

## The Influence of Service Quality on Repatronage Intention: Examining Patient Satisfaction as Mediator

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**Abstract:** This study emphasises on examining the relationship between service quality and satisfactions towards patient's repatronage intention for obstetrics services in private hospitals in Malaysia. The conceptual framework is developed from the combination of the literature related to service quality to repatronage intention via the mediating effect of patient's satisfaction. The service quality dimensions consist of doctor's care, nursing care and medical treatment whereby they are group and known as technical quality. Furthermore, the technical quality of the Gronroo's model is suitable for measuring obstetric services. This study will generate the understanding on which factors will influence patient repatronage intention for the obstetrics service in private hospitals in Malaysia.

**Key words:** Repatronage intention, service quality, doctor's care, medical treatment, nursing care, satisfaction

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### INTRODUCTION

Malaysia is a developing country whose population reached almost 31 million people in January 2015. Malaysia's Gross Domestic Product (GDP) per capita in 2014 was recorded as US\$7304.14 (RM25,598.09) which placed the country at the world's average of 58%. Five sectors are contributing to the GDP of Malaysia namely, agriculture, mining, manufacturing, construction and services. During the first 6 months of 2015, there were four sectors, namely mining, manufacturing, construction and service have registered a positive growth towards the economy except the agriculture sector. Out of these, the largest contributor to the GDP during this period was from the service sector.

Based on the Eleventh Malaysia Plan, the service sector was given high priority as it has played a major role in accelerating the country's Gross Domestic Product (GDP) to 53% and an annual growth of 6.3% in 2015 during the Tenth Malaysia Plan as compared to 2011. In fact, the Department of Statistics Malaysia reported that the contribution of GDP from the service sector as of the second quarter of 2015 recorded an increase to RM138, 584 million. As documented in the Eleventh Malaysia Plan, it is expected that the service sector will be able to contribute at least 56.5% to the country's GDP and an annual growth of 6.8% is forecast. Undoubtedly, the service sector will continue to play a contributing role in the country's economy and one of potential key player is the healthcare industry. As such under the Plan, the

government will put lots of attention on expanding the modern services of one of the key subsectors which is the private healthcare.

**Healthcare industry:** Both public and private healthcare services are providing three different types of care, namely, primary, secondary and tertiary care (Musafar and Latifa, 2014). The first is primary care whereby the healthcare professionals will act as the first point of consultation for all patients, namely obstetrics and gynecology, family practitioners, internists, paediatricians. The second type is known as secondary care. This is where medical specialists such as psychologists, psychiatrists and orthopedics will examine or see patients who have been referred to by primary care professionals. Third is tertiary care and this takes place when a patient requires highly specialized treatment and care within the hospital which requires expertise in a given field such as obstetrics and gynecology, neurosurgery, cardiac surgery and cancer management. Professionals or experts in these areas will carry out investigations and offer appropriate treatment for the patients.

The public sector is heavily subsidised and focuses on healthcare promotion as well as rehabilitative and curative care at the primary, secondary and tertiary levels. In contrast, the rapidly growing private sector offers mainly curative and rehabilitative services and is financed strictly on a non-subsidised, fee for service basis. The private health sector includes private hospitals, private clinics, private dental practitioners and private

pharmacies. Private healthcare sectors providers are predominantly urban-based. These private hospitals operate on a fee-for-service basis and their target groups are those from the middle and higher income groups.

The private healthcare service has achieved an average annual growth rate of 5.5%. Furthermore, it has contributed about RM24.1 billion in value added to the country. Private healthcare has undergone tremendous growth, since the government's privatisation policy. It is believed that the existence of private healthcare services is to complement the current public healthcare. On top of that the eleventh plan stated that private healthcare is expected to achieve an annual growth of 10% by 2020. The plan outlined strategies to improve the fundamentals of the health system whereby everyone will have equal access to high quality healthcare services provided by public and private hospitals. Furthermore, one of the strategies for this plan is to have positive outcomes such as shortening the patient waiting time, improving patient outcomes and satisfaction and optimising use of healthcare resources. Given the plan, it is evident that the healthcare industry plays an important role Malaysia's economy.

In 2014, government hospitals recorded admissions of 2,407,122 patients and outpatient treatment of 19,984,111 patients. This total represents about 74% of the Malaysian population. Hence, public hospitals are treating about 74.39% of the Malaysian population as compared to only 25.61% seeking treatment in the private hospitals. In 2014, private hospitals had a record of 1,083,201 admissions and about 4 million outpatient visits. The data show that public hospitals had a higher load of admissions, approximately 70% in 2014 compared to private hospitals which recorded approximately 30% in 2014. The year 2013 and 2014 each observed 2.4 million hospital admissions per year. Furthermore, the admission-to-population percentage also grew approximately at 0.9% from 7.1 in 2013 to 8% in 2014 for the public hospitals, compared with private hospitals which increased at a slightly slower pace at 0.2% from 3.4 in 2013 to 3.6% in 2014. Hence, this explains why the majority of the patients are opting for public hospitals because the treatment, consultation, supplements and immunisations provided either fully funded or with minimal charges as the government highly subsidises it.

A review of previous records, generally, pregnancy and childbirth have recorded the highest admissions as compared to the other causes of hospitalisation since 2012. The general admission rate for pregnancy and childbirth for 2014 has recorded at 20.55%. No doubt, the rate of admission has dropped by 0.22% as compared to

2013 but the total number of admissions have increased from 650,313 (2013) to 717,261 (2014). Due to the increased number of admissions, the government provided the highest allocation for obstetrics and gynecology department which amounted to RM522,976.500 as compared to the other departments.

Based on several reports of infant deaths, in Malaysia, one of the leading causes of infant mortality is due to the negligence of hospitals as well as their staff. As reported in Ipoh, Perak, a hospital was held responsible for the death of an infant. The parents claimed that the infant died when the mother was given an injection that caused her uterus to shrink. After the delivery, the baby was in critical condition and died after 24 h (Zahari, 2013). Apart from this incident, negligence resulting in the death of an infant due to the carelessness of doctor. On October 16, 2010, a Saudi woman whose baby died because of negligence at a private hospital where an obstetrician was negligent in administering cytotec 100 mcg to induce the labour which causing her to suffer pain, losses, mental depression and distress during delivery. This has resulted in the removal of the patient's uterus and left her with the inability to conceive again. A separate incident also exposed the severe damage that can occur due to negligence. During a caesarean surgery, a doctor's negligence caused irreparable harm to a patient. She suffered vaginal and urine leakage after the surgery and a 'Cystogram' test confirmed she experienced 'Vesico-Uterine Fistula' (injury to the bladder channel) (Bernama, 2016).

These incidents have exposed the magnitude of this problem of negligence in the private hospitals thus, highlighting a dire need to improve the quality of healthcare services provided in this area. Undoubtedly, private hospitals need to be more vigilant by showing its commitment to providing excellent quality of healthcare services particularly in obstetrics wards. Such a move will certainly help restore confidence in our country's efforts to maintain the quality of healthcare services, since, the ministry is working towards creating Malaysia as a hub for excellent healthcare services be it in the public or private domain.

Since, much is at stake in establishing strong credibility as an excellent provider of healthcare service, privately owned hospitals, need to play its role in improving the healthcare services provided especially in the obstetrics wards where a high number of complaints originated. By doing so, it gives the public as well as foreigners the confidence that these privately owned hospitals are closely monitoring the types and quality of healthcare treatment and services that are being offered. By taking care of the patient's wellbeing in the private

hospitals will strike a confident note among the public as well as foreigners who come into the country to seek treatment in private hospitals. They will be assured that the privately owned hospitals will take doctors or specialists to task for any form of malpractices.

Based on all the data and evidence collected, it can be concluded that much needs to be done to improve patient's level of satisfaction which will lead to patient's intention to repatronage regarding obstetric services. Therefore, there is a need to conduct further studies in this area to gain more insight on how this area of healthcare service in the private hospitals can be further enhanced to reduce mortality rates as well as improve live birth rates for the country. Undoubtedly, the service quality dimensions provided by each hospital play a major role as it will determine people's choices on hospitals. Therefore, service providers should take step-up efforts to offer high levels of good service. Decisions made to select the types of hospitals for deliveries to weigh heavily on the service availability provided by the hospitals.

#### **Literature review**

**Repatronage intention:** In most of the behavioural intention studies, there are four measurements commonly used for behavioural intention namely, repurchase intentions, word of mouth, loyalty, complaining behaviour and price sensitivity (Zeithaml *et al.*, 1996). In the consumer marketing community, behavioural intention plays a major role in sustaining company's long-term viability. Through the measurement of behavioural intentions, it will be able to provide a better understanding towards customers revisit intention (Chen and Chen, 2010). Repurchase intention is defined as 'the individual's judgement about buying a designated service from the same company again, taking into account his or her current situation and likely circumstance's (Hellier *et al.*, 2003). The intention to repatronise the hospital is known as patient loyalty. Repatronage intention can be measured in terms of patient's likelihood of receiving healthcare services from the same hospital (Lonial *et al.*, 2010) while another study explained the key indicator in forecasting consumer repurchase behaviour is repatronage intention and their willingness or intention to keep a good relationship with the current service providers (Dongjin *et al.*, 2008). In the preceding studies, patient's perception towards medical services quality will lead to patient satisfaction and revisit intention (Woodside *et al.*, 1989; Fisk *et al.*, 1990; Gooding, 1995). It was proven that patient satisfaction level assists as the mediator between medical services quality and revisit (Woodside *et al.*, 1989). In the previous study, it was

found that more than 75% of patients are willing to revisit the same hospital again and would recommend it to their friends (Hussain *et al.*, 2015).

**Conceptual framework:** Based on the literature review, the following research framework shown in Fig. 1 is developed to incorporate the influence of technical quality on patient satisfaction towards repatronage intention.

The goal of this proposed study is to examine the intention for repatronage as a result of the influence from technical quality which will be mediated by patient satisfaction.

#### **MATERIALS AND METHODS**

**Patient's satisfaction:** In a marketing term, customer satisfaction is measured based on the ability of the products or services delivered by the service providers exceeded a customer's expectation. Customer satisfaction has been given much attention due to its potential effect on retaining customer and behavioral intention (Anderson and Fornell, 1994; Bolton and Drew, 1991; Oliver, 1980). Within the context of healthcare, the patient is viewed as the consumer. Thus, patient satisfaction is determined by the customer's satisfaction of the healthcare services rendered. A measure of quality of care is an important tool for achieving consumer satisfaction as it shows the success rate of the providers in meeting the consumer's expectations (Donabedian, 1980). A survey conducted at an academic pediatric otolaryngology clinic showed what matters to patients and families is their satisfaction with the healthcare providers (Zopf *et al.*, 2012). In another study conducted in five Norwegian hospitals found that the Norwegian in-patients are satisfied with the service offered in the medical and surgical ward with the mean score of 3.44 (Abrahamsen *et al.*, 2013).

**Service quality:** Study of service quality in the service and retailing industries using the SERVQUAL instrument developed by them to assess customer perceptions towards services offered (Parasuraman *et al.*, 1988). There are 22 items in the SERVQUAL measurement which comprise of five different dimensions, namely: tangibles, reliability, responsiveness, assurance and empathy. SERVQUAL has been the most popular model used to measure service quality in all industries, including healthcare (Borie and Damanhour, 2013; Garrard and Narayan, 2013; Li *et al.*, 2015; Purcarea *et al.*, 2013). SERVQUAL does not explain a technical attribute of service. Healthcare service can be divided into two quality

dimensions which are technical quality and functional quality (Donabedian, 1980). Technical quality in the healthcare sector is defined primarily on the technical accuracy of the medical diagnoses and procedures or the conformance to professional specifications. Functional quality refers to the manner in which the healthcare service is delivered to the patients. The previous study was looking at different dimensions of healthcare service quality namely; facilities, safety, social responsibility, personal quality, admission procedures and experience received (Duggirala *et al.*, 2008). Whereas a study in Malaysian private healthcare used the SERVQUAL model together with the additional dimensions such as communication, courtesy and understanding of customers (Mohd *et al.*, 2011). Although, there a lot of study about service quality has been conducted but no attempt has been made to study service quality specifically in the area of obstetric service. Healthcare technical quality is associated with satisfaction and repatronage intention. Therefore, this study will look at patient satisfaction as the mediator between technical quality and repatronage intention. Hence, this study will examine the following dimensions of technical quality in healthcare comprising of doctor's care, nursing care and medical treatment.

**Technical quality:** The outcomes consumer receives from the service process offered by a service firm is refer to as technical quality (Mohd *et al.*, 2011; Brady and Cronin, 2001; Donabedian, 1992; Gronroos, 1984; Rust, 1994). There are five factors which are related to technical quality, employee's technical ability, employee's knowledge, technical solutions, computerized systems and machine quality (Akhtar, 2011). Previous studies explained that technical quality includes staff expertise, professionalism and skill of a service provider in providing a service (Aharony and Stasser, 1993; Zifko and Krampf, 1997). A study was conducted in the Malaysia hospitals shows that the most important factor for both public and private hospitals is technical quality (Rose *et al.*, 2004). However, technical quality is a crucial object for the patients because they feel that a good treatment depends upon a proper diagnosis of a diseases. No doubt at times patients might overlooked on the technical matter of a treatment. In due of this patient's awareness towards technical quality is a vital matter.

## RESULTS AND DISCUSSION

**Doctor's care:** Doctors have the means, namely effective physician-patient interaction to influence the outcome of

the medical consultation (Abioye *et al.*, 2010). Technical care is described as communication between doctors and patients. Therefore, the behaviour and professionalism of the doctors play a crucial role in creating patient's confident. Medical doctor skill seems to have a positive effect on patient satisfaction as compared to hospital facilities and procedures of care (Kim *et al.*, 2008). Furthermore, it was proven that >80% of the patients are satisfied with the competency of the doctor's (Anderson and Fornell, 1994).

A study was found that inpatients are happy with the service provided by the doctors in the private hospitals in Syria. It was reported that the doctors are very professional whereby they are very frank with the patient's cases (Alasadi and Sabbagh, 2013). Professional behaviour of doctors which has been found to be one of the determinants of patient (Kamra *et al.*, 2016; Sharma and Narang, 2011).

In view of this, we believe that doctor's care will be the determinants of patient satisfaction for obstetric service in private hospitals in Malaysia. This discussion led to the formulation of the following hypothesis:

- H<sub>1</sub>: doctor's care has a positive relationship with patient's satisfaction

**Nursing care:** In the hospital service, nursing care is an essential component. They are the ones that served as informers about the patients care in the hospitals. Through a thorough research, it shows that nurses report patients conditions and involved in quality of care (Aiken *et al.*, 2012; Kutney *et al.*, 2009) and nurse outcomes (Liu *et al.*, 2001). It is common to note that the hospital's overall quality of care comes from the nursing care as most of the time the interaction between patients and service provider involved nurses.

Past researchers have found that there is a significant relationship between nursing care and patient satisfaction (Abioye *et al.*, 2010). Nurse's ability to explain is one of the determinants of patient satisfaction with quality of care (Atinga *et al.*, 2011). High-quality nursing care as "meeting all needs of the patients or patients you are looking after" (Tafreshi *et al.*, 2007). Nursing care is one of the determinants that has a direct relationship that can impact overall patient satisfaction (Wagner and Bear, 2009) which will lead patients to recommend their friends to the same hospitals (Laschinger *et al.*, 2005).

Given this, we believe that nursing care will be the determinants of patient satisfaction with obstetric

service in private hospitals in Malaysia. This discussion led to the formulation of the following hypothesis:

- $H_2$ : nursing care has a positive relationship with patient's satisfaction

**Medical treatment:** Medical treatment or diagnostic service which includes services such as laboratory and radiology. Any delay in medical treatment will lead to patient dissatisfaction. In a study conducted by Kara Hanson, it is found that patients perceived one of the most important characteristics of service quality are the examination that they have to go through.

Past studies have shown that medical treatment services are one of the elements of patient satisfaction (Kamra *et al.*, 2016; Mohanan *et al.*, 2010). By achieving patient's satisfaction, this will lead to revisit intention which will be beneficial for the hospital in the long run. Research supported this point. His research found that patient intention to revisit the hospitals is all depends on the medical treatment they received during the service encounter such as going through different types of diagnosis (Baydas, 2014).

Given this, we believe that medical will be the determinants of patient satisfaction with obstetric service in private hospitals in Malaysia. This discussion led to the formulation of the following hypothesis:

- $H_3$ : medical treatment has a positive relationship with patient's satisfaction

**Patient satisfaction as mediating variable:** The level of satisfaction is an important indicator of a consumer's state of mind and companion with different levels of satisfaction may react in a variety of ways. A satisfied customer will spread the positive word-of-mouth to others regarding their experience with the service provider (Jouyani *et al.*, 2013). There are several evidences found in the medical field setting which have identify satisfaction as a mediator (Amin and Nasharuddin, 2013; Shabbir *et al.*, 2016; Chahal and Kumari, 2012; Huei *et al.*, 2015; Jandavath and Byram, 2016; Ramez, 2012; Sutharjana *et al.*, 2013). Moreover, satisfaction be a more relevant predictor of behavioural intention than service quality based on the conceptual nature of the relationship (Wu *et al.*, 2016). Patient satisfaction is considered as a mediator between perceived service quality and repatronage intention (Sharma and Narang, 2011). Their study is consistent found that patient satisfaction has a significant relationship with previous studies in which satisfaction plays a significant role in loyalty intentions

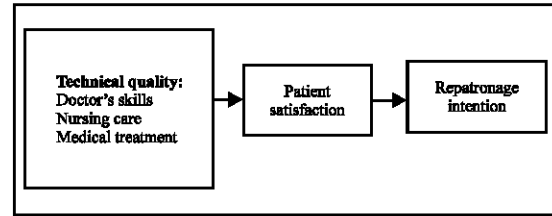


Fig. 1: Proposed conceptual framework

(Singh *et al.*, 2011; Li *et al.*, 2011). In another studies, it shows that patient's satisfaction partially mediates between perceived service quality and behavioural intention (Chahal and Kumari, 2012; Aliman and Mohamad, 2013; Alrubaiee and Alkaaida, 2011).

In today's competitive healthcare industry, hospitals must strive to increase customer satisfaction. Through proper guiding on the needs, desires and wants and provision of strategies to address the concerns of patients can significantly enhance the overall customer satisfaction levels. Given this, the mediating role of satisfaction in the relationship between technical quality and repatronage intention is expected. This discussion led to the formulation of the following hypothesis:

- $H_4$ : patient's satisfaction will mediate the relationship between technical service quality and repatronage intention

## CONCLUSION

A patient's decision to repatronize a hospital weighs heavily on their perception of the quality of service offered by the hospital concerned. Thus, if the quality of services provided is below par this will cause underutilization of private hospitals for obstetric services and people will only visit the said hospitals for minor health issue. Therefore, it is important for private hospitals to make sure their efforts will pay off by retaining and encouraging their patient to repatronage through delivering a high level of service quality. Moreover, dissatisfied patients have the option or the choice to seek treatment from public and private hospitals from within or outside the country. It is never easy to evaluate the healthcare service quality as credence values are high. Hence, patient's perception is of value for creating patient's long-term relationship with the hospitals. So, we are proposing this model which will provide a comprehensive evaluation of the healthcare service quality dimensions for the obstetrics patients in private hospitals in Malaysia.

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