THE INFLUENCE OF SERVICE QUALITY AND COMMUNICATION ON PATIENT SATISAFACTION IN PENANG PRIVATE HEALTHCARE CENTERS

BY NAVID FATEHI RAD

Research report in partial fulfillment of the requirements for the degree of

Master of Business Administration

May 2009

DEDICATION

My Parents,

For giving me chances to study in this master program and many thanks for being pillars of my strengths and for being there through thick and thin. Without their helping hand, I could never have successfully completed my education.

&

My beloved wife,

Farzaneh

For her enormous patience, understanding and support during my study. I would like address special thanks to her for everything that she does for me.

ACKNOWLEDGEMENTS

Thanks God, the most gracious and most merciful for His Blessing.

I would like to take this opportunity to express my deepest appreciation to my supervisor

Assoc. Prof. Yuserrie Zainuddin whom excellent guidance and comments, supervision,

helpful advices and approachability has made this MBA projects a success.

Last but not least, a big thank you to all the lecturer of the USM MBA program.

Navid Fatehi Rad

TABLE OF CONTENT

		Page
TITEI		i
DEDI	CATION	ii
ACKN	NOWLEDGEMENTS	iii
TABL	E OF CONTENT	iv
LIST	OF TABLES	vii
LIST	OF FIGURES	viii
LIST	OF APPENDIXES	ix
ABST	RAK	X
ABST	RACT	xii
СНАР	TER 1 INTRODUCTION	
1.1	Introduction	1
1.2	Background	2
1.3	Scope of Study	5
1.4	Area of Study	6
1.5	Trend in Penang Hospitals	7
1.6	Problem Statement	10
1.7	Research Objectives	12
1.8	Research Questions	12

1.9	Signific	cance of the Study	12
1.10	Definiti	on of key Terms	15
	1.10.1	Service Quality	15
	1.10.2	Service Quality Dimension	15
	1.10.3	Communication	16
	1.10.4	Customer Satisfaction	16
1.11	Organiz	eation of Remaining Chapters	16
СНАР	TER 2	LITERATURE REVIEW	
2.1	Introdu	etion	18
1.10	Customer Satisfaction		
	2.2.1	Customer Satisfaction in Healthcare Services	23
	2.2.2	Satisfaction Model and Theory	24
		2.2.2.1 American Customer Satisfaction Index	26
2.3	Service	Quality	28
	2.3.1	Distinctive Features of Service	32
	2.3.2	Perception and Expectation	34
	2.3.3	Service Quality Definition	37
	2.3.4	Perceived Service Quality	39
	2.3.5	Service Quality Gaps	43
	2.3.6	The Size of Gap between Customers' Expectation and Actual	45
		Experience	
	2.3.7	The importance of the Service Quality	46

	2.3.8	Dimension of Service Quality	46	
2.4	Alterna	ate Perspectives to Service Quality	49	
2.5	Commu	unication of Staff (Doctors/ Nurses) with Patients	50	
2.6	The Ma	alaysian Healthcare Environment	57	
2.7	Theore	tical Framework	58	
2.8	Develo	pment of Hypothesis	59	
CHAP	ΓER 3	METHODOLOGY		
3.1	Introdu	action	62	
3.2	Type o	f Study	63	
3.3	Nature	of Study	63	
3.4	Time Horizon			
3.5	Researc	ch Design	64	
	3.5.1	Population	64	
	3.5.2	Unit of Analysis	65	
	3.5.3	Sample and Procedure	65	
3.6	Data C	ollection Techniques	66	
3.7	Data Editing and Coding			
3.8	Questionnaire Design			
3.9	Variabl	les and Measurement	67	
	3.9.1	Dependent Variable	68	
		3.9.1.1 Measurement of dependent variable	68	
	3.9.2	Independent Variable	69	

		3.9.2.1.	Tangibles	69
		3.9.2.2	Reliability	69
		3.9.2.3	Responsiveness	69
		3.9.2.4	Empathy	70
		3.9.2.5	Assurance	70
		3.9.2.6	Communication	70
	3.9.3	Demogra	aphic Variable	70
	3.9.4	Control	variables	70
3.10	Pilot T	est		71
3.11	Data A	nalysis		71
	3.11.1	Factor A	nalysis	71
	3.11.2	Reliabili	ty	72
	3.11.3	Descript	ive Analysis	73
	3.11.4	Correlati	ion Analysis	73
	3.11.5	Regressi	on Analysis	74
	3.11.6	Test for	Underlying Assumptions	74
		3.11.6.1	Normality	75
		3.11.6.2	Linearity	75
		3.11.6.3	Independence of Error Team	75
		3.11.6.4	Constant Variance of the Error Team	75
		3.11.6.5	Multicolineraity	75
		3.11.6.6	Outlier	76
3.12	Summa	ary		76

CHAPTER 4 RESULTS

	Introduction				
4.2	Respons	se Rate	77		
4.3.	Descrip	tive Analysis	78		
	4.3.1	Profile of Respondent	78		
4.4	Factor A	Analysis	80		
4.5	Reliabil	lity Analysis	83		
4.6	Descrip	tive Analysis	84		
4.7	Correlat	tion Analysis	87		
4.8	Regress	sion Analysis	88		
4.9	Summa	ry	90		
CHI A D	TED 5	DIGGUGGION AND GONGLUGION			
СНАР	TER 5	DISCUSSION AND CONCLUSION			
CHAP 5.1	TER 5		92		
	Introduc		92 92		
5.1	Introduc	ction ulations of the Study Findings			
5.1 5.2	Introduc Recapit	ction ulations of the Study Findings	92		
5.1 5.2	Introduce Recapit Discuss	ulations of the Study Findings	92 93		
5.1 5.2	Introduce Recapit Discuss	ulations of the Study Findings ions The relationship between Perceived Tangibility	92 93		
5.1 5.2	Introduce Recapit Discuss 5.3.1	ulations of the Study Findings ions The relationship between Perceived Tangibility and Customer Satisfaction	92 93 94		
5.1 5.2	Introduce Recapit Discuss 5.3.1	ulations of the Study Findings ions The relationship between Perceived Tangibility and Customer Satisfaction The relationship between perceived reliability	92 93 94		
5.1 5.2	Introduce Recapit Discuss 5.3.1	ulations of the Study Findings ions The relationship between Perceived Tangibility and Customer Satisfaction The relationship between perceived reliability and customer satisfaction	92 93 94 95		

and customer satisfaction

	5.3.5	The relationship between perceived empathy	97
		and customer satisfaction	
5.4	Staff Communica	ation vs. Customer satisfaction	98
5.5	Implications of F	indings	99
	5.5.1	Theoretical Viewpoint	99
	5.5.2	Managerial Implications	100
5.6	limitations		103
5.7	Recommendation	for Future Research	104
5.8	Conclusions		105
REFRE	ENCES		107
APPENDIX			

LIST OF TABLES

		Page
1.1	Private Hospitals in Penang Island	6
1.2	Penang Occupancy Rate	9
1.3	Penang Occupancy Rate	9
1.4	Penang Ratios of Hospital Beds to Population	10
3.1	Layout of Questionnaire	68
4.1	Analysis of Responses	77
4.2	Profile of Respondents	79
4.3	Factor Analysis for Service Quality	81
4.4	Factor Analysis for Communication	82
4.5	Result of the Reliability Test	84
4.6	Descriptive of the Major Variables	85
4.7	Comparison of mean responses for expectation, perception and gap	86
	scores among respondents	
4.8	Correlation among major Variables	87
4.9	Result of Regression Analysis for perceive Service Quality	89
4.10	Result of Regression Analysis for Communication	90
4.11	Results of the Analyses	90

LIST OF FIGURES

		page
2.1	The Sheffield model	27
2.2	Distinctive features of services	33
2.3	Conceptual model of service quality – the gap analysis model	44
2.4	Theoretical Framework	58

LIST OF APPENDIX

		page
APPENDIX A	Survey Questionnaire	117
APPENDIX B	Statistical Analysis	118

ABSTRAK

Dalam penyelidikan ini, kepuasan pelanggan dan kualiti perkhidmatan telah dipertimbangkan sebagai faktor-faktor penting untuk sebarang pertubuhan-pertubuhan. Bagaimanapun, bukti empiris berkenaan dengan hubungan antara kepuasan pelanggan dan kualiti perkhidmatan, yang ditawarkan oleh pertubuhan-pertubuhan, masih kekal tidak jelas. Penyelidikan ini telah menguji satu model kualiti perkhidmatan SERVQUAL untuk mengukur kepuasan pelanggan dengan penyampaian perkhidmatan. Komunikasi dan pengaruhnya pada kepuasan pelanggan juga dinilai. Perlu disebut disini bahawa Indeks Kepuasan Pelanggan Amerika telah digunakan untuk mengukur keseluruhan kepuasan pelanggan. Lima dimensi utama model kualiti perkhidmatan SERVQUAL yang telah digunakan adalah boleh dilihat, kebolehpercayaan, sambutan, jaminan dan empati, dan juga pengaruh komunikasi pada kepuasan pelanggan telah diuji sepanjang tinjauan. Model ini telah digunakan ke atas pelanggan-pelanggan yang mempunyai pengalaman terdahulu daripada hospital-hospital swasta di Pulau Pinang. Tujuan kajian ini adalah untuk menyiasat faktor sumbangan kepuasan pelanggan di pusat-pusat jagaan kesihatan swasta di Pulau Pinang. Kajian ini membantu kefahaman faktor yang mempengaruhi penentu kepuasan pelanggan.

200 contoh-contoh soal selidik telah dikutip dari pekerja-pekerja University Sains Malaysia. Perisian SPSS (versi 16) telah digunakan untuk melakukan analisis kebolehpercayaan, analisis regresi dan analisis faktor. Keputusannya menunjukkan bahawa terdapat perhubungan penting antara faktor konteks dan kepuasan pelanggan. Analisis ini menunjukkan bahawa,boleh dilihat dan sambutan kualiti yang dianggapi tidak mempunyai hubungan langsung dengan kepuasan pelanggan. Tambahan pula,

kajian ini meyarankan bahawa kepuasan pelanggan tidak bergantung sepenuhnya pada kualiti perkhidmatan dan komunikasi sahaja. Penyelidikan ini juga menunjukkan bahawa kepuasan pelanggan berlaku semasa kualiti perkhidmatan dan komunikasi yang dianggapi melebihi jangkaan pelanggan.

ABSTRACT

In this research customer satisfaction and service quality have been considered as important factors for any organizations. However, empirical evidence concerning the relationship between customer satisfaction and service quality, offered by organizations, has remained unclear. This research tested a service quality model SERVOUAL to measure customer satisfaction with the delivery of service. Communication and its influence on customer satisfaction also evaluated. It must be mentioned that the American Customer Satisfaction Index was used to measure the overall satisfaction of customer. Five main dimensions of the service quality model SERVQUAL which were applied are tangibility, reliability, responsiveness, assurance and empathy and also the influence of communication on customer satisfaction is were tested during this survey. The model was applied to the customers who had previous experience from private hospitals on Penang Island. The purpose of this study was to investigate the factors that contribute to customer satisfaction in Penang's' private healthcare centers. The study helps to examine and understand the factors influenced in determining customer satisfaction.

Usable samples of 200 questionnaires were collected from local staffs who are working at the University Sains Malaysia. SPSS software (version 16) was used to do reliability analysis, regression analysis and factor analyses. The findings showed that there is a significant relationship between contextual factors and customer satisfaction. The analysis indicated that tangibility and responsiveness of perceived quality don't have direct relationship with customer satisfaction. Furthermore, this study suggested that customer satisfaction doesn't depend on completely on service quality and

communication alone. This research also showed that customer satisfaction happens when perceived service quality and communication exceed customer expectation.

Chapter 1

INTRODUCTION

1.1 Introduction

Satisfaction is a sense felt by a person which is a result of comparing the quality of the perceived performance of the delivered good to the preconceived expected quality (Ranaweera & Prabhu, 2003). Customers can be dissatisfied, satisfied and delighted when the performance of service which they receive falls matches or exceed their expectations, respectively (Kotler & Keller, 2006). The health care centers should handle environment constraints such as demographic changes and aging of population as well as emergence of new competitors or new treatment or services by increasing greater service quality to remain competitive (Ingram & Desombre, 1999; Andaleeb, 1998). Not surprisingly, service quality has close relationship with customer satisfaction (patient) which is indispensable concern for healthcare centers (Koeck, 1997; Pickering, 1991).

Most hospitals assume their customers (patients) know about and understand the services offered. This is a mistake. The role of gathering information from patients about services is part of assessing customers' perception and customer satisfaction. This chapter introduces the research outline of this study, which illustrates the background, problem statement, research objectives, research questions, definition of key terms, and the significance of the study.

1.2 Background of study

The service industry is one of the three main industrial categories of a developed economy. Services are defined in conventional economic literature as "intangible goods." Intangible means services are performance and experienced rather than objects so the buyer or customer normally cannot see, fell, hear or taste a service before they conclude and receive from the service provider (Lovelock, 1991). The importance of delivering service quality is becoming increasingly magnified as a core competency in the service industry therefore providing superior service quality is the most attractive way to acquire new customers (Lurie, Merrens, Lee & Splaine, 2002).

Studies focusing on understanding consumer behavior help as they provide information which in turn promotes a better understanding of the customer. So it is difficult for potential customers to understand what they will receive and what value it will hold for them or assess consumer's perception of service quality of hospitals. One of the measuring tools for these intangible goods is the SERVQUAL model. This approach of measuring service quality has been extensively studied by Parasuraman, Zeithmal & Berry (1985). They developed a tool called "SERVQUAL" for evaluating and assessing service quality and have used the instrument successfully in many sectors of the service industry. They cited that SERVQUAL model is an empirical method which is using by services organization to improve their service quality.

SERVQUAL model consists of survey questions about a number of service quality attributes or dimensions with good reliability and validity that companies can use to better understand the service expectation and perception of their customers (Parasuraman, Zeithmal & Berry, 1988). It is the only widely published method that

incorporates qualitative measurement of service quality which is sample for guideline and also well accepted by many researchers and practitioners around the world (Horovitz, 2000). SERVQUAL when appropriately adopted can be used by department and division within the company and organization to ascertain the service quality they provide to customers (Reynoso & Moores, 1995).

Cruana and Berthon (2002) maintained that SERVQUAL model has been designed to be applicable across abroad spectrum of as it provides a basic skeleton through its expectation /perception format encompassing statements for service quality dimensions. This technique can be used to assessing organization's gap between service quality and their customer service quality needs (Parasuraman et al., 1988). A customer survey will be conducted to determine how service quality affects customer satisfaction in hospitals and what service quality level they perceive as a being offered by hospitals.

According to Oh (1999), it is the arithmetic differences between customer expectations and perceptions across the ten measurement items which are tangibility, reliability, responsiveness, competence, courtesy, credibility, security, accessibility, flexibility, and understanding the customers. The ten indicators are then usually reduced to include only five items (i.e tangibility, reliability, responsiveness, assurance and empathy), because these items completely cover the other rest dimensions which are required for the original SERVQUAL model for analysis of service quality (Parasuraman et al., 1988). By considering these five dimensions we will try to evaluate the level of patient satisfaction, which is a highly controversial issue in the healthcare sector and forces managers and service providers to address quality and client satisfaction issues as a priority (Vinagre & Neves, 2002). Customers (patients) have the right to perceive good

and appropriate quality of care from healthcare centers. Healthcare centers in developing countries should adopt all aspect of service quality dimensions and improve it if they want to remain among other competitors and healthcare service providers (Koeck, 1997; Pickering, 1991). Improving service quality is vital for healthcare organizations because of its influence on customer (patients) satisfaction. Also, being competitive among other healthcare organizations depends on the level of customer (patient) satisfaction from healthcare centers. In other words to what degree do they meet customers' (patients) needs (Lim & Tang, 2000). So, determining and analyzing the factors associated with patient satisfaction is important topic for the health care provider to understand in terms of what is valued by patients and how the quality of care is perceived by them.

In this survey we will examine the relationship between three areas: service industry, specifically in the medical and hospital sectors; the service quality offered by hospitals; and the role of staff (doctors & nurses) communication in patient satisfaction. The survey will be conducted on the healthcare providers on Penang Island. One of the main and critical factors that must consider during this research in order to support and achieve the objective is, that the researcher must ensure that the customers have gone through or experienced healthcare center in order to answer the research questions.

Penang is the name of an island in the Straits of Malacca, and also of one of the states of Malaysia, located on the north-west coast of peninsular Malaysia; Penang is the second smallest state. There are 1.5 million people, of which over 678,000 live on the island. The population is multi-racial, young and almost equally distributed between males and females. The racial breakdown is as follows: Chinese 43.0 percent, Malay 40.9

percent, Indian 10 percent, others 0.8 percent and non-citizens 5.3 percent (www.nationmaster.con).

So, researcher is motivated to do this research in private hospitals case because of the great influence of service quality and communication in healthcare area. Consequently, when Malaysia wants to recognize as health tourism region must knows how to serve its customers superiorly. Because in healthcare area the services becoming increasingly more demand, the customers (patients) are less tolerant and very sensitive when they not having their expectations met. Therefore, the hospitals who want to become more competitive and more attractive by customers should be aware of its customer's expectation and perception. And also the researcher interested to evaluate and assess what factors affect customer satisfaction in healthcare environment among service quality dimensions to answer this question what is the most valuable factors in hospitals from customers' perspectives.

1.3 Scope of Study

The study will be conducted on Penang Island. There are eight major private hospitals on this island, excluding maternity homes, nursing homes and surgical centers. There are two public hospitals on the island which are the Penang General hospital and Balik Pulau hospital. In addition to public hospitals, there are numerous smaller community clinics in Penang. The private hospitals in Penang offer many facilities and equipment. These hospitals not only cater to the local inhabitants but also provide service to people from other states and health tourists from neighboring countries (www.hospitals-malaysia.org).

The list of private hospitals is shown in table 1.1.S

Table 1.1

Private Hospitals in Penang Island

	Hospital
1	Island Hospital
2	Gleneagles Medical Centre
3	Pantai Mutiara
4	Loh Guan Lye Specialist Centre
5	Lam Wah Ee Hospital
6	Penang Adventist Hospital
7	Tanjung Medical Centre
8	Mt Miriam Hospital

Source: www.hospitals-malaysia.org

Penang is actively promoting health tourism. According to the Penang health and hospital information, patients from the Indonesian city of Medan across the Straits regularly visit these hospitals. The quality treatment of the Penang hospitals and the cheap medication compared to Kuala Lumpur and Singapore attracts people to this place (www.hospitals-malaysia.org).

1.4 Area of Study

This research focuses on the relationship between Penang's citizens as customers of Penang's hospitals. However, it inevitably that there are several limitations to conducting this survey, which are:

(a) Target Population

The target population of this research is the patients who had or have experienced care or treatment from private hospitals. However, gathering such information from such a large

number proves in itself to be quite difficult if not impossible. For this reason, the researcher focused on a sample group which reflects the same characteristics of the original target population.

(b) Sample Group

The sample group of the population for this study is University Sains Malaysia Staff which are divided into administrative staff and academic staff. The reason for choosing this group is because most of the Universitys'staff is covered under an insurance company so they have the financial means to refer to private hospitals.

1.5 Trend in Penang hospitals

The medical tourism industry anticipates a great deal of growth in the coming years. Today, medical tourism contributes considerable to the amount of Malaysia's overall revenue. A study commissioned by the government in 2002 estimated that the foreign patient market in Malaysia was worth about RM40 million in 2002. In 2005, Malaysia drew 230,000 foreigners into the country for health/medical tourism; generating revenue of about 151milion ringgit and growing at a compound annually growth rate is estimated to reach US\$40 billion to US\$100 billion by 2012. The number grew to 297,000 in 2006, bringing revenue of RM204million for the country according to statistics produced by McKinsey & Company and the Confederation of India (penang.gov.my).

Investors have selected Malaysia as the world's 3rd most attractive destination for off shore medical treatment based on quality and affordability of care as well as receptiveness to foreign investment. Malaysia's foreign investment in the healthcare industry is after Panama and Brazil but ahead of any other Asian country, even Singapore

(www.businesstrendsasia.com). According to foreign investors, Malaysia's medical tourism industry has seen a staggering growth in recent years from 2001 to 2006. The number of foreigners seeking healthcare services in Malaysia almost tripled from 75,210 patients to 296,687 patients. The large volume of patients in 2006 brought RM203.66 million (€40 million) in revenue. This trend is likely to grow at a rate of 30% a year until 2012, projects the Association of Private Hospitals Malaysia (APHM).

According to statistics quoted on Hospitals-Malaysia.org, Penang Adventist Hospital is the pioneer hospital in health tourism in the region. The country also offers a comprehensive network of hospitals and clinics, with 88.5% of the population living within three miles of a public health clinic or private practitioner. Under Malaysia's current health tourism promotion drive, 35 private hospitals in the country have been identified in promoting Malaysia as a health tourist destination. A large percentage of foreign patient admissions (57%) come from ASEAN countries. About 65% to 70% of foreign patients coming into Malaysia are from Indonesia, 5% to 6% from Japan, 5% from Europe and 3% from India. Penang is the most favored destination followed by Malacca and Johor Baru respectively. (www.hospitals-malaysia.org).

Kok Vui (2003) survey shows that cardiology topped the list of tertiary health services that are in demand by foreign patients, garnering 27% of total foreign patient revenue in 2001. Other services high on the list of sought-after services include general surgery (13%), cardiothoracic surgery (13%) and orthopedics surgery (7%) (Kok Vui, 2003).

Malaysia's strongest competitors in the medical tourism market in South and Southeast Asia are first and foremost Singapore and India. Thailand also boasts a number of excellent hospitals offering healthcare at international standards.

Table 1.2

Penang Occupancy Rate

Penang Number of Beds, Bed occupancy rate (BOR)- Jan-Ma 2004							
	Beds	Jan	Mar				
Total	3910	64.47	66.65				

Source: State Health Department

Table 1.3

Penang Occupancy Rate

PENANG: KEY HEALTH STATISTICS (per 1000), 1994–2004 PENANG: RATIO OF MEDICAL PROFESSIONALS TO POPULATION, 1997 –									
	2005								
	1997	1998	1999	2000	2001	2002	2003	2004	2005
Doctors	1:1353	1:1244	1:1194	1:1145	1:1031	1:1028	1:1014	1:963	1:840
Dentist	1:9258	1:9425	1:8203	1:7871	1:7729	1:8912	1:8335	1:8744	1:7095
Nurse	1:728	1:689	1:633	1:600	1:577	1:596	1:569	1:354	1:501

Source: State Health Department

Table 1.4

Penang Ratios of Hospital Beds to Population

PENANG: NUMBER OF HOSPITAL BEDS (GOVERNMENT AND				
PRIVATE) AND RATIO OF HOSPITAL BEDS TO POPULATION, 2004				
	Government	Private	Total	Ratio
Total	1955	1955	3910	1:369

Source: State Health Department

The researcher has conducted Penang healthcare environment observation to have a direct overview about customers (patients) expectation in order to achieve accurate knowledge existing information in terms of quality and communication. Four hospitals (Island hospital, Iam Wah Ee hospital, Adventist hospital and Loh Guan Lye specialist centre), has been chosen as a case study for site investigation since they are the most visited places in Penang. The target group was selected among a number of patients who were in those hospitals in order to achieve the best results through interviews with them. The information acquired from this group of customers was supposed to give the true picture about Penang healthcare service quality and their communication. Furthermore this survey highlighted issues and problems in both service quality and communication which they have perceived.

1.6 Problem statement

The growth of the service industry has been unprecedented over the past decade. The service industry accounts for at least 58% of the world gross national product (Cronin & Taylor, 1992). Hence, world economies are moving from being product dominated manufacturing economies to service based knowledge economies, also known as the service economy. There are several reasons for the growth of service industry, for example, increasing customer affluence; greater demand for superior services and higher standards of living.

Nowadays, the growing trend of consumerism among healthcare consumers has established a need to understand the extent to which healthcare providers fulfill the consumer's needs and requirements. As in marketing of consumer products and services,

healthcare providers seek to maximize patient satisfaction which is the criteria that creates competitive advantages and distinguish highly reputed hospitals from the others. Thus, examining patient satisfaction has been a part of healthcare centers' focus for service quality, staff (doctors & nurses) communication and value of delivery (Teas, 1994).

Consequently, there is a vital need to "understand" the consumers of healthcare services therefore assessing service quality and communication with customer (patient) is the first step towards understanding customer (patient) expectation. In addition, most studies consider delivering superior service quality as an essential strategy for success and survival of any organization in the current dynamic and competitive market (Guru, 2003). Hernon and Altman (1998)) mentioned that it is important for healthcare centers to adopt service quality programs to improve ways of providing services to their customers (patients), and to achieve a long-term sustainable relationship with their customers (patients).

In this survey, we will attempt to assess the consumers' perception of service quality amongst Penang' healthcare centers and explore to what extent service quality and staff (doctors & nurses) communication affects the customer (patient) satisfaction.

1.7 Research Objectives

Hence, the objectives of this study are to understand:

1) To investigate the influence of *service quality* dimensions on customer satisfaction, and

2) To assess the role of *communication* (doctors & nurses) on customers' (patients) satisfaction.

1.8 Research questions

The objectives of the present study lead to the following research questions:

- 1. How is the relationship between *service quality* dimensions and customer (patient) satisfaction?
- 2. How does staff (doctors & nurses) communication influence patient satisfaction?

1.9 Significance of the Study

Understanding the new concepts in business is very important for developing an effective marketing strategy, and to regulate marketing practice. It is generally accepted that customer satisfaction in service quality has been an important topic of business in all industries. This is because service quality can have a great effect on customer satisfaction. Customer satisfaction in turn has a positive relationship with the service quality which is offered by the service provider. For this reason, managers should pay careful attention to this area as it is so critical to improving their competiveness (Newman, 2001).

Malaysia has been aggressively promoting health tourism since 1997 (www.seri.com.my). As the Malaysian healthcare industry is striving for greater levels of global standards, it is important for it to be able to define the service quality dimensions and their relative importance to patient satisfaction (www.mpc.gov.my).

The Malaysian Government is striving to improve quality in all sectors including health care. The Malaysia Productivity Corporation (MPC) emphasizes the governments' commitment to quality for its goal of sustained growth, which is vital for its ultimate aim of being a fully developed country in the healthcare sector in "Vision2020". Because of the Malaysian Governments' efforts to promote health tourism in Malaysia, patient satisfaction indicators can be systematically used as the competitive advantage for local healthcare providers. As foreign patients expect to receive better quality healthcare than in their own countries, local institutions must be able to provide higher service/treatment quality. To reach superior service quality, healthcare centers should have sufficient information about their customers (patients) expectations of the healthcare services (Vinagre & Neves, 2002).

Fitzpatrick (1991) identified three reasons a healthcare provider conducts patients satisfaction survey in its organization. Patient satisfaction survey results are a measurement of the outcome as it may be a predictor of the patient's satisfaction with the treatment and care they have received. Patients' satisfaction is also a tool in assessing consultations and patterns of communication between the service providers and their patients. Patients' feedback can be used to select alternative methods of organizing and improving healthcare services.

In marketing strategy concept, Spicer (Cook & Thompson, 2000) discussed the positive impacts of a patient's satisfaction on business performance and the quality of healthcare in numerous ways. Satisfied patients are the source of customer retention and referrals that contribute to future business growth and market share expansion. Therefore, managers should have adequate knowledge about patients' expectations and

should know what to improve upon and on whether service quality has been met or exceeded in the hospitals. In turn, this would provide the basis to assist managers in reducing the gap felt by patients between expectations and the actual service encounters. Doctors play a great role in this field, as their communication skills with patients have an interrelated effect on patient perception of quality ((Lim & Tang, 2000).

Although some studies have been done in this area, no study has been conducted, using the effects of both service quality and communication together in measuring the level of customer (patient) satisfaction in Malaysia, specifically in Penang Island.

To sum up, this research will have benefits for hospitals performance and their future performance. From a theoretical perspective, the importance of delivering superior service quality with a high degree of communication is becoming rapidly magnified as a key component among service providers. Therefore, studies on understanding the consumer satisfaction aspect and the factors which affect it, through delivering of service, are critical concepts for organizations (Babakus & Mangold, 1992). Theoretically, assessing service quality and also customer satisfaction can be used by hospitals to understand the service expectation and perception of their customers (Bateson, 1995).

From a more practical perspective, the results of this research can be directly utilized by the Penang Hospital Association to reassess the issues and problems regarding their customers, gathered in this study. Based on research findings private hospitals able to know which factors have priority for customers, provide flexible and efficient service with easily accessibility to information, creating more friendly relationship with customer and creating systematic method to share information with customers to gather accurate information and introduce new services and facilities to customers rapidly.

1.10 Definition of Key Terms

To provide a precise terminology, the following key terms need further explanation:

1.10.1 Service Quality

Christopher (1986) cited that service quality is service provider relationship by customer. This means focusing on customers' needs and tries to meet and match services by customers' expectation during the process of delivering.

1.10.2 Service Quality Dimensions

According to Kandampully (2007) service quality dimension is defined as:

- 1. "*Tangibles*: consist of appearance of physical facilities, equipment, personnel and communication materials used.
- 2. *Reliability*: reflect the service provider's ability to perform the service dependably and accurately.
- 3. **Responsiveness**: Represent the willingness to help customers and provide prompt service.
- 4. *Assurance*: Reflect the knowledge and courtesy of employees and their ability to convey trust and confidence.
- 5. *Empathy*: Involves the caring personal attention that the service provider offer its customer.

1.10.3 Communication

Communication: The process or the way in which information in conveyed or is imparted by a sender to receiver (Smith & Preston, 1996). It can be done by several methods: through verbal, nonverbal, body language, touch, eye contact, etc.

1.10.4 Customer Satisfaction

Satisfaction is defined as feeling of happiness or pleasure based on a sense of achievement.

Zeithaml and Bitner (2003) defined that customer satisfaction is the customers' evaluation of a product or service in terms of whether that service has met their expectations. The satisfied customer would remain loyal, required service more often, fewer price sensitive and shall talk favorable things about the service provider.

1.11 Organization of this study

In order to discuss this research in an efficient manner, this report is divided into five chapters. The first chapter presents an overview of the research and reasons for conducting the research is clearly explained. Chapter two mostly discusses the background literature and previous studies conducted in the area of service quality, staff communication, customer satisfaction and their relationship with marketing. The theoretical framework and hypothesis development is also represented in the second chapter. Chapter three illustrates research methodology, research design, data collection, measurement instruments used and statistical analysis conducted in testing the hypotheses. Chapter four mainly explains the findings of the study and discusses the

benefits of the measurements used and the results of the tested hypothesis. Finally, chapter five discusses the overall findings and implication of the research. At the end some limitations and suggestions will be provided for further research.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

Since the 1970s both academics and practitioners have recognized the importance of customer satisfaction (Jones & Sasser, 2000) and since then, the interest in satisfaction has grown extensively. The word "satisfaction", which has been derived from the Latin" Satis" (meaning enough) and the Latin "Faction" (ending), first appeared in English during the thirteenth century and has been fundamental to the marketing concept for over three decades. The importance of customer satisfaction in businesses is as vital as air for human beings (Philip & Hazlett, 2001). All businesses seek life-long customers, which is the fundamental essence of customer satisfaction (Porter, 1991). This is particularly highlighted in service-oriented companies where they offer attractive services through their special programs. Satisfaction is a sense felt by a person, which is a result of comparing the quality of the perceived performance of the delivered good to the preconceived expected quality (Ranaweera & Prabhu, 2003). In an over increasingly market place, customer satisfaction is one of the most important tenets for service organizations today, seeking ways to forge and maintain an ongoing relationship with their customer in order to protect their long term interests (Power & Barrows, 2006). Considering the current competitive environment, there is a need for service providers to plan their strategies that differentiate them from the others. This can be achieved through the delivery of high service quality. The practice of excellent service quality has been proven to lead to increased customer satisfaction (Martin, 2002).

In this chapter, a thorough literature review of the concepts of customer satisfaction will be discussed. In addition, a literature review will be done on the theory of service quality, the alternate perspective to service quality and communication. At the end, we will have a brief look at the Malaysian healthcare industry.

2.2 Customer Satisfaction

The Oxford Advance Learner's Dictionary of Current English (2005) defined satisfaction as "the state of being, pleased and contented". However, the literature contains significant differences in the definitions of satisfaction. For example, satisfaction is described as "an evaluation of an emotion" (Hunt, 1977) suggested that it reflects the degree to which a consumer believes that the possession and/or use of a service creates positive feelings (Rust & Oliver, 1994).

Lewis and Mitchell (1990) defined satisfaction in two dimensions: first, it is a conscious evaluation or cognitive judgment that the product or service has performed relatively well or poorly or that product or service is suitable or unsuitable for its user or purpose. Second, it involves affecting customer feeling toward the product or service. Tse and Wilton (1998) referd to satisfaction as the consumer's response to the evaluation of the perceived discrepancy between prior expectation (or some norm of performance), and the actual performance of the product as perceived after its consumption. According to Giese and Cote (2000) the inconsistencies in the definition of customer satisfaction in the literature lies within the type, focus and timing of the satisfaction response. Furthermore, Giese and Cote (2000) have defined three general components of satisfaction as described below:

- (a) Satisfaction is a response, which can be emotional or cognitive;
- (b)The response pertains to a particular focus, such as product, expectation and consumption experience; and
- (c) The response occurs at particular time, for example after consumption, after purchase or after accumulated experience.
- (d)The literature of social psychology has recognized three important facts, or dimension of attitudes: the emotional or affective dimension, the cognitive dimension and the cognitive or behavioral dimension (Reynolds & Mattin, 1975; cited in Francescato, Weidemann & Anderson, 1987). Satisfaction, according to Churchill and Suprenant (1992) is similar to attitude and both the cognitive and affective models may be the alternative for describing satisfaction.

"Customer satisfaction has usually been regarded as a primary determinant of long-term consumer behaviour" (Ranaweera & Prabhu, 2003). Thus, it is no surprise that customer satisfaction should be one of the most important goals of any firm and it is also one of the primary criteria of customers in choosing their service provider firms. In choosing a service provider, consumers weigh a number of benefits against the financial costs of buying and using the service; for example, the time spent in obtaining the service is just important as the cost of it (Bielen & Demoulin, 2007).

Some researchers believe that satisfaction applies to both tangible and intangible goods, which it emphasis in this study where the concept of customer satisfaction has been the subject of investigation for many studies before. The majority of researchers define satisfaction as a relative concept which is a consumer- related (rather than product

-related), mainly transactional and incorporating an appraisal of both benefits and sacrifices.

However, Roest and Pieters (2001) stated that satisfaction might become or influence on customer attitude, which may be regarded customer act. Yi (1990) mentioned that customer satisfaction is influenced by two factors, which are expectation and experience with service performance. But, Fornell (1992) said that customer satisfaction has a direct impact on the organization's performance and the expectations, over time, are bought in line with the actual performance. Actually, the satisfied customer tends to maintain their consumption pattern and will consume product or services. Thus, customer satisfaction has become the important indicator of quality and revenue for the future (Andreaseen, 2000). The "disconfirmation of expectation" model of satisfaction said that consumer satisfaction is the result of comparison between company performance and customer expectation (Oliver, 1980). Disconfirmation models mainly focus on performance of specific attributes and expectations (Tse & Wilton, 1998).

However, Teas (1993) has highlighted that there is some confusion whether the disconfirmed expectation variable is a predictor of perceived service quality or a predictor of consumer (dis)satisfaction. Bitnert (1990) too argued on whether its relationship to perceived service quality is direct or indirect. Cronin and Tylor (1992) also pointed out that there were some unresolved issues in the literature concerning the relationship between service quality and customer satisfaction. They said that perceived service quality leads to customer satisfaction but, Caruana (2002) concluded that customer satisfaction leads to perceived service quality. Bitner (1992) suggested that the consumer satisfaction is the assessment relation to specific service transaction, while

service quality is a general attitude relating to service providers' overall excellence or superiority. Moreover, many authors make it a point to highlight that service quality and satisfaction are distinct constructs (Bitner & Hubbert, 1994). Bitner (1990) used the expectation–disconfirmation model and attribution theory to explain customer satisfaction from service encountered with lower perception than expectation. In other words, a positive disconfirmation leads to customer satisfaction and a negative disconfirmation leads to customer dissatisfaction. Furthermore, Patterson and Spreng (1997) said that the amount of dissatisfaction is depends on the extent of disconfirmation and the customer's level of involvement with the service.

But for Oliver (1980) he identified satisfaction and dissatisfaction in terms of the disconfirmation of customers' expectation. According to him, satisfaction occurs when service positively disconfirms customers' expectation by performing better than expected. Engel and Miniard (1995) claimed that customer's past satisfaction may also affect their decision to have continued relationship with the service provider. Anderson and Lindestad (1998) mentioned that customer satisfaction is accumulated experience of a customer's uses and consumption of products or services.

To conceptualize, Hernon and Altman (1998) cited that customer satisfaction is determined by the degree of realization of product benefits that customers expect from product and services and Kotler and Keller (2006) was saying that satisfaction as the emotional perception of consumer and a result from the comparison of person's perceived functionality of the service or product with their expectation from the product or service.

2.2.1 Customer Satisfaction in Healthcare Services

The importance of customer satisfaction in healthcare services can be explained by Andaleeb (1998): Delivering customer satisfaction is very important because nowadays health care service customers are much more educated and the level of awareness is higher compared to the past. Buyers are more sensitive to monitoring the options available to them, so they know exactly what they need. These changes are being induced by the huge amount of information that is available to them from public and private sources. The studies of Kurz and Wolinsky (1995), and Hair and Black (1998) showed that customers are relying less on doctors to choose the "right" hospital. Reflecting on the importance of the patient's point of view, Patterson and Spreng (1997) suggested that, "It really does not matter if the patient is right or wrong. What counts is how the patient felt even though the caregiver's perception of reality may be quite different". Thus, "Hospitals that fail to understand the importance of delivering customer satisfaction may be welcoming possible failure." The study of Andaleeb (1998) also revealed some factors that have significant impacts on customer satisfaction. Some of them are:

- 1. "The level and quality of communication perceived by the patient.
- 2. The level of competence of the service provider.
- 3. The level of perceived quality of the facilities.
- 4. The positive demeanor of the hospital staff, and finally
- 5. The perception of hospital costs."

To measure customer satisfaction we can use different methods, such as Expectancy-Disconfirmation and SERVQUAL model (Tse & Wilton, 1998). Oliver (1981) introduced the Expectancy-Disconfirmation model for studies of customer

satisfaction in the retail and service industries. According to Oh (1999), "Expectancy-Disconfirmation Theory proved that customers satisfaction appears form their satisfaction with a target product or service as a result of *subjective* (or *direct*) comparisons between their expectations and perceptions." Oh (1999), the "SERVQUAL" and expectancy-disconfirmation models differ fundamentally in several ways.

- (a) It attempts to *explain* and *theorize* a process of consumption, whereas "SERVQUAL" purports to *describe* perceived service quality.
- (b) The expectancy model evaluates disconfirmation *directly* whereas
- (c) "SERVQUAL" does it indirectly.

Even though the two models follow different measurement methods, their conceptual thesis is almost equivalent.

2.2.2 Satisfaction Model and Theory

Satisfaction as process of evaluation between what was received and what was expected is the most widely adopted description of customer satisfaction (Parker & Mathews, 2001). This strand of theory appears to have origins in discrepancy theory (Porter, 1961; cited in Parker & Mathews, 2001). Over the years, a number of authors have used some form of comparison to model satisfaction and early contributions include Contrast Theory, which states that consumers would exaggerate any contrast between expectation and product evaluation (Cardozo, 1965; Howard & Sheth, 1969; cited in Parker & Mathews, 2001). The most well known decedents of discrepancy theory is the expectancy disconfirmation paradigm (Oliver, 1981), which stated that if performance exceeds expectations, customers will be positively disconfirmed (satisfied). On the other hand, if