INTRODUCTION

In Malaysia, the demand for better quality in health service continues to rise in view of the growing population, changes in structure of population due to the increase in the number of the elderly, increase of consumer awareness with the shift of population distribution from rural to urban areas and the rationalization of the industry in this country. These changes forced greater emphasis to improve the healthcare services provided in the country.

There are currently 150 government hospitals and 3000 clinics in Malaysia. All the thirteen states in Malaysia have their own government hospitals and government clinics that serve every town and village in the country. The Ministry of Health (MOH) has also approved the licenses of 214 private hospitals and 70 private or NGO-sponsored hemodialysis centers. (UNCTAD 1992).

Even though the healthcare industry in Malaysia is not as competitive as compared to other more advanced countries like the United States and Japan, it doesn’t mean that the quality of the healthcare services need not be evaluated. Since Malaysia has started to focus on the healthcare industry as an alternative support industry as their income other than manufacturing industry, therefore there is a need for an evaluation or assessment on the quality of the healthcare services provided in order to make it more competitive.

There are numerous researches conducted in the service quality of retail services worldwide. Most of the studies are
focusing on customer perceptions and the providers’ expectations on the service quality. However, the number of studies conducted in healthcare services especially in the clinic’s service is less significant. Earlier studies in Thailand showed that healthcare personnel mostly underestimate the patient’s perceptions on their service (Kochapakdee, 1998; and Summartwart, 1997). The finding based on all the five dimension in accordance to SERVQUAL instruments as proposed by Parasuraman et al.(1988), showed that assurance (knowledge and courtesy of service provider and ability to inspire trust and confidence to patients) was the major contributor to the service quality for healthcare service.

The main objective of the research is to determine the perceptions on the service quality of the clinics that served for HCJ (Not real name) based on the patients’ view. The study was also intended to focus on the secondary objectives that are to determine: (a) the differences between all the five dimensions of SERVQUAL to the service quality of the clinics; (b) the rank of all the five dimensions based on their importance based on the customers’ (patients) view; and (c) the validity and reliability of the modified SERVQUAL instruments in determining patient perceptions of the clinics service quality for HCJ employees.

**Service Quality and Perceptions**

The terms service quality could be divided into two words that is ‘service’ and ‘quality’. According to Parasuraman et. al (1985), service is performance that consists of four important characteristics: intangibility, heterogeneity, inseparability, and perish ability. Since service quality concerns the quality of performance, therefore the characteristics of the service need to be understood first before an evaluation of the quality takes place.

According to Backman and Veldkamp (1995), service quality and the management of services are now the predominant themes both in private and public sectors. The focus on service in business and government is evident worldwide in the growing number of quality
awards, the attention pay to the quality in press, and the emerging academic attention. This was the direction given by the community to the adopting of marketing philosophy as their primary focus in competing in the marketplace.

In consideration of total quality management, Edvardsson (1994) classified the service quality as needs, requirements and expectation of the customers. This means that the service will complete in a cycle as long as these three elements have been fulfilled. Chase and Tansik (1993) classified, three categories of service that is (a) pure service, (b) mixed service, and (c) quasi-manufacturing service. Pure service denotes conditions where customers must be present for service production. Mixed service means face-to-face contact between customer and the organisation. For quasi-manufacturing service, face-to-face contact with the customers is not necessary.

Stamatis (1996) proposed four approaches of major quality characteristics. The four major approaches were identified as:

1. metaphysical approach;
2. behavioral or perceived quality approach;
3. production management approach; and
4. economic approach.

According to Stamatis (1996) service is determined by four characteristics that was: (a) intangible, (b) perishable, (c) transportability of service providers, and (d) immediate purchase for immediate performance (prompt). Parasuraman et al. (1985) stated that comparing physical appearances such as color, style, and package with present standards could assess the quality of goods. The quality of goods means that the quality received by the customer in terms of product. This view is directly related to the quality measured in manufacturing industries. The four main characteristics in determining service quality were intangibility, heterogeneity, inseparability, and perishability (Zeithaml at el., 1985).

On the other hand, customer expectations are based on a wide variety of variables. Some questions to answer would be whether
or not customers use the service in times of crisis. In this situation, their moods and expectations are likely to be different compared to normal times. Any exceptional service provider would identify the likely frame of mind of their customer before they decide the kind of service that need to be offered (Denton, 1989).

Reichheld and Sasser (1990) categorized a satisfied customer as: a) more likely to involve frequently and in larger volume in other services from the organisation; b) willing to pay for the benefits they receive; and c) more likely to be tolerant of increases in price. Customers’ satisfaction was met when there is an increasing demand in the service offered.

A behavioral process model of perceived service quality has been developed using the information from the service quality, attitude and customer satisfactions (Boulding et al, 1993). There are two types of expectation based on behavioral process concept, expectations; will and should expectations. What customer expect will occur during the service transaction is identified as will expectations, while what customer wanted or desired during the service transaction is identified as should expectations. This behavioral process model was based on the concept of the service quality expected by customer that is transmitted during the transaction of the service.

There are different ideas by researcher about the dimension of expectations. Kochapakdee (1998) conducted experiments on service quality of nursing service through interviews 73 nurses, patients, nurse educators and nurse administrators in Southern Thailand. The study has used the five dimensions of SERVQUAL instruments to determine the reliability of each dimension in determining service quality of nursing service. The result concluded that assurance dimension has rated the highest among four groups, while dimension of empathy was rated the lowest.

Zeithaml, Parasuraman and Berry (1990), conducted a survey on 187 credit card, 183 repair and maintenance, 184 long distance telephone and 177 bank customers with the rating scale of 1 as ‘not all important’ and 10 as ‘extremely important’. The result concluded that dimension of reliability having the highest score while dimension
of tangible has the lowest score.

The two research results show that there are differences of expectation level among all the five dimensions of the SERVQUAL instruments. The result may vary depending on the type of services and the background of the respondents.

THE METHOD

Population and Sampling

There are 826 employees serving HCJ. The organisation of the company was divided into two major levels that are direct manpower and indirect manpower. The direct manpower represents the supervisor level and below which consists of 80% of the whole population while the indirect manpower was identified as executive level and above.

The indirect manpower represents the administration staffs that do not contribute directly in the product manufacturing. HCJ was divided into three major manufacturing units as the population of the manufacturing unit. Each manufacturing unit represents different product base.

The respondents of the sample are taken randomly from the HCJ with out considering their job-scope and organisational level. The respondents sample are taken in simple random mode after considering that all the employees will have the same treatment no matter what organisational level they are in when they are engaged with the clinics.

To get more significant results of the research, the respondents selected are represented by all organisational level. The organisational levels consisted of managerial staff, supervisory staff and operator. At every organisation level at each department, at least one person will be taken as the representative for the group. The sample size for the respondents represented 21% of the whole population of HCJ. The number of samples taken was 175 respondents out of 826 persons.
Kochapakdee (1998) suggested that for health care industries, the 20% population sampling is appropriate to study patient perceptions on the service quality.

The Questionnaire

The questionnaire was developed based on the research done by Kochapakdee (1998). Kochapakdee has conducted a research focusing on patients’ expectations and perceptions on nursing service quality in Southern Thailand. A few items were changed from the original questionnaire i.e. the terms ‘nurse’ change to ‘staff’ and ‘hospital’ change to ‘clinics’ to make appropriate for the research. The changes are made based on the interest of study to determine the perception on the service quality of the clinics’ services. The modified SERVQUAL instruments developed by Kochapakdee (1998) were used as guidelines in developing the survey. The survey has been translated into Malay to suite to the respondents’ background. The translated questionnaire was sent for review by a knowledgeable person to make it easy to understand and appropriate.

DATA ANALYSIS

Data received from the respondents will be analysed by using SPSS 10.0 software. A descriptive study was carried out for the data analysis that will help to answer the research questions. The items concerned with the descriptive study were frequencies, means, standard deviations and percentages. The test on normality was performed before the initial analysis to ensure that all the statistical analysis conducted suited to the actual data obtained. The analysis will be further analysed by using correlation analysis and comparison on means was derived for the inferential study. All the analysis will involve bivariate analysis that concerns the analysis of relationship between the two variables.
FINDINGS

First, the researchers analyse the reliability of the questionnaires. The Cronbach alpha coefficient obtained was high. The highest value was responsiveness (0.807), followed by tangible (0.794), assurance (0.763), empathy (0.762), reliability (0.754) and. The overall value of Cronbach alpha coefficient obtained was 0.7945. The result shows that it is reliable to use five dimension of SERQUAL as an instrument to predict the service quality of the clinics. Since all the Cronbach alpha coefficients for the study was above 0.70, therefore the method of predicting the service quality by using five dimension of SERVQUAL is acceptable (Waltz, Strickland and Lenz, 1991).

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Employee (patients) perceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>0.794</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.754</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.807</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.763</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.762</td>
</tr>
<tr>
<td>Total Score</td>
<td>0.691</td>
</tr>
</tbody>
</table>

Reliability Coefficients 6 items
Alpha = .7945 Standardized item alpha = .8219

Table 1: Cronbach Alpha Coefficient of employee (patients) perception of the clinics service quality

Based on the 5 point Likert scale used in the study ranging from 1(strongly disagree) to 5 (strongly agree), the data has been transformed using Terrell’s Transformation Technique from 5 point of Likert scale to percentage score. The overall means score for the employee perception on the service quality of the clinics is 66.02% and the standard deviation is 8.46 in average. The mean score for
each dimensions ranging from the highest to lowest score were, responsiveness (70.29%), assurance (69.92%), empathy (69.83%), reliability (66.0%) and tangibles (54.08%). The standard deviation of the five dimensions studied is ranged form 8.96 to 14.72.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>70.29</td>
<td>14.72</td>
</tr>
<tr>
<td>Assurance</td>
<td>69.92</td>
<td>12.92</td>
</tr>
<tr>
<td>Empathy</td>
<td>69.83</td>
<td>13.04</td>
</tr>
<tr>
<td>Tangibles</td>
<td>66.00</td>
<td>14.57</td>
</tr>
<tr>
<td>Reliability</td>
<td>54.08</td>
<td>8.96</td>
</tr>
<tr>
<td>Overall Perception</td>
<td>66.02</td>
<td>8.46</td>
</tr>
</tbody>
</table>

Notes: Means were obtain from transformed 5-point Likert scale

**Table 2:** Means and standard deviations for employee perceptions on service quality of the panel clinics

Further analysis of correlation between each element from the SERVPERF instruments and the total score of the service quality of the clinics were derived (Table 3). Pearson’s correlation of coefficient analysis with level 0.05 was performed to obtain the result.

In Table 3, the result obtain was in the range 0.619 to 0.696 for the Pearson’s product moment of coefficient. The result shows that all the five dimension of SERVPERF instruments having strong positive relationship to the service quality of the clinics. The dimensions of ‘Responsiveness’ have the most significant correlation with value of 0.696. It is followed with Assurance (0.676), Empathy (0.648); Tangibles (0.638) and followed by Reliability (0.557).
### Overall perception of services

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Overall perception of services</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td></td>
<td>0.638(**)</td>
<td>.000</td>
<td>175</td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td>0.619(**)</td>
<td>.000</td>
<td>175</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td>0.696(**)</td>
<td>.000</td>
<td>175</td>
</tr>
<tr>
<td>Assurance</td>
<td></td>
<td>0.676(**)</td>
<td>.000</td>
<td>175</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>0.646(**)</td>
<td>.000</td>
<td>175</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

**Table 3**: The Pearson’s Product Moment of coefficient Correlation result

### CONCLUSIONS

The result found in this research stated that overall score means is 67.33 percent (made up from transformed 5-point of Likert scale). This represented that the service quality of the clinic is above the middle level. This shows that the level of the service clinics is agreed to be satisfactory based on the 22 elements from five dimensions developed in the questionnaire. The result mean score of each dimension was above 60 percent (made up from 5-point of Likert scale) that are considered that all the elements were satisfied by the patients in terms of service quality. The result shown that responsiveness dimension is the highest mean score amongst all other four dimensions.
Responsiveness on the willingness of the clinics staff to help patients and provide prompt clinics service by telling them when service will be provided; giving prompt service; being willing to help and responding promptly. Reviewing the detail score of the elements to form the dimension of responsiveness shows that all the elements having a score of more than 65 percent.

The result in this study was found differently compared to the previous research findings as stated above. Based on the previous finding Kochapakdee (1998), Summarwart (1997) and Wongsunnopparat (1996) found that to have enough staff on the line was the solution to provide prompt service to the clinics patients. Staffs will response and willing to help patients promptly when they have enough time to serve the patients.

During in site survey to all the clinics, it was found that the clinics staff consisted of five to six persons at most of the time. On that observation, in the peak hours, all the staff was occupied with their works as arranged by their job scope. As normal arrangement, one was appointed at registration counter; two at the pharmacy counter and one is assisting the doctor in the diagnosis room. This number of staff was enough to give prompt service, which the patients will be served as necessaries. The firm’s needs to incorporate an effective service quality strategy into the organisation, policy and procedures made prior to strategic service quality emphasis will need to be considered. Policy considerations would include criteria for responds, treatment and serving the patients accordingly. The self-awareness of the staff also needs to emphasis on developing inner self-improvement in winning the patients hearts and minds.

The three important dimensions having a significant reading reflect to the perception of the clinic service which was responsiveness, assurance and empathy. In practical, the dimension of responsiveness represented by informing patients when service will be provided; give prompt service; willing to help patients and respond to patients promptly was a direct service, contact and communication in the clinics service between patients and staff. Since this was the very basic element in the normal front line service in Malaysia, it has been
established as a common practice in the particular clinic. With the nature of Malaysian people in being generous and helpful, therefore the dimension of Responsiveness has contributed to be the highest perception and expectation by the patients.

For further study, SERVQUAL, as a model or even a different model should be refined or revised specifically address to the clinics service industry. Such a model would incorporate language and experiences that were unique to the relevant clinics and provide the opportunity for the researchers and administrators to determine whether current considerations about services in the clinics are documented, and if not, where modifications should be made.

In lieu to the generalized facts in the data of the study, the finding should not be able to specifically determine the specifics evaluations result based on each clinics performance. Therefore, additional research factors should be considered to delegates the evaluations specifically according to each clinics performances. This will be helpful in identifying the weakness and strength of each clinic and appropriate action could be made.

REFERENCES


Patient’s Perceptions on Clinics Service Quality

Problems and strategies in service marketing. Journal of Marketing. 49. 33-36.