

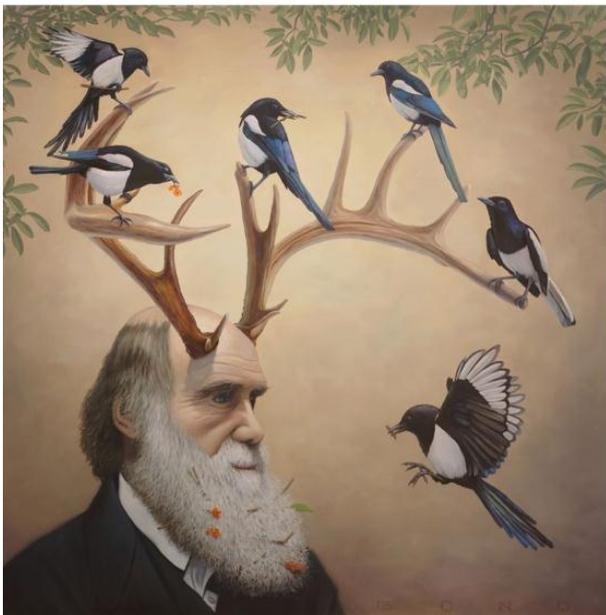
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## **The Effect of Service Quality on Patient Satisfaction and Loyalty in Malaysia Muslim Friendly Hospital**

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### **Abstract**

Service quality is a must for Muslim friendly hospital to succeed and still maintain the support of its participants. Muslim patients are realized that Islamic medical care is critical for their perceived health and satisfaction. Although this problem is emerging, the standard of medical care among patients is still less encouraging in the Malaysian Muslim friendly hospital. The objective of this study is to measure the relation among service quality and patient loyalty in the Muslim-friendly healthcare sector in the developing country of Malaysia. An empirical study is conducted to look at the study model. This research applied a SERVQUAL model developed by Parasuraman in 1985, to measure service quality in Malaysian Islamic medical care particularly in Muslim friendly hospital. The respondents were selected from inpatients and outpatients by adopting multi-stage cluster sampling. The hypotheses were tested using multiple regressions. There are four factors of service quality (tangible, empathy, reliability and responsiveness) have demonstrated strong links with loyalty. Therefore, the SERVQUAL model's compliance aspect proved its value by demonstrating the highest major factor in the overall model. It is hoped that the findings from the research are useful for the Islamic medical care policy makers by providing high-quality treatment, improving patient satisfaction, and ultimately promoting revisiting and recommending intentions to others.

**Keyword: Service, Quality, Patient, Satisfaction, Muslim, Friendly, Hospital**

# **El efecto de la calidad del servicio en la satisfacción y lealtad del paciente en Malasia Muslim Friendly Hospital**

## **Resumen**

La calidad del servicio es imprescindible para que un hospital musulmán sea exitoso y siga manteniendo el apoyo de sus participantes. Los pacientes musulmanes se dan cuenta de que la atención médica islámica es fundamental para su salud y satisfacción percibidas. Aunque este problema está surgiendo, el estándar de atención médica entre los pacientes es aún menos alentador en el hospital amigable musulmán de Malasia. El objetivo de este estudio es medir la relación entre la calidad del servicio y la lealtad del paciente en el sector de la salud amiga de los musulmanes en el país en desarrollo de Malasia. Se realiza un estudio empírico para observar el modelo de estudio. Esta investigación aplicó un modelo SERVQUAL desarrollado por Parasuraman en 1985, para medir la calidad del servicio en la atención médica islámica de Malasia, particularmente en un hospital amigable para musulmanes. Los encuestados fueron seleccionados de pacientes hospitalizados y ambulatorios mediante la adopción de muestreo por conglomerados en varias etapas. Las hipótesis se probaron utilizando regresiones múltiples. Hay cuatro factores de calidad del servicio (tangibles, empatía, fiabilidad y capacidad de respuesta) que han demostrado fuertes vínculos con la lealtad. Por lo tanto, el aspecto de cumplimiento del modelo SERVQUAL demostró su valor al demostrar el factor principal más alto en el modelo general. Se espera que los hallazgos de la investigación sean útiles para los encargados de la formulación de políticas de atención médica islámica al proporcionar un tratamiento de alta calidad, mejorar la satisfacción del paciente y, en última instancia, promover la revisión y recomendación de intenciones a otros.

Palabra clave: Servicio, Calidad, Paciente, Satisfacción, Musulmán, Amigable, Hospital

## **Introduction**

The Halal industry's growth takes place in many sectors such as food processing, agriculture, logistics, tourism, entertainment, and health. Islamic medical treatment is an example of a new paradigm in the health-care field originating from Shari'ah's principle being extended to hospital management and delivery services. Islamic medical practice may also de-

mand some additional criteria compared to traditional medical practice. The provision of Islamic medical care, while being a lucrative business, it is facing a lot of challenges due to the differences of social and moral considerations among communities. The social incongruities pose problems for Muslim patients when providing Islamic medical practices.

The position of quality is generally known as a key success factor and survival of any company in the precious's challenging environment. Even though there are many factors affecting the behaviour and intention of the user, it is generally accepted that the most important among them is understanding the quality of Islamic medical service. Zailani et al.,(2016) found out that Muslim preference is for same-gender care (Halligan, 2006), and that a male clinician would never try to interview or examine a female patient without accompanied by another adult relative or female nurse (Rahman, Zailani & Musa, 2018). All hospital staff to be educated with these halal principles in order to offer treatment despite the values of patients. Within the literature, most of the studies have a limited perspective on the qualitative approaches of halal concept (Samori, Md Salleh and Khalid, 2016), customer awareness (Mohsin, Ramli and Alkhulayfi, 2016) and the perception of the Muslim friendly medical tourism (Rahman and Zailani, 2016) in developing countries.

Regarding the standard of service for patients in Muslim friendly hospital in Islamic medical care practices, there is a little study has explored the satisfaction of patients and their loyalty intention for potential Islamic medical care. This research aims to look into this issue by examining the crucial factors affecting the satisfaction and loyalty intention of patients at Muslim friendly hospital for future medical care practices. An applied SERVQUAL model is being suggested to assess the factors of satisfaction of Muslim health travellers, as well as their impact on happiness and loyalty purpose. The framework refers to the service quality as a contrast between consumer perceptions and the actual results of the service provided (Parasuraman, Zeithaml, and Berry, 1985) based on five dimensions, which are tangible, reliability, responsiveness, assurance, and empathy.

#### Concept of Muslim friendly Hospital

Tourism forms a backbone of many countries including Malaysia (Al-Shami et al., 2019), which include many sectors. Muslim friendly hospital, when it comes to practicing Muslims, does not tend to compromise on their requirements but will be comfortable with the options. In 2016, Majdah Zawawi and Noriah Ramli clarified individuals nowadays

like traveling and seeing fresh culture and experiencing new things from other countries. Not only are Muslim travelers restricted to Umrah and Hajj, finding information learning and company, but they also impact the notion of the global tourism sector. In 2014, The National reported the Muslim friendly idea also provides data on halal food and prayer space. The past practices in hospital, the availability of Muslim friendly hospital is regarded to be one of the most important characteristics that attract and encourage Muslim travelers to visit their destination.

Table 1.1 the Criteria of Muslim Friendly Hospital

No	Criteria	Yes	No
1.	Gender - compatible care	/	
2.	Hospital provides halal food and beverages for Muslims.	/	
3.	Halal food and free alcohol	/	
4.	Providing sophisticated prayer facilities	/	
5.	The room cleaned and calm	/	
6.	Dress modesty	/	
7.	Muslim prayer room	/	
8.	Nurses are flexibility and willingness to provide care to patients.	/	

Source : (Al-Hammadi, Al-Shami, Al-Hammadi, & Rashid, 2019; Aliman, 2017; Meesala & Paul, 2018; Rahman, Zailani, & Musa, 2017)

### Service quality, patient satisfaction and loyalty

Service quality between hospital departments is essential to patient satisfaction, retention and loyalty in developing country. One of the core roles of health care systems is to have good service quality. Mohebi-far et al., (2016) highlighted to survive and attain patient satisfaction, all hospitals need to evaluate, track and improve the quality of healthcare services. The key approaches to increase the quality of healthcare services are to track and assess the quality of healthcare delivered over time, using objective quality assessment methods and models. The SERVQUAL (service quality) model, developed by Parasuraman et al. in 1980 (Lestari et al., 2019; Meesala & Paul, 2016; Umath & Marwah, 2015), is one of the best and most commonly used models for assessing the quality of health care services. A good business should pay good attention to the customer satisfaction theory practices or services.

Some of the empirical researches have been attempting to indicate a causal relationship between quality of service and customer satisfaction for examples past research findings indicate that a stronger indicator of customer satisfaction is service quality (Ali & Raza, 2017; Farooq et al., 2018; Ngo & Nguyen, 2016; Paul et al., 2016). As stated by Azman, Ilyani and Ranlan et al., (2016), customer satisfaction can be described in a timely manner as a split between the customer's preferences for execution experience after

receiving the item or service. Helping Muslim medical tourists ‘satisfaction with the medical services is important in Asian culture. It is because buying real intent heavily with the power of the same mouth word from colleagues, neighbors and members of the family (Zailani et al., 2016). It indicates that in modern marketing the idea is associated with customer service.

Consumers typically establish a purchasing mindset in light of previous service experience. Fatima, Malik and Shabbir (2018) highlighted out as commitment to the eagerness to say, ready to revisit, and positive word of mouth (WOM) objectives. Tripathi (2017) endorsed the presence of loyalty would differently impact the consumer’s WOM expectations. In addition, the medical care providers listed in Aliman and Mohamad (2016) must meet patient needs and expectations in order to achieve patient loyalty. Many researches have explained the importance of Muslim medical tourists ‘satisfaction at Shariah-compliant hospitals and their commitment to medical treatment.

### Methodology

The SERVQUAL scale is a commonly recognized measurement device for the standard of service (Pekkaya et al. 2019; Ladhari, 2008). In this analysis, five aspects of service quality, based on Parasuraman et al. (1988) study, were related as independent variables. The items were submitted in A Likert- scale format of 1 (strongly disagreeable) to 5 (strongly agreed). The respondents were asked a total of 31 things on the standard of service in Islamic medical care. Six item statements adapted from Oliver (1980), Taylor and Baker (1994), and Zailani et al. (2016) assessed patient satisfaction, covering both relative and overall satisfaction. Regarding calculating patient loyalty, the multidimensional model of patient loyalty proposed by Zeithaml et al. (1996) was used. The following theories have been tested, based on the literature discussion: The conceptual framework for this research as in figure 1 below:

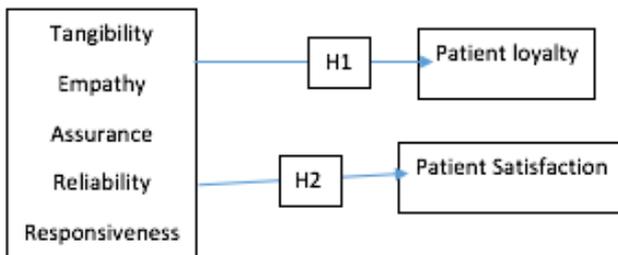


Figure 1: Conceptual framework

H1: There is a significant relationship between service quality and patient loyalty.

H1 (a): There is a significant relationship between tangible and patient loyalty.

H1 (b): There is a significant relationship between empathy and patient loyalty

H1 (c): There is a significant relationship between assurance and patient loyalty.

H1 (d): There is a significant relationship between reliability and patient loyalty.

H1 (e): There is a significant relationship between responsiveness and patient loyalty.

H2: There is a significant relationship between service quality and patient satisfaction.

H2 (a): There is a significant relationship between tangible and patient satisfaction.

H2 (b): There is a significant relationship between empathy and patient satisfaction.

H2 (c): There is a significant relationship between assurance and patient satisfaction.

H2 (d): There is a significant relationship between reliable and patient satisfaction.

H2 (e): There is a significant relationship between responsiveness and patient satisfaction.

The data were collected using structured survey questionnaires from a selected group of 250 private hospital inpatients and outpatients in Malaysia. Discovered plenty of work into the quality of private healthcare services 200-250 respondents (Manaf et al., 2015 —173 usable questionnaires; Ismail, Zaki & Rose, 2016 – 300 respondents; Kalaja et al., 2016 — 200 usable questionnaires; Shafiq et al., 2017, – 340 valid questionnaires). This sample size followed the one suggested by Roscoe (1975) who observes that “sample sizes more than 30 and less than 500 are appropriate for most studies” (Sekaran & Bougie, 2016). The measurement for this research as in table 1.

Table 1: Measurement of construct

<b>Tangible</b>	
Separation of male and female ward.	(Rahman, Zailani and Musa, 2017; Jais, Ismail and Alirman, 2017; Puteh, 2018)
The room and toilet cleaned.	(Karsra & Jha, 2016; Meesala & Paul, 2018; Rahman et al., 2017)
Islamic dressing code by staff.	(Rahman et al., 2017; Umath & Marwah, 2015)
Hospital provides sophisticated praying infrastructures (e.g., prayer room, signage, wudhu facilities).	(Alirman, 2017; Karsra & Jha, 2016; Meesala & Paul, 2018; Rahman, Zailani, & Musa, 2018b)
Hospital provides a same sex health care worker when possible.	(Jais, Ismail and Alirman 2017; Rahman, Zailani and Musa, 2018b; Han et al., 2019)
Nurses attempt to provide a quiet environment during prayer for Muslims patients.	(Rahman et al., 2018b)
<b>Empathy</b>	
Physician respect modesty and religious beliefs.	(Alirman, 2017; Rahman et al., 2018b)
Medical staff sensitive with other people's feeling.	(Rahman et al., 2017)
Nurse is very sympathetic towards Muslim patients	(Rahman et al., 2018b; Umath & Marwah, 2015)
Nurse tries to provide Muslim patients' privacy.	(Alirman, 2017; Rahman et al., 2018b)
Nurse is flexible and willing to provide care to patients	(Karsra & Jha, 2016; Rahman et al., 2017)
Nurse tolerates with patients.	(Rahman et al., 2017; Umath & Marwah, 2015)
<b>Assurance</b>	
Doctor informs a Muslim patient/patient family regarding the use of vaccines that are porcine in origin.	(Rahman et al., 2018b)
Doctor imposes their own religious/cultural values and practices in handling the body of deceased.	(Karsra & Jha, 2016; Zailani, Ali, Iranmanesh, Moghavvanni, & Musa, 2016)
Doctor prefers using halal medicines in their practice.	(Zailani et al., 2016)
Medical team is knowledgeable about Islamic principles in medical care.	(Umath & Marwah, 2015; Zailani et al., 2016)
Medical team is aware of potential haram risks in medical care.	Zailani et al., 2016)
Hospital provides halal food and beverages for Muslims.	(Rahman et al., 2018b; Zailani et al., 2016)
<b>Reliability</b>	
Receiving good Islamic healthcare in this hospital.	(Zailani et al., 2016; Iranmanesh et al., 2018)
Staff are practicing Islam	(Rahman, Zailani and Musa, 2017; Mohezar, Moghavvanni and Zailani, 2017)
The quality provided meets for peace of mind.	(Rahman, Zailani and Musa, 2017; Mohezar, Moghavvanni and Zailani, 2017)
Recognize the halal label for medicine.	(Rahman, Zailani and Musa, 2017; Mohezar, Moghavvanni and Zailani, 2017)
Recognize the halal label for food.	(Rahman, Zailani and Musa, 2017; Mohezar, Moghavvanni and Zailani, 2017)
I am receiving Islamic medical care is perfect.	(Rahman, Zailani and Musa, 2017; Mohezar, Moghavvanni and Zailani, 2017)
<b>Responsiveness</b>	
Doctor seeks clarification from Muslim patients when they are unsure about Islam protocols.	(Rahman et al., 2017)
The doctor feels a moral obligation to disclose the exact source of non-halal ingredients to the patient (e.g., alcohol in syrups/elixirs and gelatine in capsules).	(Ahmed, Tarique, & Islam, 2016; Manaf, Hussin, Kassim, Alawi, & Dahari, 2015)
A male doctor should attend to a female Muslim patient only if there is no female doctor available or in the case of emergency.	(Rahman, Zailani, & Musa, 2018a; Zailani et al., 2016)
Always examine a female patient in the presence of another female.	(Rahman et al., 2017)
The medical team allows them to pray and read the Quran.	(Alirman, 2017; Rahman, Zailani and Musa, 2017)

Providing operation theatre garments that are decent and cover Aural.	(Ailman, 2017; Rahman, Zailani and Musa, 2017)
<b>Patient Satisfaction</b>	
I am satisfied with the Islamic healthcare practices in this hospital.	(Zailani et al., 2016; Rahman, Zailani and Musa, 2018b; Asnawi et al., 2019)
I am satisfied because the medical doctor of this hospital is consistently courteous and respectful to me.	(Zailani et al., 2016; Rahman, Zailani and Musa, 2018b; Asnawi et al., 2019)
I am satisfied with the explanation of the treatment result.	(Meesala & Paul, 2018; Zailani et al., 2016)
I am satisfied with the Ibadah infrastructures (e.g., prayer room, signage, wudhu facilities) of this hospital.	(Rahman et al., 2018b; Zailani et al., 2016)
I am satisfied with the quality and variety of halal food of this hospital.	(Rahman et al., 2018b; Zailani et al., 2016)
I am satisfied with the nurses' behaviour in this hospital.	(Meesala & Paul, 2018; Zailani et al., 2016)
<b>Patient Loyalty</b>	
I intend to revisit this hospital because of ease in accessibility to treatment.	(Sahbbir, Malik and Malik, 2016; Meesala and Paul, 2018; Rahman, Zailani and Musa, 2018b; Fatima, Malik and Sahbbir, 2018)
I intend to revisit this hospital because of the precise and clear explanation of my treatment results.	(Sahbbir, Malik and Malik, 2016; Meesala and Paul, 2018; Rahman, Zailani and Musa, 2018b; Fatima, Malik and Sahbbir, 2018)
I intend to revisit this hospital because healthcare professionals are consistently courteous to me.	(Sahbbir, Malik and Malik, 2016; Meesala and Paul, 2018; Rahman, Zailani and Musa, 2018b; Fatima, Malik and Sahbbir, 2018)
I intend to revisit this hospital for its Islamic medical care practices.	(Zailani et al., 2016; Rahman, Zailani and Musa, 2018b)
I will prefer to use the services of this hospital because I am satisfied and acquainted with the hospital.	(Meesala and Paul, 2018; Rahman, Zailani and Musa, 2018b; Fatima, Malik and Sahbbir, 2018)
I prefer this hospital to others.	(Sahbbir, Malik and Malik, 2016; Meesala and Paul, 2018; Rahman, Zailani and Musa, 2018b; Fatima, Malik and Sahbbir, 2018)

## Result and Discussion

This study investigated the determinants of patient's satisfaction and its impact on medical loyalty intention at Muslim friendly private hospitals in Malaysia. A group of Kumpulan Perubatan Johor in Malaysia was chosen to receive respondents from the Muslim friendly private hospital on aspects of their satisfaction and loyalty intention. Thus, only KPJ's hospital group, which is the largest Bumiputera/Muslim private healthcare group in the country, offers a wide range of promotive, preventive and curative procedures with modern and sophisticated medical devices (Persidangan Kebangsaan Ekonomi Malaysia - VI, 2011). There are four major groups of Bumiputera/Muslim private hospitals established in Malaysia which includes Six Islamic Medical Association Hospitals Association, twenty Kumpulan Perubatan Johor (KPJ) Healthcare Sdn. Hospitals of Bhd and three group hospitals of TDM Berhad and at least eight major independent

hospitals. KPJ Berhad was chosen based on the mentioned rating in order to complete the data collection stage. As part of it, the selection of the main industry driven from Association of Private Hospital Malaysia database. Based on their system, KPJ Berhad is recognised as the practicing Islamic medical care to support the Malaysian healthcare industry.

Regression analysis

Data is analysed using version 23 of IBM SPSS. This research used multiple regression analysis to test research hypotheses and ensure the reliability of the data analysis from two multivariate methods and techniques. Several researchers have also employed the same techniques in literature to test theories (Aliman and Mohamad, 2013; Al-Borie and Damanhour, 2013). Before evaluating regression analysis, all classical linear regression model assumptions were tested to mitigate analytical problems such as normality and heteroscedasticity (Kline, 2011).

Regression analysis of service quality dimensions with patient loyalty.

Table 2 relates the consistency of the service to customer loyalty. The finding of regression analyses demonstrates that factors of consistency contribute significantly ( $F=147.71$ ,  $F\text{-sig}=0.00$ ) and predict 75 per cent of patient loyalty variability. The link between service quality and patient loyalty is significant, positive and highly regarded ( $R=0.86$ ). Tangible, empathy, reliability and responsiveness are positively important from the five dimensions of service quality, which account for a major shift in patient loyalty. As the most significant predictor, responsiveness ( $B=0.26$ ;  $t=2.74$ ;  $p=0.02$ ) exists, followed by empathy ( $B=0.22$ ;  $t=2.41$ ;  $p=0.02$ ), continued with reliability ( $B=0.19$ ;  $t=2.15$ ;  $p=0.03$ ) and tangibility ( $B=0.17$ ;  $t=2.18$ ;  $p=0.03$ ). The results provide evidence for H1 (a), H1 (b), H1 (c) and H1 (e).

Table 2: Relationship between service quality and patient loyalty

	B	t-value	Sig	R	R <sup>2</sup>	F-Value	F-sig
Constant	0.53	4.04	0.00	0.87	0.75	147.71	0.00
Tangible	0.17	0.21	2.18	0.03			
Empathy	0.27	0.24	2.41	0.02			
Assurance	-0.11	-0.12	-0.11	0.91			
Reliability	0.19	0.19	2.15	0.03			
Responsiveness	0.26	0.27	2.74	0.02			

Regression analysis of service quality dimensions with patient satisfaction

Table 3 refers the level of service to satisfaction of the patients. The finding of regression analyses show that dimensions of quality contrib-

ute significantly ( $F=119.711$ ,  $F\text{-sig}=0.00$ ) and predict 71 per cent of patient satisfaction variance. The relationship between the standard of service and the satisfaction is significant, positive and highly regarded ( $R=0.84$ ). Thus, it supports H2. Empathy and responsiveness are positively important from the five dimensions of measurable service efficiency, which account for a significant shift in patient satisfaction. The most significant factor is the responsiveness ( $B=0.32$ ;  $t=2.68$ ;  $p=0.008$ ), continued with empathy ( $B=0.31$ ;  $t=3.04$ ;  $p=0.003$ ) and tangible ( $B=0.20$ ;  $t=2.28$ ;  $p=0.024$ ). Such results indicate that support is provided for H2 (a), H2 (b) and H2 (e).

**Table 3: Relationship between service quality and patient satisfaction**

	B		t-value	Sig	R	R <sup>2</sup>	F-Value	F-sig
Constant	0.58		4.03	0.000	0.84	0.71	119.71	0.00
Tangible	0.20	0.24	2.28	0.024				
Empathy	0.31	0.32	3.04	0.003				
Assurance	-0.10	-0.12	-0.97	0.334				
Reliability	0.96	0.10	0.99	0.324				
Responsiveness	0.32	0.33	2.68	0.008				

## Discussion and Conclusion

The research aims to predict the effects of quality of service on patient satisfaction and patient loyalty in a friendly Muslim hospital in Malaysia. This study result has verified the existence of a positive relationship between levels of service for patient satisfaction and loyalty. The study's findings are consistent with previous research. The positive impact of service quality on patient satisfaction in the Malaysian Muslim friendly hospital finds consistency with similar studies carried out in the past (Anabila, Kumi & Anome, 2019; Lestari et al., 2019; Rahman, Zailani and Musa, 2018; Zailani et al., 2016; Kalaja et al., 2016; Ismail, Zaki & Rose, 2016). Having studied medical care customers' level of satisfaction is an important factor in the medical process. Service quality is also directly and strongly related to patient loyalty Fatima, Shabbir & Malik (2018); Rahman, Zailani and Musa, (2018); Ahmed, Tarique and Arif (2017); Zailani et al., (2016); Malaysian Muslim Friendly Hospital, which is found to be in line with previous results.

The current study has contributed to established information on the standard of hospital service, which in the following ways may be of great benefit to healthcare practitioners and managers or administrators. This research examined five dimensions from which patients determine the quality of Islamic hospital service. These five attributes of service quality are tangible, empathy, assurance, reliability and responsiveness. These measurements are important for service quality assessment in ter-

tiary medical environment and can be applied for Islamic medical care. Thus the result indicates that achieving high-quality services in healthcare can significantly enhance the understanding of values among consumers, it may also be helpful in increasing consumers 'trust in the form of loyalty, and it can provide a high satisfaction level. Medical care managers should use these measurements to gain critical patient input at regular intervals to track the performance management process and identify opportunities for improvement and take corrective action accordingly. Identifying areas that need significant improvement in Muslim friendly hospitals would also offer useful feedback to policymakers willing to formulate effective measures creating those hospitals more accessible And are open to local patient and health tourist needs, and that will ultimately lead to enhancing the standard of service, satisfaction and the country's needs.

The management of hospital managers should alert with the cleanliness of healthcare centre environment as it has most voting by the patients which can affect their satisfaction. For example, managers should make sure the hospital staff to wear gloves properly because improper use of gloves can spread dangerous bacteria. This way can help in controlling contaminants by starting with assigning different gloves for patients' rooms, household and tasks involving patients' operations. The gloves must always be changed between each patient and each job that has be done. Furthermore, the hospital staff should wash their hands after removing the gloves. In term of empathy, the hospital managers should guarantee the hospital staff have suitable working hours to all patients as it has the most voting by the patients which can affect their satisfaction. This means that the hospital staff should allocate sufficient time and effort for each patient based on the patients' needs.

Besides, in term of assurance, managers can pay attention towards courtesy and polite behaviour towards patients as well as the accessibility of staff when needed because both items mentioned have the highest voting among the respondents. Therefore, the hospital board of management can provide the current employees and future employees with some training programmes so that they can polish their attitude and communication skills. On the aspect of reliability, the managers must ensure that the hospital staff is discipline in delivering their service to the patients as this item has the most voting from the respondents. A hospital staff is discipline when the hospital staff is well organized, punctual, accept correction, and welcome responsibilities and more.

The findings in this research study provide a valuable understanding for

the hospitals especially the Muslim friendly private hospitals to determine the Malaysian's minds and opinions towards their satisfaction when receiving services from the private hospitals. This research study also highlighted the important factors of implementing tangibility, empathy, assurance, reliability and responsiveness of service quality to the organization towards patients' satisfaction and loyalty. This research study has proven that SERVQUAL Model is a valid instrument for measuring the satisfaction of patients in terms of quality of service in hospitals. The managers should implement the SERVQUAL Model to evaluate the quality of service in the hospital. In this world which full of competition, it is very important to maintain the business and sustain in the market.

For future research direction, more independent factors should be integrated together into the existing model (SERVQUAL Model) in measuring the patients' satisfaction. The questionnaire should adopt real-time scenarios and different types of possible situations that might happens towards the patients in the hospital. Hence, it is a need for future researchers to put more effort and elongate the duration of the research study so that a better and valuable research can be produced. Besides quantitative research method, future researchers should conduct qualitative research study as well in order to improve the understanding of the dimensions of the SERVQUAL Model such as tangibility, empathy, assurance, reliability and responsiveness towards patients' satisfaction. The future researchers should integrate more relevant factors other than dimensions of the SERVQUAL Model that might affecting the patients' satisfaction.

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### References

- [1] Zailani, S., Ali, S.M., Iranmanesh, M., Moghavvemi, S. and Musa, G., 2016. Predicting Muslim medical tourists' satisfaction with Malaysian Islamic friendly hospitals. *Tourism Management*, 57, pp.159-167.
- [2] Halligan, S. and Stoker, J., 2006. Imaging of fistula in ano. *Radiology*, 239(1), pp.18-33.
- [3] Rahman, M.K., Zailani, S. and Musa, G., 2018. Tourists' satisfaction and loyalty intention at Shariah-compliant private hospitals in Malay-

sia. *International Journal of Tourism Sciences*, 18(4), pp.295-311.

[4] Bloomer, M.J. and Al-Mutair, A., 2013. Ensuring cultural sensitivity for Muslim patients in the Australian ICU: Considerations for care. *Australian Critical Care*, 26(4), pp.193-196.

[5] Samori, Z., Salleh, N.Z.M. and Khalid, M.M., 2016. Current trends on Halal tourism: Cases on selected Asian countries. *Tourism Management Perspectives*, 19, pp.131-136.

[6] Mohsin, A., Ramli, N. and Alkhulayfi, B.A., 2016. Halal tourism: Emerging opportunities. *Tourism Management Perspectives*, 19, pp.137-143.

[7] Rahman, M.K. and Zailani, S., 2016. Understanding Muslim medical tourists' perception towards Islamic friendly hospital. *Journal of Investment and Management*, 5(6), pp.206-213.

[8] Parasuraman, A., Zeithaml, V.A. and Berry, L.L., 1985. A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), pp.41-50.

[9] Mohebifar, R., Hasani, H., Barikani, A. and Rafiei, S., 2016. Evaluating service quality from patients' perceptions: application of importance-performance analysis method. *Osong public health and research perspectives*, 7(4), pp.233-238.

[10] Meesala, A. and Paul, J., 2018. Service quality, consumer satisfaction and loyalty in hospitals: Thinking for the future. *Journal of Retailing and Consumer Services*, 40, pp.261-269

[11] Umath, B., Marwah, A.K. and Soni, M., 2015. Measurement of service quality in health care industry using SERVQUAL model: A case of select hospitals. *International Journal of Management and Social Sciences Research*, 4(1), pp.52-57.

[12] Ali, M. and Raza, S.A., 2017. Service quality perception and customer satisfaction in Islamic banks of Pakistan: the modified SERVQUAL model. *Total Quality Management & Business Excellence*, 28(5-6), pp.559-577.

[13] Farooq, M.S., Salam, M., Fayolle, A., Jaafar, N. and Ayupp, K., 2018. Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. *Journal of Air Transport Management*, 67, pp.169-180.

[14] Ngo, V.M. and Nguyen, H.H., 2016. The relationship between service quality, customer satisfaction and customer loyalty: An investigation in Vietnamese retail banking sector. *Journal of Competitiveness*.

[15] Paul, J., Mittal, A. and Srivastav, G., 2016. Impact of service qual-

ity on customer satisfaction in private and public sector banks. *International Journal of Bank Marketing*.

[16] Azman, I., Ilyani Ranlan, R. and Nur Afiqah, F., 2016. Service quality as an antecedent in enhancing customers' behavioural intentions. A case study of Malaysian army medical centers. *GEOGRAFIA OnlineTM Malaysian Journal of Society and Space*, 12(2), pp.179-190.

[17] Fatima, T., Malik, S.A. and Shabbir, A., 2018. Hospital healthcare service quality, patient satisfaction and loyalty. *International Journal of Quality & Reliability Management*.

[18] Tripathi, S.N. and Siddiqui, M.H., 2018. Assessing the quality of healthcare services: A SERVQUAL approach. *International Journal of Healthcare Management*, pp.1-12.

[19] Aliman, N.K. and Mohamad, W.N., 2016. Linking service quality, patients' satisfaction and behavioral intentions: an investigation on private healthcare in Malaysia. *Procedia-Social and Behavioral Sciences*, 224(2016), pp.141-148.

[20] Pekkaya, M., Pulat İmamoğlu, Ö. and Koca, H., 2019. Evaluation of healthcare service quality via Servqual scale: An application on a hospital. *International Journal of Healthcare Management*, 12(4), pp.340-347.

[21] Ladhari, R., 2008. Alternative measures of service quality: a review. *Managing Service Quality: An International Journal*.

[22] Oliver, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 17(4), pp.460-469.

[23] Baker, T.L. and Taylor, S.A., 1998. Patient satisfaction and service quality in the formation of customers' future purchase intentions in competitive health service settings. *Health marketing quarterly*, 15(1), pp.1-15.

[24] Zeithaml, V.A., Berry, L.L. and Parasuraman, A., 1996. The behavioral consequences of service quality. *Journal of marketing*, 60(2), pp.31-46.

[25] Manaf, N.H.A., Hussin, H., Kassim, P.N.J., Alavi, R. and Dahari, Z., 2015. Medical tourism service quality: finally some empirical findings. *Total Quality Management & Business Excellence*, 26(9-10), pp.1017-1028.

[26] Ismail, A., Zaki, H.O. and Rose, I.R., 2017. Interlinkages between service quality, customer satisfaction and customer loyalty in Malaysia: A case study of Armed Forces Medical Organizations. *Geografia-Malaysian Journal of Society and Space*, 12(7).

[27] Kalaja, R., Myshketa, R. and Scalera, F., 2016. Service quality

assessment in health care sector: the case of Durres public hospital. *Procedia-Social and Behavioral Sciences*, 235, pp.557-565.

[28] Shafiq, M., Naeem, M.A., Munawar, Z. and Fatima, I., 2017. Service quality assessment of hospitals in Asian context: An empirical evidence from Pakistan. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 54, p.0046958017714664.

[29] Roscoe, J.T., 1975. *Fundamentals Research Statistics for Behavioural Sciences*. "What Sample Size is Enough" in *Internet Survey Research*". *Interpersonal Computing and Technology: An electronic Journal for the 21st Century*.

[30] Sekaran, U. and Bougie, R., 2016. *Research methods for business: A skill building approach*. John Wiley & Sons.

[31] Al-Borie, H.M. and Damanhour, A.M.S., 2013. Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis. *International journal of health care quality assurance*.

[32] Kline, R.B., 2011. *Convergence of structural equation modeling and multilevel modeling*. na.

[33] Anabila, P., Kumi, D.K. and Anome, J., 2019. Patients' perceptions of healthcare quality in Ghana. *International journal of health care quality assurance*.

[34] Lestari, S.I.P., Ambarwati, R., Agustina, T., Muryani, E., Andriani, A. and Alfani, M., 2019. The effect of customer's orientation of service employee on customer's satisfaction of health services.

[35] Ahmed, S., Tarique, K.M. and Arif, I., 2017. Service quality, patient satisfaction and loyalty in the Bangladesh healthcare sector. *International journal of health care quality assurance*

[36] Al-Shami, S., Al-Hammadi, A. H., Hammadi, A. Al, Rashid, N., Al-Lamy, H., & Eissa, D. (2019). Online social networking websites in innovation capability and hotels' performance in Malaysia. *Journal of Hospitality and Tourism Technology*.

[37] Al-Hammadi, A., Al-Shami, S. A., Al-Hammadi, A., & Rashid, N. (2019). Halal tourism destination in uae: The opportunities, threats and future research. *International Journal of Innovative Technology and Exploring Engineering*, 8(6S4), 788–793. <https://doi.org/10.35940/ijitee.F1158.0486S419>





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