaps score calculated using Service quality (SQ) = Perception (P) – Expectation (E) and results of service quality between public and private hospitals differences on the five service quality dimensions. The results are shown in Table 1 to 6 as follows:

4.1 Tangibles

Expectations: Table 1 shows the mean expectation scores for all 5 items representing the tangibles dimension for private hospitals were above 6.30 –ranging from the highest 6.68 (2 items) for “up-to-date equipment” and “convenient timing of services offered to patients” to the lowest 6.37 for “visually appealing physical facilities at the hospital”. On the other hand, the mean expectation scores for all items in public hospitals were above 5.50 – ranging from the highest 6.34 for “up –to-date equipment” to the lowest 5.58 for “visually appealing physical facilities at the hospital”.

Table 1

Mean expectation (E), perception (P), perception, gap scores and group differences (gap score) tests of tangibles

Dimension/items Tangibles	Mean Values						F-tests	
	E		P		Gap score		F-value	Sig
	Public	Private	Public	Private	Public	Private		
Up-to-date equipment	6.34	6.68	6.09	6.57	-0.25	-0.12	34.40	0.00*
Appearance of hospital personnel	6.28	6.55	5.89	6.62	-0.39	0.07	16.38	0.00*
Convenient timing of services for patients	5.99	6.68	5.84	6.68	-0.15	0.00	13.70	0.00*
Visually appealing hospital environment	5.81	6.45	5.36	6.50	-0.45	0.05	10.36	0.18
Visually appealing physical facilities at hospital	5.58	6.37	4.70	6.00	-0.87	-0.36	6.94	0.19

Perceptions: the mean perception scores for private hospitals were above 5.90 –ranging from the highest 6.09 for “convenient timing of services offered to patients” to the lowest 6.00 for “visually appealing physical facilities at the hospital”. On the other hand, the mean perception scores for all items in public hospitals were above 4.45 – ranging from the highest 6.09 for “up to date equipment” to the lowest 4.70 for item of “visually appealing physical facilities at the hospital”.

Gap scores: the mean gap score values are positive meaning that expectations fall short of perceptions on three items in private hospitals. The gap score of both the private and public hospitals was the largest for “visually appealing physical facilities at the hospital”, i.e., -0.36 and -0.87 respectively. The results for items measuring tangibles indicate that three items showed a significant difference revealing that private hospitals provided better “up-to-date equipment”; “appearance of hospital personnel”; and “convenient timing of services offered to patients” as compared to the public hospitals.

4.2 Reliability

Table 2

Mean expectation (E), perception (P), perception, gap scores and group differences (gap score) tests of reliability

Dimension/items Reliability	Mean Values						F-tests	
	E		P		Gap score			
	Public	Private	Public	Private	Public	Private	F-value	Sig
Performance of services prompt every time	5.89	6.62	5.38	6.33	-0.55	-0.33	17.50	0.00*
Solving problems	5.88	6.58	5.34	6.30	-0.53	-0.36	13.46	0.05*
Performance of services right the first time	5.80	6.55	5.28	6.19	-0.50	-0.25	9.53	0.44
Inform about operating hours	5.66	6.51	4.44	5.65	-1.12	-0.68	6.90	0.25
Hospital's service within agreed time	5.56	6.33	4.37	5.99	-1.29	-0.53	0.07	0.17

Expectations: Table 2 indicates that the mean expectation score for private hospitals were above 6.30 –ranging from the highest 6.62 to the lowest 6.33. On the other hand, the mean expectation scores for public hospitals were above 5.50 –ranging from the highest 5.89 to the lowest 5.56.

Perceptions: the mean perception scores for private hospitals were above 5.90 –ranging from the highest 6.33 for “performance of services prompt every time” to the lowest 5.65 for “informing patients about operating hours”. On the other hand, perception mean scores for public hospitals were above 4.30 –ranging from the highest 5.38 for “performance of services promptly every time” to the lowest 4.37 for “hospital’s service performed within agreed time” item.

Gap scores: the largest mean gap score in private hospitals was -0.68 for “informing patients about operating hours”. While the largest mean gap scores in public hospitals was -1.29 for “hospital’s service performed within agreed time”. In testing for results of each item measuring reliability, two items had significant differences in the case of private hospitals when it came to “performance of services promptly every time”; and “solving problems” as compared to public hospitals.

4.3 Responsiveness

Table 3

Mean expectation (E), perception (P), perception, gap scores and group differences (gap score) tests of responsiveness

Dimension/items Responsiveness	Mean Values						F-tests	
	E		P		Gap score			
	Public	Private	Public	Private	Public	Private	F-value	Sig
Willingness of personnel to provide service	5.88	6.53	4.97	6.34	-0.91	-0.18	17.96	0.00*
Readiness of personnel to provide service	5.87	6.37	4.97	6.22	-0.90	-0.12	10.11	0.00*
Fast and efficient service of personnel	5.70	6.32	4.58	5.86	-1.13	-0.47	3.61	0.66

Expectations: Table 3 indicates that the mean expectation scores for private hospitals were above 6.30 –ranging from the highest 6.53 to the lowest 6.32 . On the other hand, the mean expectation scores for public hospitals were above 5.50 –ranging from the highest 5.88 to the lowest 5.70.

Perceptions: the mean perception scores for private hospitals were above 5.80 –ranging from the highest 6.34 for “willingness of personnel to provide service” to the lowest 5.86 for “fast and efficient service of personnel”.

On the other hand, the mean perception scores for all 3-items in public hospitals were above 4.50 –ranging from the highest 4.97 (2 items) for “willingness of personnel to provide service” and “readiness of personnel to provide service” to the lowest 4.58 for “fast and efficient service of personnel”.

Gap scores: the largest mean gap scores of both the private and public hospitals were -0.47 and -1.13 respectively for “fast and efficient service of personnel”. In testing for results for each item measuring responsiveness found that two items had significant difference when it came to private hospitals “willingness of personnel to provide service” and “readiness of personnel to provide service” as compared to public hospitals.

4.4 Assurance

Table 4

Mean expectation (E), perception (P), perception, gap scores and group differences (gap score) tests of assurance

Dimension/items Assurance	Mean Values						F-tests	
	E		P		Gap score		F-value	Sig
	Public	Private	Public	Private	Public	Private		
Personality and experience of hospital personnel	6.34	6.57	5.86	6.62	-0.23	-0.04	22.10	0.00*
Hospital personnel have knowledge	6.09	6.48	5.69	6.63	-0.43	0.15	21.01	0.04*
Sense of trust personnel provide	6.04	6.53	5.63	6.42	-0.46	-0.11	19.81	0.00*
Politeness of hospital personnel	5.92	6.66	5.62	6.53	-0.48	-0.13	8.54	0.00*

Expectations: Table 4 shows that the mean expectation scores for private hospitals on the assurance dimension were above 6.40 –ranging from the highest 6.66 for “politeness of hospital personnel” to the lowest 6.48 for “hospital personnel have knowledge”. On the other hand, the mean expectation values for all items in public hospitals were above 5.90 –ranging from the highest 6.34 for “personality and experience of hospital personnel” to the lowest 5.92 for “politeness of hospital personnel”.

Perceptions: the mean perceptions scores for private hospitals were above 6.40 –ranging from the highest 6.63 for “hospital personnel have knowledge” to the lowest 6.42 for “sense of trust personnel provide”. On the other hand, the mean perception values for all 4-items in public hospitals were above 5.60 –ranging from the highest 5.86 for “personality and experience of hospital personnel” to the lowest 5.62 for “politeness of hospital personnel”.

Gap scores: the results show some positive values, meaning that expectations fall short of perceptions, e.g., on the item in private hospitals for “hospital personnel have knowledge”. The largest mean gap score of both the private and public hospitals was -0.13 and -0.48 respectively for “politeness of hospital personnel” item. The results in testing for each item measuring assurance found that all 4 items had significant difference when it came to private hospitals as compared to public hospitals.

4.5 Empathy

Table 5

Mean expectation (E), perception (P), gap scores and group differences (gap score) tests of empathy

Dimension/items Empathy	Mean Values						F-tests	
	E		P		Gap score		F-value	Sig
	Public	Private	Public	Private	Public	Private		
Understand specific needs	5.91	6.54	5.16	6.17	-0.57	-0.34	10.23	0.03*
Follow up patients individually	5.70	6.56	5.13	6.22	-0.64	-0.51	9.59	0.00*
Take the patients’ best interests to heart	5.69	6.46	5.06	5.95	-0.72	-0.45	4.91	0.04*
Giving personal attention	5.36	6.45	4.64	6.01	-0.75	-0.37	1.27	0.29

Expectations: Table 5 shows the expectation mean scores for all 4- items representing the empathy dimension for private hospitals which were above 6.40 –ranging from the highest 6.56 for “follow up patients individually” to the lowest 6.45 for “giving personal attention”. On the other hand, the means expectation values for 4-all items in public hospitals were above 5.30 –ranging from the highest 5.91 for “understand specific needs” to the lowest 5.36 for “giving personal attention”.

Perceptions: the mean perception values for all 4-items in the perception score for private hospitals were above 5.90 –ranging from the highest 6.22 for “follow up patients individually” to the lowest 5.95 for “take the patients’ best interests to heart”. On the other hand, the mean perception values for all 4-items in public hospitals were above 4.60 –ranging from the highest 5.16 for “understand specific needs” to the lowest 4.64 for “giving personal attention” item.

Gap scores: the largest mean gap score in private hospitals was -0.51 for “follow up patients individually” item, while the largest mean gap score in public hospitals was -0.75 for “giving personal attention”. The results in testing for each item measuring empathy found three of the four items showed significant difference for private hospitals when compared to public hospitals.

4.6 Overall service quality

Table 6

Mean expectation (E), perception (P), gap scores and group differences (gap score) tests of overall service quality

Dimension/items	Mean Values						F-tests	
	E		P		Gap score		F-value	Sig
	Public	Private	Public	Private	Public	Private		
Overall service quality	5.88	6.50	5.21	6.27	-0.66	-0.24	39.99	0.00*
Tangibles	6.07	6.54	5.58	6.47	-0.49	-0.07	40.25	0.00*
Reliability	5.76	6.52	4.96	6.09	-0.80	-0.43	40.17	0.00*
Responsiveness	5.81	6.40	4.84	6.14	-0.98	-0.25	19.23	0.00*
Assurance	6.09	6.56	5.70	6.55	-0.40	-0.01	78.70	0.00*
Empathy	5.66	6.50	5.00	6.09	-0.67	-0.42	21.62	0.00*

Expectations: Table 6 shows that the overall mean values of service quality expectations for the private and public hospitals were 6.50 and 5.88 respectively. Among the five dimensions, the private hospitals’ expectation was highest for assurance (6.56); followed by tangibles (6.54), reliability (6.52), empathy (6.50) and responsiveness (6.40). On the other hand, mean values for public hospitals were the highest for assurance (6.09); followed by tangibles (6.07), responsiveness (5.81), reliability (5.76), and the lowest for empathy (5.66).

Perceptions: the overall mean values of service quality perceptions for the private and public hospitals were 6.27 and 5.21 respectively. Among the five dimensions, the private hospitals’ expectation mean values were highest for assurance (6.55); followed by tangibles (6.47), responsiveness (6.14) reliability (6.09), and empathy (6.09). On the other hand, mean perception values for public hospitals were highest for tangibles (5.58); followed by assurance (5.70), empathy (5.00), reliability (4.96), and responsiveness (4.84).

Gap scores: the overall mean values of service quality gap score for the private and public hospitals were -0.24 and -0.66 respectively. The largest gap mean score in private hospitals was -0.43 for reliability dimension followed by empathy; responsiveness; tangibles; and assurance dimensions. In addition, the largest mean gap score in public hospitals was -0.98 for “responsiveness dimension” followed by reliability; empathy; tangibles; and assurance. The results in testing for all 5 dimensions measuring service quality were significant for private hospitals when compared to public hospitals.

5. Discussions and Conclusions

An investigation of service quality between private and public hospitals in Thailand was conducted using data from 400 patients drawn from a convenience sample. As the findings indicate, differences in service quality exist, as private hospitals were perceived by patients as better than the public hospital on most of the indicators of assurance dimension – including knowledge, personality and experience, sense of trust by the personnel, and polite of hospital personnel (Polsa et al., 2011); followed by tangibles dimension – such as appearance of hospital personnel, convenient timing for patients, and up-to-date equipment (Arasli et al., 2008); followed by responsiveness, empathy and reliability dimensions.

These differences suggest that private hospitals are playing a meaningful role in society, and higher perceived service quality will only increase demand for their services (Andaleeb, 2000). This supports prior research by Taner and Antony (2006) who studied the service quality in both private and public hospitals in Turkey, confirming that private hospitals were perceived higher in service quality with regard to assurance with and confidence in the doctors, nurse and supportive services than the public hospitals. A similar finding was reported in a study by Irfan and Ijaz (2011) which examined service quality in hospitals of Pakistan and found that private hospitals were delivering better service quality to their patients as compared to public hospitals, especially on the dimensions of empathy and tangible factors, followed by assurance and timeliness of the service.

The findings from this study suggest that the poor service quality delivered to patients by public hospitals as compared to the private hospitals are due to five dimension of service quality including: responsiveness, reliability, empathy, tangibles, and assurance, respectively. These dimensions are affecting the service quality of public hospitals and represent areas for government administrators to focus on in order to improve and develop more high service quality public hospitals in Thailand. (Irfan & Ijaz, 2011). Moreover, the results of the study show that some service quality dimensions in private hospitals were not provided as efficiently as the public hospitals and the both groups can and should makes improvements.

Andaleeb (2000) reported that service quality improvement in private and public hospitals in urban Bangladesh needed to make improvement on the assurance dimension for rooms and the skills of the staff, along with professionalism. Thus, the findings of the present study have managerial implications for Thai private and public hospital administrators as to service quality improvement and enhancement as follows. Regarding tangibles, both hospitals group can improve in the visually appealing environment and physical facilities within hospital.

Next, on the reliability dimension, improvements can be made by delivering services performed right the first time which corresponds to patient expectations, e.g., hospitals should inform patients and family about operating hours and to provide service within the agreed time. As to the responsiveness dimension, it is imperative for both hospital groups personnel to offer faster and more efficient service to patients. Finally, empathy can be improved by offering personalized attention to patients. Additionally, hospital management needs to gather systematic feedback from patients and to set up visual and transparent complaint procedures and protocols so that the complaints of patients can be addressed effectively and efficiently (Arasli et al., 2008).

6. Limitations and Further Research Implications

The limitations to this study were based on the SERVQUAL instrument and five service quality dimensions. Perhaps future research should consider adding more dimensions. Next, the questionnaire included the both expectation and perception questions. It may be prudent that future studies should separate the expectation and perception sections, contacting patients just before their treatment and just before they are discharged from hospital. Finally, future studies should investigate the effects of service quality dimensions on other variables such as customer satisfaction, customer behavioral intentions (i.e. would recommend the hospital to a friend or relative), and the overall perceived service value received.

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