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Conceptual Development on Factors Influencing Customer Satisfaction in Private Rehabilitation Hospitals in Klang Valley

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Abstract

Rehabilitation medicine is a specialized interdisciplinary medicine that requires the cooperation and involvement of multiple healthcare teams working together towards the recovery and improvement of the quality of the involved patients. The increasing incidence of acute diseases such as stroke and the ageing population brings an increasing need for rehabilitation in Malaysia. However, there are limited academic studies conducted on customer satisfaction in private rehabilitation services, especially in Malaysia. Thus, this conceptual paper is visualized to demonstrate the antecedents of customer satisfaction in private rehabilitation hospitals from a Malaysian perspective, particularly in Klang Valley. A total of fifteen studies with regard to patient and family satisfaction in various healthcare services were reviewed and analysed. In order to determine the independent variables for conceptual framework development, a frequency analysis was done. The finding specified that information communication, treatment service quality, healthcare delivery process, infrastructure and facilities and physician factors are significantly influencing customer satisfaction in healthcare services. Based on the conceptual framework, an empirical study is planned in the future to investigate the factors influencing customer satisfaction in private rehabilitation hospitals. All five independent variables are found to correspond with the five dimensions of the SERVQUAL model.

Keywords: Patient satisfaction, Family satisfaction, Customer Satisfaction, Rehabilitation, Malaysia

1. Introduction

The improvement of quality of health resulted in increasing utilization of health services. According to World Health Organization, the future of healthcare is now towards patient-centred approach, an evidence based practice towards achieving high quality of healthcare. This describes patient as a whole person with multifaceted needs rather than only focusing on disease treatment [15]. Patient-centred approach is also proven in relation to value-based healthcare models that are globally adopted which is focusing on maximizing value for patients [29]. Healthcare quality assessment is important to drive organization towards this patient-centred approach. One way of assessing the service is by exploring patients'



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satisfaction towards the healthcare service and identifying the factors influencing the satisfaction. Satisfaction with the service experience will improve trust and commitment towards healthcare provider.

According to World Health Organization, the numbers of population who needs rehabilitation is increasing due to increasing people with disabilities, aging population and increasing health issues globally [37]. 'Rehabilitation 2030 Initiative' was launched by WHO in 2017 to emphasize on the importance of rehabilitation and to strengthen the healthcare system coordination by the related stakeholders to achieve quality and timely rehabilitation. This is in line with Sustainable Development Goal 3 regarding Good Health and Well-being [38]. Rehabilitation medicine is a type of specialized medicine that has interventions designed to maximize the function and reduce the disability of individuals with health conditions [39]. It is a part of medical model that promotes person centred enablement which aim at reduction and prevention of impairment in order to minimize the disabling sequelae [35]. Patients who need rehabilitation include those with chronic illnesses such as cancer, acute illnesses such as after surgery or fractures that leads to lower mobility and subsequent stroke or traumatic brain injury that leads to paralysis and inability to eat or speak which resulted in disabilities and low quality of life. Rehabilitation also involves children of cerebral palsy and trisomy-21 who needs continuous training physically and cognitively [19]. Rehabilitation involves multiple teams that work together with the physician to achieve a certain goal that is set based on patients' health condition and prognosis. Teams involve include physiotherapy, occupational therapy and speech and language therapy [6].

However, centralized rehabilitation centres with the involved teams are still scarce in Malaysia with most centres are outpatient based focusing on physiotherapy or occupational therapy services. Rehabilitation services in Malaysia in the government setting include rehabilitation outpatient clinics, rehabilitation department in government hospitals which mostly has limited bed availability , SOCSO rehabilitation centres which provide placement for those who made SOCSO contribution and are aimed for return to work programme and a specialized rehabilitation hospital in Cheras, Kuala Lumpur. With the increasing demands for rehabilitation services, specialized private hospitals have also provided the services as part of treatment care after acute events. According to a report by Ministry of Health Malaysia, visits to rehabilitation centres have increased by 33.2% in two years between 2015 to 2017, with average patient expenditure of RM 12,000 to RM 60,000 [22]. Following increasing awareness and market demands for rehabilitation services, two stand-alone private hospitals started their business in Kuala Lumpur by the year 2018-2019 [7,30]. These hospitals targeted patients that have been discharged from acute specialized hospitals but still need to continue their rehabilitation treatment. However, following the discharge after the acute events, rehabilitation treatment was made as an option for these patients. Furthermore, there is still lack of information regarding private rehabilitation services which are still growing in Malaysia.

Customers satisfaction is one of the important element in the current business of private rehabilitation hospitals for sustainability of the business. Satisfied patients during rehabilitation process is crucial as it is related with therapeutic treatment success and the compliance to the treatment management [14]. Family or caregivers' satisfaction are also of importance in rehabilitation as their involvement in the care process is rudimentary to ensure the effectiveness of the intervention, continuity of care, support system and assisting disabled patients in their daily life activities [5]. With this importance, customers satisfaction in private rehabilitation hospitals which include patients and family or caregivers' satisfaction are chosen in



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this study context. Satisfaction with healthcare services frequently impact the care quality which leads to direct impact on essential services competency and marketability. Although customers' satisfaction is multifaceted, rehabilitation professionals may use the feedbacks for improvement of the practices and services quality [14]. By focusing on patient-centred services, patients' satisfaction can be achieved which will result in customers loyalty, returning patients and a positive word-of-mouth as a form of marketing by the existing customers [4]. As rehabilitation is a continuous process after acute event such as stroke and chronic illnesses like cancers or brain injury, satisfied and loyal customers will continue with the treatment and services which will result in business profitability.

This conceptual paper will focus on identifying the factors influencing customers satisfaction in private rehabilitation hospitals in Klang Valley. It is believed that by maximizing customers satisfaction with the services, customers loyalty can be gained which will result in business gains and feedbacks received will be beneficial at managerial level for service quality improvement.

2. Problem Statement

Stroke incidence in Malaysia is increasing with increasing prevalence of risk factors such as hypertension, diabetes, hyperlipidemia and obesity [33]. There were 47,911 incident cases in 2019 according to a study by Tan & Venketasubramanian in 2022. These surviving stroke cases will eventually need rehabilitation services either to patients or to family as part of caregiver training and support. Due to its importance, rehabilitation services has been reviewed and consolidated in line with 9th Malaysian Plan, which is to optimize the resources and deliver patients with appropriate services [23]. Rehabilitation patients also consist of patients post-surgery, cancer patients and children with disabilities. With increasing awareness regarding rehabilitation in the community, there is increasing needs for the services thus the presence of private rehabilitation hospitals to support the lack of bed availability in the government settings. Rehabilitation is a long term continuous process of recovery that involves multiple stakeholders including medical team and family. However, customers satisfaction rate and the factors affecting them are still unknown to the business but is crucial for business sustainability. Therefore, exploring customers satisfaction, towards patient-centred care services play an important element in the business as provider must constantly strive for high quality service delivery. Moreover, highly satisfied customers will lead to improvement of health condition and customers loyalty which will result in positive business revenue [4].

There are many studies conducted in relation to patients satisfaction using qualitative and quantitative method. Most studies of patients' satisfaction were focusing on either inpatient hospital services [13] or specialized hospitals [2] or outpatient services in specific centres such as primary health care clinic [1,11] or physiotherapy centre (14). There are still limited studies that focused on customers satisfaction on rehabilitation services. As of current, most studies on rehabilitation services are present as either patient satisfaction [21] or family satisfaction [5,26] with lack of studies focusing on both [32] present globally which is important in rehabilitation treatment. Based on a study done by Shigemoto et. al in assessment of satisfaction with rehabilitation among cancer patients and their families in Japan in 2007, it was concluded that the factors influencing patient and family satisfaction are overlapped in rehabilitation services as family members are actively involved with the treatment process as caregivers accompanying patients. The overlapped factors found were emotional state, awareness and communication. Nonetheless, our understanding regarding customers satisfaction which involve patient and family in rehabilitation



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services specifically private rehabilitation hospitals is still limited in Malaysia. Exploration of this gap with research will be beneficial for this new and growing business prospect for the importance of business sustainability.

Studies have previously analysed over 30 antecedents to understand factors influencing customers satisfaction with medical services either inpatient, outpatient and rehabilitation services. It was also found that some studies used customers satisfaction as mediator that is positively related with all the antecedent factors, in which customers loyalty is the dependent variable. The antecedents of treatment service quality, healthcare delivery process, infrastructure and facilities, information communication and physician factors are found to be the factors influencing customers satisfaction. In a different study, communication, convenience, quality time and person-focused care are all having positive impact towards patients satisfaction in physiotherapy outpatient department [14]. Angelino et al., (2016) highlighted that hospital facilities, treatment quality, relationship with healthcare staffs and outcome of rehabilitation are the basic factors in measuring family satisfaction with inpatient rehabilitation care in Italy. In a study done by Amin & Nasharuddin (2013) to investigate the quality of hospital service and the effects on patient satisfaction and behavioural intention to build long-term relationships with public and private hospital provider in Malaysia, it is found that medical service, admission, discharge, social responsibility and overall service has significant relationship with hospital service quality.

There is still limited study that examine the factors influencing customers satisfaction in private rehabilitation hospital in Malaysia adapting the most commonly used antecedents in the academic research. Thus, this conceptual paper is constructed to combine the most used factors and to develop hypotheses and conceptual framework for future research on factors influencing customers satisfaction in private rehabilitation hospital in Malaysia.

3. Research Question and Objective

The problem statement identified that there are limited studies to explore the most used antecedents and their influence towards customers satisfaction in private rehabilitation services. The research question for this conceptual paper is : What are the most used antecedent factors that influence customers satisfaction in private rehabilitation hospitals in Klang Valley, Malaysia ?

This conceptual paper has the objective to identify the most studied factors that influence customers satisfaction in private rehabilitation hospitals in Klang Valley, Malaysia, to develop hypotheses based on the identified factors and to develop conceptual framework for the future research on customers satisfaction in private rehabilitation hospitals in Klang Valley, Malaysia.

4. Literature Review

4.1 Rehabilitation Medicine Service

Rehabilitation process involve multidisciplinary team with various rehabilitation expertise and skills to provide coordinated and professional assistance [19]. They work together with a specific intervention and share common objectives to help individuals [16]. In cancer rehabilitation, rehabilitation is designed to prevent secondary impairments, deterioration of general health condition and improving the quality of life. This includes improvement of deconditioning, mobility and activities of daily life [32]. In a different study



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by Ngubane and Chetty (2016), children with cerebral palsy requires rehabilitation to improve function and to prevent secondary complication.

The role of rehabilitation with patient-centred goals has proven to be successful with patients who completed the planned program and has managed to assist the families to develop strategies of coping mechanism and training as caregivers [36]. In Canada, a care designation called complex continuing care (CCC) and rehabilitation is introduced to address post-critical care setting patients who still requires continuous care before discharging home. For example, post stroke patients and patients recovering from hip replacement surgery [21].

In Malaysia, the improvement of healthcare sector has led to reduction of mortality rate. The demand for rehabilitation is increasing due to the advancement in technology and medical services. Patients are left with more complex and severe disabilities which require rehabilitation attention. Rehabilitation services are provided by government and private agencies. This includes public and private hospitals, community-based rehabilitation centres, clinics and non-government organisations (NGOs) [34].

4.2 Customers Satisfaction

Satisfaction is the feeling of gratification and act in fulfilling one's needs or desires. In rehabilitation context, satisfied patients lead to better adherence to treatment and achievement of better life quality. Dissatisfied patients will discontinue treatment and may spread negative views to other clients [14]. Customers satisfaction which involves both patients and families are a major factor in the evaluation and improvement of healthcare quality. Previously, family satisfaction is accounted concerning patients with children, elderly with lack of cognitive capability or psychiatric patients. The increasing family involvement in the care system of rehabilitation especially with disabled patients justifies the needs for evaluation of their satisfaction is necessary [5]. Customers satisfaction made the medical intervention to improve the quality of life possible in cancer rehabilitation patients [32]. The level of satisfaction is directly related to compliance with rehabilitation and intervention commitment among the family of patients with cerebral palsy. This impacts the rehabilitation goals outcome and impacts on child's psychology [26].

The approach of the management of healthcare organizations towards improvement of patient satisfaction and good health outcomes common quality made ISO 9000:2008 possible. Service quality values are directly related with achieving patient satisfaction that leads to loyalty and increasing market share [31]. Satisfied patients will recommend the services to relatives and friends on top of compliance and higher service use which will give positive impact of profitability [25]. Patient satisfaction reflects the extend of which the service used suggests positive feelings in relation to the service quality by the provider. Providers have their own strategies to achieve customers satisfaction including new technology approaches. Satisfied patients are associated with 'Word of mouth' marketing. They tend to give referral and positive recommendation to future clients [25]. Patient satisfaction is a multifaceted frame with many variables. Service quality affects patient satisfaction which influences patient's loyalty [24]. The more satisfied customers lead to greater customer retention and recommendation willingness [10]. Customers satisfaction has significant positive relationship with customers loyalty [4] and enhancing this is important in maintaining long term relationship between patients and healthcare provider [12]. In another study by



Kessler and Mylod (2011), patients that value their relationships were most likely to stay loyal with the providers. Improvement of medical service qualities are achievable by analysing patient's satisfaction factors with aim to improve customers retention [1].

4.3 SERVQUAL Model

In 1985, Parasuraman et al made a significant finding on service quality model that was later used extensively in marketing world. SERVQUAL model defines service quality as comparison between customer perception and service expectation and the actual performance perceived by the customer provided at a certain time period. Parasuraman et al (1985) defines service quality in five dimensions which are tangible, reliability, responsiveness, assurance and empathy. This model has managed to provide a comprehensive concept of service quality with measurement instrument and provide better diagnostics and practical implications for provider. SERVQUAL model has been adapted to measure healthcare service quality by many medical researchers around the world. Al-Neyadi et al. (2016) tested SERVQUAL in measuring patient's satisfaction of healthcare services in the UAE hospitals and found that the dimension of assurance was perceived as the highest while responsiveness was rated as the least important. Sharma (2017) expanded the technical-functional of SERVQUAL quality model to 5 Quality Dimensions of process, object, interaction, infrastructure and atmosphere in measuring patient satisfaction and brand loyalty in health-care organizations in India and found that the quality of infrastructures has the highest significance in the result. Both studies agreed that SERVQUAL dimension is consistent and a reliable tool to measure healthcare service country.

According to Naik et al. (2015) SERVQUAL instrument is found suitable in healthcare setting but modification is needed to suit studied environments. In healthcare point of view, tangibles is part of the physical or external factors of the service such as infrastructure, facilities, food and housekeeping services which is important as the first impression. Reliability is the ability to perform the service that is promised such as the process of nursing care, clinical care and the treatment quality. Responsiveness is the ability and availability to perform service promptly and positively in helping the customer such as the way of interaction and information communication. Assurance is the competency of the staff, knowledge and the ability to elicit trust and confidence such as the skill and experience of the physician and staffs. Empathy is the caring and attention that the firm provides to the patients during healthcare delivery process [25]. In a study in Czech Republic, the most significant factor of satisfaction is physician skill and expertise and the least significant factor was in relation to the infrastructure and facilities [13].

5.0 Research Methodology

A literature review related to patient and family satisfaction was conducted to determine and analyse the factors influencing customers satisfaction in various healthcare services. Previous studies were retrieved from online journals such as Taylor and Francis Online, Emerald, PubMed, BMC Health Services and Plos One. Keywords that were used to search for the articles were patient satisfaction, family satisfaction, customer satisfaction, healthcare, rehabilitation, Malaysia and also a combination of these keywords. There are several related studies that were conducted using quantitative and qualitative methods. The studies covered global geographical locations such as Europe, North America, Asia, Middle East and Africa in between 2007 to 2022. It was then narrowed down to 15 articles that particularly investigated factors influencing patients and family satisfaction in rehabilitation and related healthcare settings. All 15



articles were tabulated in research summary table comprising of author name, title, publication and year, objective, methodology, dependent variable, independent variable, mediator, moderator, findings, research limitation and recommendation (Appendix 1). A frequency analysis was done to identify the occurrence number of the dependent variable used in all 15 articles. Three frequency tables were further generated, each table for independent variable, mediator and moderator obtained from the 15 articles to identify the most constructs used for customers satisfaction in healthcare services. The alphabet "A" represents article, hence, "A1" represents "Article 1", "A2" represents "Article 2" and so on. The alphabet "F" represents "Frequency". All of the four tables are presented and will be discussed in the next section.

6.0 Findings and Conceptual Model Development

The findings of the study are based on the frequency analysis of the variables used in previous studies related to factors affecting customers satisfaction in healthcare services. Fifteen studies related were organised in four separate tables as regard to dependent variable, independent variables, mediators and moderators. Table 1 represent 3 dependent variables used in the previous studies on factors affecting customers satisfaction in healthcare services.

					-					-	•					
<u>D</u>	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	F
Patient		Х			Х	Х	Х	Х	Х	Х	Х	Х		Х		10
satisfaction																
Customer	Х		Х	Х												3
loyalty																
Family													Х	Х	Х	3
satisfaction																

Table 1: Dependent Variables with Frequency Value

From the frequency table, it was found that there are 12 out of 15 studies were investigating customers satisfaction as dependent variable that include patients and/or family satisfaction which will be chosen in this study. There are 3 out of 15 studies that were investigating customers loyalty in which customers satisfaction is the mediator. These three articles are chosen for literature review as the articles explains clearly on the relationship between antecedent factors of customers satisfaction, with customers satisfaction as the mediator and its significant relationship with customer loyalty as the dependent variable.

Table 2 represents 36 independent variables used in the previous studies on factors affecting customers satisfaction in healthcare service.

r																
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A1	A1	A1	A1	A1	A1	F
										0	1	2	3	4	5	
Treatment	Χ	X	Χ		Χ			Χ				Χ	Χ		Χ	8
service quality																
Customers'	Х															1
feedback																

 Table 2: Independent Variables with Frequency Value



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Healthcare	X						X			X		X			X	5
delivery process																
Infrastructure/	Χ				Χ					Χ			Χ			4
Facilities																
Interaction &	Χ	Χ		Χ	Χ		X		Χ		Χ	Χ		X	Χ	10
Information																
Communication																
Atmosphere	Х											Х				2
First impression		Х														1
Nursing care		Х														1
Food &		Х														1
housekeeping																
services																
General service		Х	Х					Х								3
Admission			Х													1
Discharge			Χ					Х								2
Social			Χ													1
responsibility																
Physical				Х												1
environment																
Reliability				Х		Х										2
Customer friendly				Х												1
staff																
Responsiveness				Х												1
Privacy & safety				Х												1
Overall				Х												1
satisfaction																
Empathy					Х	Х										2
Physician factors					Χ					Χ	Χ				X	4
Waiting time					Χ											1
Accessibility/					Х		Х									2
Healthcare																
location																
Tangibles						Х										1
Responsiveness						Х										1
Assurance						Х										1
Medical staff								X					Х			2
Convenience/	1					1			Х	Х						2
Affordability																
Quality time									Х		Х					2



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Patient-focused					Х		Х				2
care											
Patient's						Х					1
confidence											
Outcome/								Х	Х		2
Effectiveness											
Awareness									Х		1
Willingness									Х		1
Emotional state									Х		1
Family-centred										Х	1
care											

The frequency value shown in Table 2 ranges from a minimum frequency of one and a maximum frequency of ten. The repeated adoption of some factors from different studies prove the significance of the variables with regards to factors affecting customers satisfaction in healthcare services. Variables with frequency value of four and above are established as the independent variables for the development of the conceptual framework. The other variables with frequency below than four are ruled out as the frequency of variable occurrence are not significant enough to be justified in the framework.

Table 3 shows the analysis of the mediator. There were only 3 studies that incorporate a mediator in the research.

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	F
Customer	X		Х	Х												3
satisfaction																

Table 3: Mediator with Frequency Value

Customers satisfaction was studied in there different articles as mediator towards patients loyalty. It is perceived that customers satisfaction construct is significantly related with the independent variables. Customers satisfaction as mediator has a positive relationship with customers loyalty as proven in previous studies. However, as this study is focusing on customers satisfaction as the dependent variable, no mediator will be chosen in the conceptual framework.

	Α	Α	Α	Α	Α	Α	Α	Α	А	A1	A1	A1	A1	A1	A1	F
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Feelings of well-	Х															1
being																
Nationality					Χ											1
Health status					Χ				Х							2
Sociodemograph							Х									1
ic																

Table 4: Moderator with Frequency Value



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Pain level					Х	Х				2
Frequency of						Х				1
visits										
Institutional						Х				1
factors										
Gender							Х			1
Length of stay								Х		1

Table 4 shows the analysis of the moderator that were used in 7 different studies. Each of the moderators has a frequency of 1 to 2 which is insignificant to be considered in concept development.

				- 1							-					
	А	Α	Α	Α	А	Α	А	А	А	A1	A1	A1	A1	A1	A1	F
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Information	Х	Χ		Х	Х		Х		Х		Х	Х		Х	Х	1
Communicatio																0
n																
Treatment	Х	Х	Х		Х			Х				Х	Х		Х	8
Service																
Quality																
Healthcare	Х						Х			Х		Х			Х	5
delivery																
Process																
Infrastructure/	Х				Х					Х			Х			4
Facilities																
Physician					Х					Х	Х				Х	4
factors																

Table 5: Most Frequent Independent Variables used in previous studies

Table 5 illustrates all the independent variables with frequency value of four and above which are chosen for the development of conceptual framework.

The definition of the independent variables is described below along with the hypothesis development of each construct. Non-directional hypothesis is adapted in the development.

5.1 Information Communication

Information communication is the act in providing customers with detailed explanations, acknowledging and hearing to their issues in an effective and observant manner. It involves the positive way of interaction and counselling by staff [18]. Communication is obtaining information on medical condition, diagnosis, treatment and results in the language patients can understand and at the same time acknowledging their concerns [25]. Thus, it is concluded that as healthcare system is dealing with sick and unwell patients that is prone to be emotionally unstable, patients and family must be well explained and informed with their disease condition, treatment plan, prognosis and counselling in a language that is understandable and interpersonal interaction must be present with concern and empathy by healthcare professionals in order to gain patient's trust. Communication falls under the dimension of responsiveness under SERVQUAL model as explained by Naik et al. (2015) in adaptation of SERVQUAL model in determining factors



influencing patients satisfaction at hospitals in India. The dimension of responsiveness was perceived as the least important in the five dimension of SERVQUAL in a study done by Al-Neyadi et al. (2016) in measuring patient's satisfaction in healthcare service in UAE. Several studies done in determining customers satisfaction factor in healthcare settings found that positive healthcare staff interaction and the efficient method of information communication by the physician has a significant relationship with customers satisfaction in multiple healthcare settings [1,25,31]. Hence, it is hypothesised that :

H1: There is a relationship between information communication and customers satisfaction in rehabilitation hospital

5.2 Treatment Service Quality

Treatment service quality is a core construct of hospital services. It includes the width and depth of clinical care and medical services provided to the patients. It involves patient's experience with the medical process including diagnosis, treatment and outcome process with the organization [25]. According to Sharma (2017) in a study which expanded the technical-functional model of SERVQUAL in India, the technical treatment quality falls under the quality of object which patients receive during visit to hospital. It imparts the healthcare organization vision and is beneficial to create long-term satisfaction. Treatment quality satisfaction level may be affected with the introduction of new innovative process, treatment modification and diagnostic procedure. In view of patient vulnerabilities, treatment consistency and healthcare process are important and need to be individualized. The follow up after discharge is also of important element in treatment service quality [13]. Treatment service quality is a part of reliability dimension under SERVQUAL model as explained by Naik et al. (2015). Several studies done in determining customers satisfaction factor in healthcare settings found that a high quality treatment procedure, process and service has a significant relationship with customers satisfaction in multiple healthcare settings [21,25,31]. Hence, it is hypothesised that :

H2 : There is a relationship between treatment service quality and customers satisfaction in rehabilitation hospital

5.3 Healthcare Delivery Process

A simple definition of healthcare delivery process is the quality of healthcare activities delivered to the customers. It includes waiting times, the time needed to understand the issue and the time taken for services to be provided. Speed and ease of admission and waiting time for medication, investigation and ease of discharge are the example of healthcare delivery process [31]. The waiting time for consultation was significantly associated with customers satisfaction in which they are negatively associated ; Customers satisfaction is reduced when the waiting time is longer [40]. Healthcare delivery process is a part of empathy dimension under SERVQUAL model as explained by Naik et al. (2015) as it involves the caring and attention that the firm provides to the patients during delivery process. Multiple studies done in determining customers satisfaction factor in healthcare settings found that an efficient healthcare delivery process has a significant relationship with customers satisfaction in multiple healthcare settings [21,31,40]. Hence, it is hypothesised that :



H3: There is a relationship between healthcare delivery process and customers satisfaction in rehabilitation hospital

5.4 Infrastructure and Facilities

Infrastructure and facilities are the essential basic resources that are important for the performance and provision of healthcare services. They include physical appearance of the room, cleanliness of the hospital, equipment and food review [31]. In interdisciplinary rehabilitation point of view, facilities also include the machines, equipment technology and the skills of the therapist involve with the healthcare delivery [5]. Infrastructure and facilities is a part of tangible dimension under SERVQUAL model as explained by Naik et al. (2015) as it is related to the physical or external factors of the service. Multiple studies done in determining customers satisfaction factor in healthcare settings found that a high quality infrastructure and updated facilities that will ease patient's performance has a significant relationship with customers satisfaction in multiple healthcare settings [1,31]. Hence, it is hypothesised that :

H4 : There is a relationship between infrastructure and facilities with customers satisfaction in rehabilitation hospital.

5.5 Physician Factors

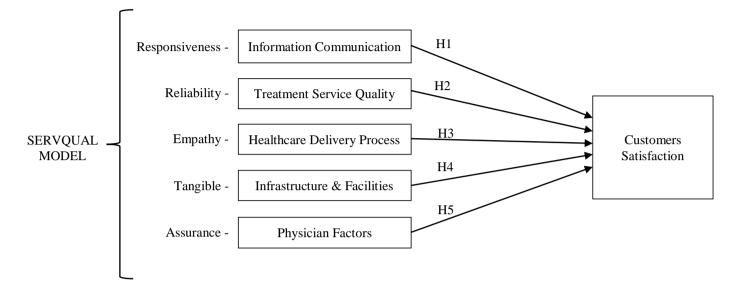
Physician factors include the skills and specialty that the physician had and the experience perceived by the customers. It comprises of communication skill, accuracy of diagnosis, inquiry and examination by the physician, medical advice and treatment plan provided [11]. In a study done by Alhashem et al. (2011), the duration of consultation also plays a part in patient satisfaction with the physician in which, longer consultation time leads to higher patient satisfaction rate. Physician factors play an important role in healthcare as they will be the core of customers' expectation and confidence. Physician factors is a part of assurance dimension under SERVQUAL model as explained by Naik et al. (2015) as it explains the competency, knowledge and the ability to elicit trust and confidence. The dimension of assurance was perceived as the most important in the five dimension of SERVQUAL in a study done by Al-Neyadi et al. (2016) in measuring patient's satisfaction in healthcare service in UAE. Multiple studies done in determining customers satisfaction factor in healthcare settings found that the competency, skill and experience of the physician involved in patient's treatment has a significant relationship with customers satisfaction in multiple healthcare settings [1,26,11]. Hence, it is hypothesised that :

H5 : There is a relationship between physician factors and customers satisfaction in rehabilitation hospital.

Based on the findings obtained during the development of this conceptual paper, a conceptual framework that consist of five independent variables was developed for future study on factors influencing customers satisfaction in private rehabilitation hospital (Figure 1).



Figure 1. Conceptual framework on Factors Influencing Customers Satisfaction in Private Rehabilitation Hospital



6.0 Future Work and Conclusion

This conceptual paper was done to develop conceptual framework based on the most frequently used variables that were adopted from previous research in their study on factors affecting customers satisfaction in various healthcare sectors to be adapted in private rehabilitation hospitals setting. Fifteen studies were identified in relation to patients satisfaction and family satisfaction in healthcare services. The frequency analysis reveals five independent variables that were most commonly tested as regards to customers satisfaction factors in healthcare which are information communication, treatment service quality, healthcare delivery process, infrastructure and facilities and physician factors. All five independent variables are found corresponding with the five dimension of SERVQUAL model. An empirical study is planned in the future to test this conceptual model. Study will be done by adopting quantitative method, data collection will be in the form of cross-sectional questionnaire with individuals either patient or family as unit of analysis. In this study, the population will be the customers of private rehabilitation hospitals in Klang Valley. As of current, the number of new patients are about 100 per month for the hospitals. Therefore, the sample size of the study is 80. A probability simple random sampling technique will be adapted to reduce biased.

By studying and analysing the factors that affect customer satisfaction in private rehabilitation hospitals, healthcare managerial level will gain insights on the current status of their healthcare quality from customers' view and improve services based on the study findings. Rehabilitation medicine is a complex interdisciplinary specialty that requires cooperation and involvement of multiple stakeholders. As the patients are usually disabled and emotionally unstable, family will eventually be involved as caregivers. Hence, customers satisfaction which involve patient or family member is chosen in this study. Healthcare provider must constantly review and upgrade their service quality to gain competitive advantage in the industry and customers confidence and trust. As customers satisfaction is closely related with loyalty, gaining highly satisfied customers will influence positive ' Word of mouth' marketing and



recommendation to future clients. Customer retention as the output of satisfaction will lead to business profitability due to customers' willingness to spend which is important in business sustainability.

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