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# Factors Influencing the Choice of Private Medical Centre Among **Malaysians**

### Nor Azlina Kamarohim<sup>1\*</sup>, Siti Zaidah Turmin<sup>2</sup> and Manisah Othman<sup>1</sup>

<sup>1</sup>Department of Management and Marketing, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia <sup>2</sup>Department of Accounting and Finance, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

#### **ABSTRACT**

With better education, knowledge and income, people today are able to choose the medical services that will satisfy them the most. The purpose of this study is to examine the factors influencing consumers in choosing a Private Medical Centre. In this study, five factors were used and these included waiting time, environment, reputation of consultant, facilities and cost. These factors had been used to see whether they influenced the choice for private medical centre among Malaysians. Data were collected through a questionnaire survey that involved customers of private medical centre in Serdang, Kajang, and Puchong. Convenience sampling technique was used to distribute 155 questionnaires. The results showed that there was a significant relationship between environment, facilities, and cost, with the choice of Private Medical Centre among Malaysians. Based on the results, it is suggested that the management of Private Medical Centre should focus on providing the best services to their customers to ensure they get the greatest satisfaction.

Keywords: Private medical centre, consumer behaviour, determinant factors, facilities, environment

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E-mail addresses: azlinakm@upm.edu.my (Nor Azlina Kamarohim), zaidah@upm.edu.my (Siti Zaidah Turmin), manisah@upm.edu.my (Manisah Othman) \* Corresponding author

INTRODUCTION

Nowadays, medical services are considered very important throughout the world. People in this day and age have better levels of education, knowledge and income, and therefore, they have the power to choose medical cares that satisfy them the most. As Jabnoun and Chaker (2003) mentioned that due to increasing demand of their services

from the government as well as the public, healthcare organizations in the public sector are under pressure to upgrade their service quality and the effectiveness of their medical services to be at par with the medical services offered by the private sector.

Currently, searching for the kind of medical attention they need has become a familiar norm. Although the hospital industry is growing like mushroom after rain, it has not been able to meet patients' demands (Miller, 2006). The power of selecting medical care these days has shifted to the patient. A study by Miller (2006) in the UK revealed that patients requiring surgery in the UK have at least four to five choices of hospitals ranging from the ordinary National Health Service trust (NHS) to private practitioners specializing in very specific medical procedures. Due to the rapid growth of the hospital industry, medical centres have come out with the option of 'Choose and Book' whereby patients are allowed to opt for where and when to have medical procedures needed by using the national electronic booking programme (Miller, 2006). In addition, patients can make appointment with the medical centre through phone call, digital television, or logging into a website (Miller, 2006).

Looking at the environment in Malaysia, the government is continually striving to provide the highest quality health care in which the Ministry of Health offers a wide variety of networks of clinics and hospitals nationwide. Historically, the health care in Malaysia has notably undergone some radical transformation from the earliest pre-colonial medical cares1 to the birth of colonialism<sup>2</sup> to meet the growing needs of proper health care for Malaysian residents (Forum, Health Care in Malaysia, 2012). Over the years, with the presence of many medical schools in the country, Malaysia has been continuously vigilant about their health care system. Consistent with this phenomenon, the demand for quality medical care in Malaysia is on the rise. In an interview with the Borneo Post, it was mentioned by Siti Sa'diah Sheikh Bakir, the Managing Director of KPJ Healthcare, that quality medical care would continue to be in high demand, with increasing affluence and rising consumer awareness on the need to priorities their healthcare needs<sup>3</sup> (Borneo Post Online, 2010). In order to cater for this growing demand, the government of Malaysia is encouraging the private sector to play a greater role in the delivery of frontline public services. This indicates that residents have wider alternatives in choosing medical centres in Malaysia.

Overall, Malaysia has 117 public hospitals and 224 private hospitals (Forum, Health Care in Malaysia, 2012). Due to this significant number of medical centres,

<sup>&</sup>lt;sup>1</sup> The earliest pre-colonial medical cares were confined mostly to those traditional remedies that are evident today on local Chinese, Malays and some other ethnic group populations.

<sup>&</sup>lt;sup>2</sup> More modern and westernized medical practices are slowly introduced to Malaysia.

<sup>&</sup>lt;sup>3</sup> Key drivers such as changing disease patterns, rising life expectancy, medical coverage by health insurance, and government policies were the forces behind this.

the best provider of medical care will come out as the winner and rein in the cash. The public now has the power to choose medical services that satisfy them the most, and therefore, it is important to understand the factors influencing them in choosing the hospitals to get medical care. This study was conducted with the objective to investigate the determinants of the choice of a medical centre by Malaysian patients. Yong (2000) mentioned that Malaysians feel that public funded hospitals could not provide the kind of services they require, thus, there is a need for them to turn to private hospitals. As a result, the number of private hospitals in Malaysia is increasing rapidly. Therefore, this study focused on factors affecting the choice of medical centre among Malaysians.

There are five factors to be investigated, namely waiting time, environment, reputation of consultant, facilities and cost factor. Result of the study is beneficial to the management of the medical centres, patients, and future researchers. For the management, they can have a better understanding of consumers' choice of medical centre, as well as to what extent patients are satisfied with their services, based on which, they can improve their services in areas that are not satisfactory. As for patients, they can express their opinions and give suggestions on the hospital's services. They will also be informed of the benefits and services that they can get from the medical centre. In conducting this study, the researchers are exposed to the real situation occurring in private health sector in Malaysia. Therefore, the knowledge and experience gained

through this study can be applied practically in other health care services.

#### LITERATURE REVIEW

Healthcare is not about the requirement to meet physical, psychological and social needs of patients anymore, but more of a tendency to achieve the overall well-being of physical, mental and social condition of the patient (Rose et al., 2004). To realize this, the quality of healthcare industry and motivational state of the provider should also be considered (Finlayson, 2002). In addition, in light of the development of the health care industry, Kui-Son Chio (2004) mentioned that medical practitioners and providers have to revamp their service delivery in order to better suit the needs of the customers. The restructuring of the medical service focuses on finding the best way to satisfy the needs and desires of patients (Donabedian, 1996; Williams, 1994). As a consequence, the culture of health care system has shifted to patient centred system rather than of medical professionals as seen in the previous millennium.

A study by Miller (2006) stated that hospitals are paid per patient for treatment and surgery they carry out. If patients choose to go to hospital A rather than hospital B because they have heard that Hospital A is better or for another reason, Hospital A will get more money than Hospital B. Hence, a hospital that is better equipped, both physical and social standing wise will get to be more profitable due to the choices made by customers (Miller, 2006).

Study by Appleby *et al.* (2003) indicated that patients' choice could contribute to competitive pressure on less deserving hospital to improve their services and overall performance. However, if the management of the hospital cannot provide or improve the service they will lose patients to other established hospitals. It can cause the hospital to face financial decline.

In addition, Baldwin (2005) stated that certain hospitals were favoured because of their ability to attract patients due to factors such as waiting time, convenience, certainty of treatment dates, and availability of transport. Although the reputation of the hospitals is important, it does not seem to be based solely on clinical outcomes, which are generally seen as given. Baldwin (2005) stated that specific health related issues would affect the hospital's reputation but it was the subjective assessment of the environment, ease of parking, facilities for visitors and perceived cleanliness that patients based their choice on. Baldwin (2005) also claimed that through good management, a trust could gain competitive advantage through initiative such as clean hospital, better hospital food and ensuring patients' privacy and dignity.

Furthermore, Coulter *et al.* (2004) revealed that as waiting times start to decrease, other factors will become more important to patients such as the facilities and car parking. Coulter *et al.* (2004) found that patients tend to choose a hospital based on how well known it is. For example, people might choose the Portland Hospital because Victoria Beckham had her baby there.

Moreover, a quantitative research conducted by MORI Social Research Institute (2004) indicated that the residents in the Thames Villey welcome the concept of more choices of hospital. The study found that the three most important factors in the choice of hospitals for the general public were hospital reputation or star rating, the distance of the hospitals from home, and the reputation of the consultant.

As for selecting the physician in a fee-for service arrangement, Razzouk *et al.* (2004) stated that the important factors considered by patients were price, location, accessibility, credentials of the physician, quality of admitting hospitals and physician interpersonal skill.

Consistently, it was mentioned by Cole (2004) that the most important criteria considered in selecting a medical centre by patients were physician expertise, friend's or relative's recommendations, number of physicians located at preferred hospital, physician available by phone, physician recommendation, cost, ease of scheduling and time spent waiting.

Besides research on factors influencing the selection of hospitals by patients, some research has been conducted with regards to the patient's expectation of the medical centre. Expectations have been defined by Gilbert *et al.* (1982) as an individual's thought or belief of future performance of a service, which are mainly influenced by personal experience, word-of mouth, as well as communication and organization's external communications exercise. Patients' expectations consist of physical quality, namely reception area, examination room

and medical equipment, while interactive quality is the contact between customers and service personnel and corporate quality, which are based on image and reputation.

Study by Coulter *et al.* (2005) that evaluated the London Patient Choice Scheme found that a high standard of cleanliness and length of waiting time were the two most important factors to patients when choosing a hospital. In addition, Liyanage and Egbu (2005), in their study, mentioned that cleanliness standards are highly influential in patients' choice of hospitals. This is because a poor standard of hygiene is regarded as increasing the risk of contracting infections.

Furthermore, there have been studies conducted on patients' perception towards medical centres. Perception has been defined by Teas (1993) as an individual's formed opinion of the experienced service. Liyanage and Egbu (2005), in their exploration of the role of facilities management, found that patients' perceptions of quality are not only based on clinical treatments but also on a range of other related support function factors. Pertinent to this, MORI (2004) identified that patients' perceptions on a hospital ward environment are influenced by factors affecting their ability to eat and sleep, feelings of security or insecurity, privacy in washroom areas and being able to see out of the window. According to Leonardi et al. (2007) and Juran (1988), patients at the time of admission might express only their critical need to get rid of their pain. However, when the patient is discharged they will evaluate the service

of the hospital according to various other hospital factors such as food, safety, noise, response time of the nurse, and physicians' competency.

#### THEORY USED

This study is based on the Theory of Reason Action (TRA). TRA is a model that finds its origins in the field of social psychology. This model was developed by Fishbein and Ajzen (1975). TRA defines the links between belief, attitudes, norms, intentions and behaviours of individuals. According to this model, a person's behaviour is determined by his behavioural intention to perform it. This intention is itself determined by the person's attitudes and his subjective norms towards the behaviour. Fishbein and Ajzen (1975) define subjective norms as "the person's perception that most people who are important to him think he should or should not perform the behaviour in question. This theory can be summarized by the following equation:

Behavioural intention = attitude + subjective norms.

According to TRA, the attitude of a person towards a particular behaviour is determined by his beliefs on the consequences of this behaviour, multiplied by his evaluation of these consequences. Belief is defined by the person's subjective probability that performing a particular behaviour will produce specific results. This model therefore suggests that external stimuli influence attitudes by modifying the structure of the person's beliefs. Moreover,

behavioural intention is also determined by subjective norms that are themselves determined by the normative beliefs of an individual and by his motivation to comply to the norms.

TRA also claims that all other factors which influence the behaviour will only do so in an indirect way by influencing the attitude or subjective norms. Fishbein and Ajzen (1975) refer to these factors as being external variables. These variables can be, for example, the characteristics of the tasks, the interface or the users, the type of development implementation and the political influence, and the organizational structure. According to Sheppard *et al.* (1998), a meta-analysis on the application of TRA showed that this model can produce good predictions of choices made by an individual when facing several alternatives.

#### THEORETICAL FRAMEWORK

The theoretical framework used in this study is shown in the Fig.1.

## Hypothesis Development

The following hypotheses are developed based on past literature.

- H1: Consumers will choose which private medical centre they want to go based on waiting time.
- H2: Consumers will choose which private medical centre they want to go based on its environment.
- H3: Consumers will choose which private medical centre they want to go based on the reputation of consultants.
- H4: Consumers will choose which private medical centre they want to go based on the facilities offered.
- H5: Consumers will choose which private medical centre they want to go based on cost.

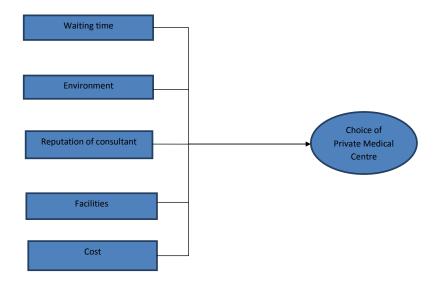


Fig.1: The theoretical framework

#### METHODOLOGY

The samples in this study focused on the customers of private medical centre (no matter light, medium or heavy users) of this choosing category. Serdang and Kajang areas were used as a sample frame. These areas were chosen because there are several private medical centres that are operating in the area such as Kajang Plaza Medical Centre, KPJ Health Care Kajang, Kajang Medical Centre Sdn. Bhd., and Kajang Specialist Maternity and Surgery Sdn. Bhd. Convenience sampling was used in this study. Data were collected using a structured questionnaire that was personally administered

# Measuring Instrument

There are five factors used for measuring the choice of private medical centre in this study; these are waiting time, environment, reputation of consultants, facilities and cost. There were 8 questions on waiting time and environment each, 9 questions on reputation of consultants, and 7 questions on facilities and cost. The respondents responded on a scale which ranged from 1 (strongly disagree) to 5 (strongly agree). All measures for the construct were taken from some previous studies (see Angelopoulou et al., 1998; Appleby et al., 2003; Choi et al., 2003), which were carried out from a service perspective. Dependent variables in this study (waiting time, environment, reputation of the consultant, facilities and cost) were operationalized through category 1, which represents choosing the private medical centre and 0 for otherwise.

### Analysis of Data

Data in this study were analyzed using SPSS. Statistical tools used are frequency analysis, factor analysis, reliability analysis and regression analysis.

#### **FINDINGS**

From the total of 155 respondents taking part in this study, majority of them are females (73%), of Malay ethnicity (78%), not married (71.6%) and aged between 25-35 years (67%). It is interesting to note that almost half of the respondents are working in the private sector (41%), and 47% are earning between RM 1000 to RM 3000. More than half (58.1%) of the respondents are degree holders.

TABLE 1 Profile of the Respondents

Variables	Frequency	%	
Marital status			
Not married	44	28.4	
Married	11	71.6	
Age (years)			
24 and below	26	16.8	
25-34	104	67.1	
35-44	16	10.3	
45-54	9	5.8	
Gender			
Male	42		
Female	113	72.9	
Ethnic			
Malay	121	78.1	
Chinese	25		
Indian	9	5.8	
Education			
SPM	23	14.8	
Diploma	20	12.9	
STPM	9	5.8	
Degree	90	58.1	
Master	13	8.4	

TABLE 1 (continue)

Occupation			
Government Sector	18	11.6	
Private Sector	64	41.3	
Self-Employed	31	20	
Others	42	27.1	
Income			
RM1000 and below	31	20	
RM1001 - RM3000	73	47.1	
RM3001 - RM5000	43	27.7	
RM5001 - RM7000	6	3.9	
RM7001 and above	4	1.3	

For the reliability of the variable used, all were found to have shown satisfactory Cronbach Alpha values between 0.632 and 0.805 (refer to Table 2). Thus, all the variables (waiting time, environment of the medical centre, reputation of the consultants, facilities and cost) are considered as reliable and the questions can be trusted to determine the findings of this study.

TABLE 2 Reliability analysis, Means and Standard Deviation of the Study Variables

Variables	Number of items	Cronbach Alpha	
Waiting Time	8	0.805	
Environment	8	0.793	
Reputation of consultant	9	0.632	
Facilities	6	0.800	
Cost	7	0.732	

Note: All items use a 5 point Likert scale (1= strongly disagree, and 5 = strongly agree)

Multiple regression was used to test all the hypotheses postulated in this study. The results in Table 3 show the relationship between all the factors and the choice of private medical centre. The model was found to be able to explain 19.6% of the

total variance in choice of the private medical centre (R2=19.6, p-value<0.01). In addition, there are three dimensions which have positive influence on the choice of private medical centre, namely, environment of medical centre ( $\beta$ =0.344, p-value < 0.05), facilities in the medical centre ( $\beta$  = 0.356, p-value < 0.05), and cost charges of medical centre ( $\beta = 0.331$ , p-value < 0.05). The positive relationship between environment and the choice of private medical centre indicates that Malaysian consumers will choose a medical centre that provides up-to-date equipment, a conductive treatment room, and modern furnishing arrangement. This is supported by Miller (2006) who found that comfortable environment is important in order to attract customers to choose a medical centre because the better environment will make them more satisfied and interested in choosing the medical centre. As for the positive relationship between facilities and choice of private medical centre, it indicates that the convenient location of a medical centre, parking space, amenities and facility for visitors will make customers feel happy and satisfied with the medical centre. Costs also have a positive relationship with the choice of private medical centre among Malaysians. They prefer going to private medical centre that impose low cost.

From Table 3, there is no significant relationship between the choice of medical centre and waiting time (P=0.459,  $\alpha$  = 0.005). Meanwhile, the negative relationship ( $\beta$ = - 0.083) indicates that when customers need to wait to obtain the services at

medical centre, it will negatively influence the choice of private medical centre. This result is supported by Lothar (2008), which shows that Malaysian culture is more to polychromic type. It means that the maximum waiting time for Malaysian is only about 15 minutes to 20 minutes when they have an appointment with other people. Hence, a medical centre should ensure that their customers do not have to wait to get services from the staff more than that time range because it can cause customers to lose their patience. The table above also shows that there is no significant relationship between the choice of medical centre and the reputation of consultants (P=0.444,  $\alpha$ = 0.05). The negative relationship ( $\beta$ =0.058) indicates that the consultant factors such as experienced consultant, consultants allowing patients to ask questions, the ability of consultants to remember patients' names and faces, etc. negatively influence the choice of private medical centre among Malaysians. This finding is supported

by Baldwin (2005) who mentioned that certain hospitals are favoured because of their ability to attract potential patients due to certain factors such as waiting time, convenience, certainty of treatment dates and the availability of transport.

#### DISCUSSION

The objective of this study is to investigate the effects of waiting time, environment, reputation of consultant, facilities and cost on the choice of private medical centres among Malaysian consumers. The statistical results show that three factors, namely, environment, facilities and cost have significant impacts on consumers' choice of private medical centre. Other factors, waiting time and reputation of consultants, have negative effects on the choice of private medical centre. Interestingly, the results of this study contradict with the previous studies carried out in different settings. For example, Coulter *et al.* (2004) revealed that

TABLE 3
The Regression analysis of waiting time, environment, reputation of consultant, facilities and cost with choice of private medical centre.

	R	R <sup>2</sup>	Std. error Estimate	Sig. F	
	0.443	0.196	0.22407	0.000	
	Unstandardized coefficient		Std.coeff		
	Beta	Std.Error	Beta(β)	t	
Sig.					
1 (Constant)	3.548	0.247		14.353	0.000
Waiting time	-0.039	0.053	-0.083	-0.742	0.459
Environment	0.185	0.062	0.344	3.007	0.003
Consultant	-0.037	0.049	-0.058	-0.767	0.444
Facilities	-0.188	0.053	0.356	-3.566	0.000
Cost	0.172	0.051	0.331	3.396	0.001

Note: dependent variable choice of private medical centre

as waiting time starts to decrease, other factors become more important to patients such as the facilities and car park. Coulter *et al.* (2004) found that a patient tended to choose a hospital based on how well known it was. The findings of this study also revealed and identified three variables (environment, facilities and costs) as playing a role in the choice of a private medical centre.

# RECOMMENDATIONS FOR PRIVATE MEDICAL CENTRE

Recommendation 1 – Give a reasonable charge to patient

This study shows the positive relationship between costs with the choice of private medical centre. Majority of the respondents agreed that they would consider the cost factor when choosing a medical centre to go to. Most of them stated that they would check the cost charges first before they opt for the medical centre that they want to go to. For that reason, private medical centre should ensure that they charge reasonable prices because customers will see this as an important criterion in choosing which medical centre to go.

Recommendation 2 – More improved environment and comfortable environment to induce more patients

This study found that the environment factor has a positive relationship with the choice of a medical centre. In particular, patients of private medical centre require a more comfortable and conducive environment as they are 'paying' customers. For this reason, this study recommends that medical centre should provide a relaxing and more peaceful ambience that will definitely de-stress patients and thus, hastening the healing process.

Recommendation 3 – Improve Facilities to Attract More Patients, Upgrade to Higher Standard Facilities

From the profile in this study, it was found that patients who came to the private medical centre are from the middle and high- income bracket4. Thus, higher standard of facilities are expected from the private medical centre. The patients are expecting their money's worth. One of the recommendations from this study is on parking spaces. It is a big issue for consumers of government hospitals. The management of the private medical centre must provide ample parking spaces for the patients and the visitors as this will ease the flow of users to the medical centre. Besides that, the management of private medical centre has to upgrade their basic amenities. For example, walkways and corridors should be well-lit, while signage or instructions have to be clearly displayed to avoid confusion and stress among consumers. This study also recommends that treatment rooms in private medical centre must be given top priority, as it is a basis for choosing a medical centre. Therefore, medical centre must be equipped with sophisticated and most up-to-date machine and equipment.

<sup>&</sup>lt;sup>4</sup> Please refer Table 1 (page 8)

# LIMITATION OF THE STUDY AND FUTURE RESEARCH DIRECTION

The current research endeavor also has several limitations. The study was conducted using only two sample frames; thus, it is recommended that future researchers take sample frame of other categories in Malaysia so as to enable them to conduct a comparative analysis across diverse area classifications. Researchers also can compare factors among urban and rural areas. In order to have more accurate findings, longitudinal research design should be considered in future investigations. Future researchers should also observe the effects of the demographic factors on the choice of private medical centres among Malaysians.

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