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# **Element of Marketing: SERVQUAL Toward Patient Loyalty** in the Private Hospital Sector

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#### Abstract

The study aims to analyze the factors that shape patient loyalty, namely, by involving the service quality factor (SERVQUAL), hospital image, patient value, and patient satisfaction in private hospitals. This study was conducted in Makassar City, Indonesia, with a sample of 296 eligible samples from private hospitals. The sample criteria were patients with outpatient and hospitalization status. Then, this study developed 23 hypotheses to test the statistical relationship between direct, intervening and multiple-effect models. Problem-solving and research focus are carried out using a quantitative method approach with a PLS-SEM-based testing tool. The bootstrapping method is being used with the constant bootstrapping step to demonstrate the results of hypothesis testing; we find that the overall hypothesis has a positive and significant effect. The combination of testing models involving several variables shows that a patient's loyalty can be formed if a patient's satisfaction has been realized. Satisfaction can be realized if the value-customer has been felt by the patients. Therefore, the hospital image must be directly proportional to service quality. Service quality is the essence of service that directly affects customers; service quality is also the reason that shapes consumer perceptions in increasing rationalization and solid customer (patient's) decision-making.

Keywords: SERVQUAL, Hospital Image, Patients Loyalty, Patients Value, Patients Satisfaction

JEL Classification Code: M0, M30, M11, I1

#### 1. Introduction

In essence, the goal of health development in the world

and Indonesia is to realize that the nation's entire population is healthy and free from various diseases (Woo, 2017). Even though contracting disease in the future is a natural factor, the

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This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/bv-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the hope that people can reach and enjoy quality, fair and equitable health services is an ideal that any country has been striving for, including Indonesia. Therefore, to realize these ideals, various health development efforts have been carried out, are being carried out, or are planned as strategic steps to learn meaningful changes in increased health status and health services to the community. Particularly in Indonesia, the government's efforts to improve health status and improve services have become a focus. It is still a big job since forty-two years ago, because quality, fair, and equitable health services are still far from people's expectations (Shieh, Wu, & Huang, 2010; Andriani, 2017). Therefore, it takes serious efforts to achieve lofty goals in the health sector. There are three fundamental factors why it is difficult to achieve fair and equitable quality health services in Indonesia: first, limited resources; second, government policies regarding health are still decentralized; and third, the high level of public awareness of the importance of quality health services is not directly proportional to the government's ability to deal with bureaucratic problems and hospitals' health services. (Handayani, Hidayanto, Sandhyaduhita, & Ayuningtyas, 2015; Perwitasari, Abror, & Wahyuningsih, 2010; Dewanto & Wardhani, 2018).

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customer-satisfaction Several surveys regarding overall hospital services in Indonesia include service complaints, suggestions, and media readers' letters. Most of the complaints that exist are related to the presence of unprofessional officers in providing services. The quality of health services in the hospital's scope is the degree of perfection of health services for the community to meet the patient's needs for health services following the health professional service standards and service standards by using the potential resources available in a reasonable, efficient and effective manner (Giao et al., 2020; Pham, Vu, Pham, & Vu, 2020). Ensuring a sense of security and fulfilling the aspects of satisfaction following norms, ethics, law, and socio-culture while still paying attention to various parts of both the government and society's capabilities and limitations. Quality health services have become the demands of all parties, including people who are users of health professional services. Therefore, the problem of the quality of health services must be a significant concern. The patient's health problems are diverse, so it seems that health services cannot always satisfy everyone. Thus, the service quality (SERVQUAL) of patient satisfaction is mostly determined by the health service provider's performance.

One way to maintain and improve the quality of service is to assess patient's satisfaction regularly. The aim is to determine the weaknesses and shortcomings of hospital management so that they are being addressed immediately. In Indonesia, quality assessment and quality assurance (QA) have received attention since 1978; Gatot Subroto hospital is the first hospital in Indonesia that implemented the quality assessment efforts, which are based on the degree of patient satisfaction. After that, several hospitals have also implemented the development of service quality activities in different ways. For reform in health services, it must be based on a quality and capacity approach. The value system and orientation in society began to change. The community began to demand better, friendlier, and better quality public services, including this health service. With the community's increasing demands for the quality of health services, health services' functions, including assistance in hospitals, need to be gradually improved to become more effective and efficient and provide satisfaction to patients, families, and communities. The purpose of this study is to analyze the factors that shape patient loyalty, namely, by involving the characteristics of service quality, government hospital image, patient value, and patient satisfaction. It can be a reference for the government to further optimize the quality of health services for the community, especially in the medical sector.

# 2. Literature Review and Hypothesis Development

Service quality is an overall evaluation of the performance and value of the entity from a service (Mashur, Muhammad, Ansir, & Shandra, 2019; Haming, Murdifin, Zulfikar, Syaiful, & Aditya, 2019). Research on the quality of services in the health industry has been conducted in recent years (e.g., Kalaja, Myshketa, & Scalera, 2016; Purcărea, Gheorghe, & Petrescu, 2013; Li et al., 2015; Abushab et al., 2018; Aliman & Mohamad, 2016; Kitapci, Akdogan, & Dortyol, 2014; Lee & Seong, 2020). The concept of service quality such as infrastructure, quality of personal, access, and health service-processes are perceived as health services quality and refer to patient preferences, needs, and expectations in order to realize customer value and customer satisfaction (Giao et al., 2020; Pham et al., 2020; Rahaman, Ali, Kejing, Taru, & Mamoon, 2020), Beside that, good service quality is not only measured by the luxury of facilities, sophisticated technology and physical appearance, but also professional attitudes and behavior as well as the high commitment of hospital employees. Beside that, service quality will also affect the image of the hospital (Kalaja et al., 2016) because health services are a category of product which is credential and intangible (Mohebifar, Hasani, Barikani, & Rafiei, 2016; Nguyen & Nguyen, 2020). The most fundamental aspect why hospital patients feeling dissatisfy in their health services is because the patients do not know or do not have access to technical information from their medical personnel (Tucker & Adams, 2001). This research in measuring service quality on hospital patient loyalty using the Service Quality concept was popularized in 1994 with dimensions such as tangible, reliability, responsiveness, assurance and empathy (Parasuraman, Zeithaml, & Berry, 1994), which was readopted from the same research conceptual framework (Haming et al., 2019). The relationship between value, satisfaction and service quality was adopted from (Bloemer & De Ruyter, 1998; Wallin Andreassen & Lindestad, 1998; Nguyen & LeBlanc, 1998).

Growth of private hospitals in recent years certainly has a positive impact on people who need quality and classy health services. However, this also led to competition between private hospitals and public hospitals. Therefore, the hospital must provide service quality to achieve patient satisfaction and lead to customer loyalty (Meesala & Paul, 2018). Indeed, competition can also increase the image of the hospital. To achieve the excellent image of hospital in the public, the government must analyze the element of management, which have been implemented, and change the paradigm of government hospitals whose image is less impressive in the community to customer-based services. Some of the results from previous studies stated that there is a positive relationship between image and loyalty as expressed by Faullant, Matzler, & Füller (2008), and the model has a relationship with consumer value (Naumann, 1995; Tran, Vo, & Dinh, 2020; Firman, Mustapa, Ilyas, & Putra, 2020). In implementation of management, every customer wants to see the value behind every sacrifice the individual has made to get or use the product he wants (Mashur et al., 2020;

Yusuf & Putra, 2019; Merdika et al., 2019; Božič & Dimovski, 2019); value creation and customer satisfaction are the keys to building business sustainable. Customer loyalty is also an indicator and the key to the success of a good long-term business (Kumar & Nayak, 2018; Pham et al., 2020; Ilyas, Rahmi, Tamsah, Munir, & Putra, 2020; Tran & Le, 2020).

Individuals have values based on the core values of society in which they live, but are modified by the values of other groups to which they are members and individual life situations or personalities. In an organizational setting, values are essential for the long-term success of the organization concerned. Value is significant in the need recognition stage of consumer decision making. Consumers also use values in determining evaluation criteria, so that value influences the communication program's effectiveness. For Kotler, Kartajaya, & Setiawan (2016), value for customer is the difference between the total value for the customer and the total cost for the customer; and the essence of marketing is to create customer value that is better than the value created by competitors. Customer value relates to using a product and is more of something that the customer feels than for the seller. Customer value is the perception and what the customer feels and evaluates the product attributes and performance. The consequences of consuming the product will ultimately make the customer achieve his goals in various usage situations. Values are relatively stable, but not completely static, as are beliefs (with cognitive, affective, and conative components) about what a person has to do, both regarding goals (final states or terminal elements) and ways of behaving (instrumental features) to achieve goals. Customer value is a strategic weapon in attracting and retaining customers and has become one of the most critical factors in the success of manufacturing companies and service providers (Haming et al., 2019; Klongthong, Watcharadamrongkun, & Ngamkroeckjoti, Thavorn, 2020). Customer value has become an ongoing concern in building and sustaining competitive advantage and creating customer relationship management. Many researchers have suggested that companies need to reorient their operations toward customer delivery and value creation to improve their customer relationship management attainment (Saeed, Grover, Kettinger, & Guha, 2011).

Firman et al. (2020) states that customer relationship management creates value for customers. There are several ways to improve customer service through customer relationship management. This includes reliability, safety, efficiency, and communication, and control of the quality of services being monitored. The customer relationship management system also acts as an 'organizational memory' about that customer. Customer relationship management provides additional value to customers that seem to be directly linked to improving its profitability and value-based marketing. Apart from the value that customer relationship management creates for customers, it can also bring

operational benefits, namely increasing company goals, which can increase customer satisfaction and long-term success and a closer relationship with the customer. Based on the literature review, the hypotheses developed in this study are as follows:

- H1: Service quality has a positive and significant direct effect on hospital image
- *H2:* Service quality has a positive and significant direct effect on patient's satisfaction
- **H3:** Service quality has a positive and significant direct effect on patient's value
- **H4:** Hospital image has a positive and significant direct effect on patient's satisfaction
- **H5:** Hospital image has a positive and significant direct impact on patient's value
- **H6:** Patient's value has a positive and significant direct impact on patient's loyalty
- **H7:** Patient's value has a positive and significant direct impact on patient's satisfaction
- **H8:** Patient's satisfaction has a positive and significant direct effect on patient's loyalty
- **H9:** Service quality has a positive and indirect effect on patient's loyalty if mediated by patient's value
- **H10:** Service quality has a positive and significant indirect effect on patient's satisfaction if mediated by hospital image
- H11: Service quality has a positive and significant indirect effect on patient's loyalty if mediated by patient's satisfaction
- H12: Service quality has a positive and indirect effect on patient satisfaction if mediated by patient's value
- H13: Service quality has a positive and indirectly significant effect on patient's value if mediated by hospital image
- **H14:** Service quality has an indirect positive and significant effect on patient's loyalty if mediated by hospital image and patient's value
- **H16:** Service quality has a positive and indirect effect on patient's loyalty if mediated by hospital image and patient's satisfaction
- H17: Service quality has a positive and significant indirect effect on patient's loyalty if mediated by hospital image, patient's value, and patient's satisfaction
- **H18:** Service quality has a positive and indirect effect on patient's loyalty if it is mediated by patient's value and patient's satisfaction
- **H19:** Hospital image has a positive and indirect effect on patient's loyalty if it is mediated by patient's satisfaction
- **H20:** Hospital image has a positive and significant indirect effect on patient's loyalty if mediated by patient's value
- **H21:** Hospital image has a positive and indirect effect on patient satisfaction if mediated by patient's value

**H22:** Hospital image has a positive and indirect effect on patient's loyalty if mediated by patient's value and patient's satisfaction

**H23:** Patient's value has an indirect positive and significant effect on patient's loyalty if it is mediated by patient's satisfaction

# 3. Research Methods and Materials

# 3.1. Sample Criteria

This study involved a sample of 200 patients from a private hospital in Makassar City during the study period from July 2019 to February 2020. The sample criteria included 17 years old and over in-patients with a minimum treatment period of three days. Apart from that, the sample criteria include gender, highest level of education, occupation, and information on funding sources during treatment at the hospital. Illustrations of specific patient demographic data are presented in Table 1. Based on 296 respondents, as depicted in Table 1, males dominated (149 samples or 50.34%); the dominant age group is 41-50 years (62 samples or 23.99%); the dominant education level is senior high school (136 samples or 45.9%); and the dominant job category came from groups outside the category of government employees, private employees, military and BUMN employees, (27.65%).

#### 3.2. Measurement

The research approach is based on quantitative explanatory, which consists of several question items and variables. Data collection used a survey with measurements using a 5-point Likert scale (1 = Strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The first independent variable component, such as service quality (SQ), consists of six measurement dimension indicators: food menu, which consists of three questions; the hospital environment, consisting of three questions; technical service level and HR professionalism, composed of four questions; the patient-friendliness entity, comprising three questions; personalized services, consisting of three questions; and hospital accessibility, composed of one question).

The second independent variable component is the hospital image (HI), which consists of six items and question dimensions – level of trust, service, facilities, success rate, excellence, the reputation of an institution, hospital image, hospital facilities, and infrastructure. The third independent variable component is patient value (PV), which consists of five measurement dimension indicators: price based on behavior, consisting of two questions; the cost is based on monetary value, composed of two questions; emotional response, consisting of two questions; quality, consisting of three questions; and reputation, which consists of two questions).

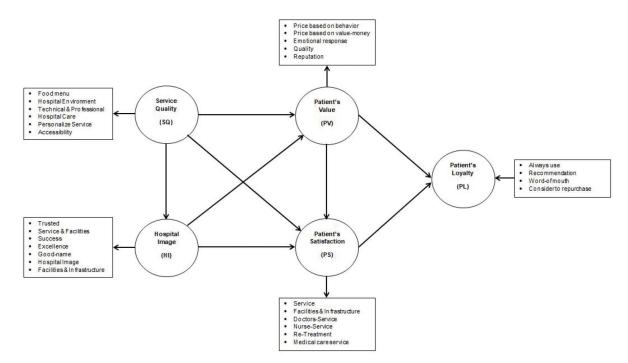


Figure 1: Conceptual Framework

Table 1: Data Demography (N = 296)

Measurement		Total	(%)	
_	≤ 20	20	6.76	
	21 - 30	59	19.93	
Ago (yoorg)	31 - 40	62	20.95	
Age (years)	41 - 50	71	23.99	
	51 - 60	45	15.20	
	> 61	39	13.18	
Gender	Male	147	49.66	
Geridei	Female	149	50.34	
Gender	Elementary School	39	13.2	
	Junior High School	30	10.1	
Education Level	Senior High School	136	45.9	
	Bachelor	24	8.1	
	Master	67	22.6	

The fourth variable component is patient satisfaction (PS), which consists of six items and question dimensions: the level of satisfaction with hospital services; the level of satisfaction with the facilities and infrastructure; the level of satisfaction with doctor services; the level of satisfaction with nurses; satisfaction for wanting to come; and return to treatment, satisfaction level during medical treatment. The last dependent variable component, patient loyalty (PL), consists of four questions: willingness to reuse, recommending subject studies, positive word-of-mouth, and favorable consideration for returning to treatment. More details on variable measurements are described in Table 2.

The testing model involves direct, indirect, and intervening relationships depicted in the conceptual framework in Figure 1. The statistical testing model uses the Structural Equation Model Partial Least Square (SEM-PLS) analysis technique. This study's testing stage consisted of measuring the average value of the dimensions of the questions on the item variable in Microsoft Excel. Then, the average value's measurement data will be processed with SPSS to determine the coefficient of validity and reliability of items against variables. Meanwhile, to determine the frequency distribution of respondents' perceptions of answers to our survey, we also use SPSS to measure this. After that, the existing data in SPSS will be migrated to SmartPLS for measuring the feasibility of a model based on the Structural Equation Model. The data analysis method used is the Partial Least Square (PLS) and data analysis test tool uses Smartpls 3.0 software. The analysis stage consists of testing the validity and reliability, evaluating the outer-model with convergent validity.

The expected convergence validity criterion is > 0.7 (Chin, 1998; Ghozali, 2013; Fornell & Larcker, 1981). Inner-model evaluation is by reviewing the value of R Square (R2) with the criteria, namely, the R2 value is about 0.5-0.67 (good determinant), 0-0.33 (moderate determinant), and 0-0.19 (weak determinant). Also reviewed is the value of F-Square (f2) with the assessment criteria, namely, the value of f2 is 0.02 (weak simultaneous correlation), if 0.15 (medium simultaneous correlation) (Chin, 1998; Henseler et al., 2014). The last step is hypothesis testing with the criteria for measuring the significant value and probability < 0.05. Hypothesis testing using our PLS Bootstrapping method with constant bootstrapping.

#### 4. Results and Discussion

# 4.1. Statistics Analysis

The results of the statistical test described in Table 2 explain that each variable's overall loading factor value is at a level > 0.60, indicating that the loading factor measurement has met the requirements of the PLS test (Henseler et al., 2014; Chin, 1998; Mashur et al., 2020). As for some questions that were issued from the test (Deleted Item) because the tested coefficient did not meet the loading factor standard (e.g., Price on money value (PBV) Q26 = Fairness of rates, Q27 = competitive price offer, Q23 = Perception of institutional facilities and infrastructure, Q17 = Accessibility (ACC).

Variable Service quality is formed by several items with outer loading value > 0.60. For example, items (e.g., FM = 0.840, HE = 0.768, TP = 0.768, FP = 0.815, PS = 0.705) all service quality variables produce a Cronbach's alpha value of 0.842, CR = 0.888 and an AVE value = 0.614. variable HI has a value of Cronbach's alpha = 0.826; CR = 0.878 and AVE = 0.590. Patient's value variable with items where the value of outer loading (e.g., PBB = 0.676, ER = 0.880, QU = 0.883, RP = 0.886), all Patient's Value variables have a Cronbach's alpha coefficient = 0.847, CR = 0.898 and AVE value = 0.690. Patient's satisfaction variable has a Cronbach's alpha coefficient = 0.908, CR = 0.929 and AVE = 0.684. The Patient's Loyalty variable has a Cronbach's alpha coefficient = 0.858, CR = 0.904, AVE = 0.701.

The Cronbach's alpha value, composite reliability, and average variance extracted (AVE) value states that the item's reliability against the variable also meets the PLS validity and reliability measurement standards. The values of Cronbach's alpha (α), Composite Reliability (CR), and AVE are declared fit. The validity measurement using the Fornell-Larcker method explains the causality between valid variables with each other. On the measurement of the average coefficient of determination (R-square) on the variable Hospital image, Patient's loyalty, Patient's satisfaction, Patient's value of 0.627, which states that the independent variable has an effect of 62.7% in forming Patient's satisfaction and Patient's value in private hospitals.

 Table 2: Variables Measurement and Statistics Analysis

Variables	Item Indicators	Deleted Item	Loading Factor	Cronbach Alpha	Composite Reliability	AVE
Service Quality (SQ)	Food Menu (FM) Q1 = A diverse menu Q2 = level of cleanliness Q3 = accuracy of presentation		0.840	0.842	0.888	
	Hospital Environment (HE) Q4 = Cleanliness, the comfort of hospital facilities Q5 = Hospital equipment Q6 = The smoothness of communication facilities at the location		0.768			
	Technical and Professional (TP) Q7 = completeness of work equipment Q8 = Timeliness of medical services Q9 = Speed of patient handling Q10 = Validity of medical action	Q17	0.768			0.614
	Friendliness towards Patients (FP) Q11 = Level of attention to patients Q12 = Speech the medical team to the patient Q13 = Patient safety and trust		0.815			
	Personalization Service (PS) Q14 = Confidentiality of patient data Q15 = Accuracy of patient information Q16 = Personal attention		0.705			
Hospital Image (HI)	Q18 = Perception of trust in institutions Q19 = Perception of optimal services and facilities Q20 = Perceptions of positive and successful institutions Q21 = Perceived superiority among competitors Q22 = Perception of friendliness to patients	Q23	0,721 0,786 0,782 0,776 0,772	0.826	0.878	0.590
	Price on behavior (PBB) Q24 = level of ease of service Q25 = Difficulty level of getting service	PBV (Q26, Q27)	0.676	0.847	0.898	
Patient's value (PV)	Emotional response (ER) Q28 = patient comfort level Q29 = Feelings of being appreciated		0.880			
	Quality (QU) Q30 = The level of service satisfaction Q31 = Responsibility Q33 = Consistency		0.883			0.690
	Reputation (RP) Q34 = The level of accuracy of the medical team following the rules Q35 = The attitude of management to maintain the status of the institution		0.886			

Table 2: Variables Measurement and Statistics Analysis (continued)

Variables	Item Indicators		Deleted Item	Loading Factor	Cronbach Alpha	Compos Reliabil		AVE
Patient's Satisfaction (PS)	Q36 = Level of Satisfaction with medical services Q37 = Satisfaction with facilities and infrastructure Q38 = Level of Satisfaction with doctors Q39 = Level of Satisfaction with nurses Q40 = Confidence to come back Q41 = Patient satisfaction level		-	0,817 0,867 0,835 0,820 0,810 0,814	0.908	0.929		0.684
Patient's Loyalty (LP)	Q42 = Always use Q43 = Recommend Q44 = Word of mouth Q45 = Consideration to	return	-	0,824 0,848 0,839 0,838	0.858	0.904		0.701
Fornell- Larcker	Hospital Image	Patient's Loyalty		ient's faction	Patient's Value		Service Quality	
Hospital Image	0,768							
Patient's Loyalty	0,590	0,837						
Patient's Satisfaction	0,697	0,755	0,	827				
Patient's Value	0,677	0,797	0,833		0,831			
Service Quality	0,693	0,656	0,785		0,744		0,784	
		R Square		R Square Adjusted				
Hospital Image		0,480		0,478				
Patient's Loyalt	ty	0,662		2		0,660		
Patient's Satisfaction 0,76		34		0,761				
Patient's Value 0,60		4 (			0,601			

The hypothesis testing results are shown in Table 3, which show that, of the 23 model demonstrations, both direct and indirect relationships have a positive and significant effect (P-Value < 0.05). In a direct relationship, the service quality on hospital image (H1) analysis path model is the most potent demonstration of the analysis. Then, on the analysis path indirectly, the mediation of the patient's value variable is proven to have a strong influence on increasing the role of service quality on patient satisfaction. Table 3 also shows a model demonstration involving two intervening variables, such as in the demonstration path analysis H16, H17, and H18, which assumes that hospital image, patient's value, and patient's satisfaction strengthen the role of service quality on patient's loyalty. The detailed illustration of the analysis path model is illustrated in Figure 2.

# 4.2. Discussion

We have demonstrated how successful the role of service quality and hospital image are in building image, customer satisfaction, and loyalty. Service quality in-hospital services is reflected in the food menus, followed by health standards (e.g., calories, vitamin, and mineral content) and even customization depending on the patient's everyday needs. Service quality reflects all forms of service quality, both product and technical. Service quality is a fundamental key to get customer satisfaction and loyalty. Interestingly, our test is the combination of testing models that involve several variables such as patient's value, hospital image, and patient's satisfaction. For example, it is shown in the lines of analysis H16, H17, and H18 that patient's loyalty can be formed if a patient's satisfaction has been realized.

Pleasure can be realized if the value-customer has been felt by the patient's. Therefore, hospital image must be directly proportional to service quality. Service quality is the essence of service that directly affects customers; Service quality is also the reason that shapes consumer perceptions in increasing rationalization and solid customer (patient's) decision making.

Health has an absolute position; even health factors cannot be equated with economic and financial interests, although financial difficulties can also impact both physical and mental health. Hospitals often give wrong impressions and perceptions to patients, so that changing the hospital's

image is needed to help patients get better faster. Excellent service is one of the critical elements. Technically, the medical personnel in the hospital is required to provide friendly professional services to both the patient and the patient's family. The confidentiality of medical record data, the patient's disease's accuracy, and customization of attention aims to provide value for patients. In essence, patients have the right to their health information and are entitled to receive all the best advice from medical personnel. Of course, accuracy in diagnosing a patient's disease aims to make patient handling more targeted. In various uncertain conditions, the demand for service and friendliness for patients is the main thing.

Table 3: Hypothesis test

	Direct Effect							
Path	Hypothesis	Sample Mean	Standard Deviation	T-Stat	P Values			
H1	Service Quality → Hospital Image	0,693	0,027	25,777	0,000			
H2	Service Quality → Patient's Satisfaction	0,318	0,047	6,704	0,000			
НЗ	Service Quality → Patient's Value	0,525	0,049	10,708	0,000			
H4	Hospital Image → Patient's Satisfaction	0,135	0,040	3,426	0,001			
H5	Hospital Image → Patient's Value	0,315	0,051	6,059	0,000			
H6	Patient's Value → Patient's Loyalty	0,555	0,061	8,939	0,000			
H7	Patient's Value → Patient's Satisfaction	0,503	0,045	11,211	0,000			
H8	Patient's Satisfaction → Patient's Loyalty	0,290	0,069	4,317	0,000			
Indirect Effect								
H9	Service Quality → Patient's Value → Patient's Loyalty	0,291	0,043	6,768	0,000			
H10	Service Quality → Hospital Image → Patient's Satisfaction	0,093	0,027	3,466	0,001			
H11	Service Quality $\rightarrow$ Patient's Satisfaction $\rightarrow$ Patient's Loyalty	0,093	0,028	3,382	0,001			
H12	Service Quality → Patient's Value → Patient's Satisfaction	0,264	0,033	8,104	0,000			
H13	Service Quality → Hospital Image → Patient's Value	0,218	0,036	5,961	0,000			
H14	Service Quality → Hospital Image → Patient's Value → Patient's Loyalty	0,121	0,024	4,859	0,000			
H15	Service Quality → Hospital Image → Patient's Value → Patient's Satisfaction	0,110	0,021	5,097	0,000			
H16	Service Quality → Hospital Image → Patient's Satisfaction → Patient's Loyalty	0,027	0,011	2,649	0,008			
H17	Service Quality → Hospital Image → Patient's Value → Patient's Satisfaction → Patient's Loyalty	0,032	0,010	3,323	0,001			
H18	Service Quality → Patient's Value → Patient's Satisfaction → Patient's Loyalty	0,076	0,020	3,921	0,000			
H19	Hospital Image → Patient's Satisfaction → Patient's Loyalty	0,039	0,015	2,645	0,008			
H20	Hospital Image → Patient's Value → Patient's Loyalty	0,175	0,035	4,920	0,000			
H21	Hospital Image → Patient's Value → Patient's Satisfaction	0,159	0,030	5,203	0,000			
H22	Hospital Image → Patient's Value → Patient's Satisfaction → Patient's Loyalty	0,046	0,014	3,396	0,001			
H23	Patient's Value → Patient's Satisfaction → Patient's Loyalty	0,145	0,036	4,193	0,000			

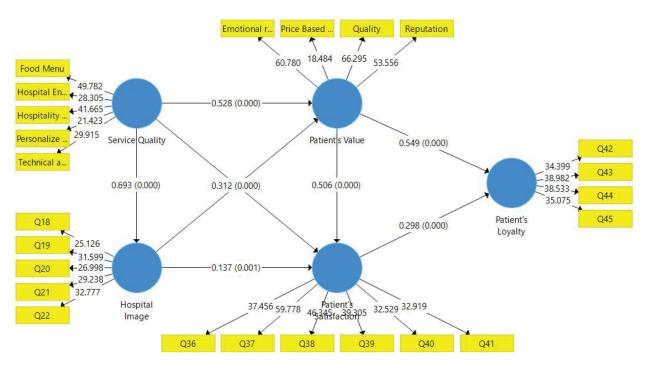


Figure 2: Bootstrapping PLS Result

Service quality is a measure of distinguishing between expectations and reality felt by patients. When consumer expectations match what they get, satisfaction will arise. In-hospital services, optimization of service quality must be able to guarantee optimal patient value improvement. Patient value in the hospital is indicated by how the patient feels the reality regarding the ease of service. This means that, the more comfortable the patient is, the more the patient's satisfaction and value will increase. The comfort factor and the feeling of being valued are a form of service reflected in increasing the patient's value. The patient's value variable is also an element that can strengthen the mediation of satisfaction and loyalty. The success in realizing a patient's importance in the hospital sector cannot be separated from two types of treatment models (e.g., palliative and hospice); hospice and palliative care, two sides of the same coin, are closely related. Hospice care means providing specialized care for patients as well as emotional support provided by medical personnel to patients. Meanwhile, palliative care is integrated health care that is active and comprehensive, with an integrated multidisciplinary approach between doctors, nurses, therapists, social-medical workers, psychologists, clergy, volunteers, and other required professions. The main goal of palliative care is not to cure the disease, but attends to the patient and his family. Even though, in the end, the patient dies, the most important thing is that before passing, the patient is ready psychologically and spiritually and is not stressed to face the illness he is suffering from. Value in health

care is defined as the health care outcome (clinical outcome and patient satisfaction). The patient's weight will be felt as the reality is realized; for example, patients/customers feel the satisfaction they expect. Organizational responsibility in handling every problem and consistency of professional actions makes customers or patients feel comfortable and have meaning in the hospital sector. Even though the condition of having a disease is something that no one wants, it does not mean that the aspects of marketing and applied psychology do not have a role, on the contrary. Marketing and mastery of psychological elements are the primary support for the service industry, especially for hospitals.

Customer satisfaction, service quality, and image are why most respondents still choose hospital as a trusted place for treatment. However, suppose we look at the distribution of the demographic data of respondents. In that case, it can be seen that the dominance of respondents comes from the 41-50 years old group, with the highest education being senior high school. The occupational factor is also dominant from the government employees sector (e.g., military, civil servants, private sector employees). This means that the price factor feels affordable; the state's health insurance is also suspected of being an antecedent of factors that trigger people in choosing a hospital for treatment. Of course, the health care cost factor is an abstract thing; price sensitivity can be addressed primarily for hospitals. It can also be assumed that the characteristics of satisfaction, loyalty, the image of the hospital, and service quality in our study are tangible and measurable.

# 5. Conclusions

In the hospital sector, whether managed by the private sector or the government, the service quality factor is a factor that must continue to experience development and improvement, considering that the services offered prioritize psychological and empathy aspects in addition to professional technical care aspects. Our research confirms the element of equal degrees that must be prioritized collectively, which aims to increase satisfaction and loyalty, such as service quality and image. Loyalty can be realized if the customer senses that satisfaction can be realized if the customer or, in this case, the patient in the hospital sector feels valued/ appreciated, and the emotional aspect is realized. Then, both physically and non-physically, the image factor can be operative as long as the tangible or intangible service quality is also recognized and felt by the customer. The emotional value can affect customer satisfaction and loyalty because the personal significance is an emotional bond between the customer and the service provider after using a product.

### References

- Abushab, K., Alajerami, Y., Alagha, S., ALnahal, M., Najim, A., & Naser, M. (2018). Evaluation of advanced medical imaging services at Governmental Hospitals-Gaza Governorates, Palestine. *Journal of Radiation Research and Applied Sciences*, 11(1), 43–48 https://doi.org/10.1016/j.jrras.2017.10.007
- Aliman, N. K., & 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(August 2015), 141–148. https://doi.org/10.1016/j.sbspro.2016.05.419
- Andriani, A. (2017). Relationship between Health Service Quality and Patient Satisfaction in Public Polyclinic Room at Puskesmas Bukit tinggi. *Jurnal Endurance*, 2(1), 45–52. http://dx.doi.org/10.22216/jen.v2i1.461
- Bloemer, J., & De Ruyter, K. (1998). On the relationship between store image, store satisfaction and store loyalty. *European Journal of Marketing*, 32(5/6), 499–513. https://doi.org/10.1108/03090569810216118
- Božič, K., & Dimovski, V. (2019). Business intelligence and analytics use, innovation ambidexterity, and firm performance: A dynamic capabilities perspective. *Journal of Strategic Information Systems*, 28(4), 101578. https://doi.org/10.1016/j. jsis.2019.101578
- Chin, W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295–336. https://doi.org/10.1016/j.aap.2008.12.010
- Dewanto, A., & Wardhani, V. (2018). Nurse turnover and perceived causes and consequences: A preliminary study at private hospitals in Indonesia. *BMC Nursing*, 17(2), 52. https://doi.org/10.1186/s12912-018-0317-8

- Faullant, R., Matzler, K., & Füller, J. (2008). The impact of satisfaction and image on loyalty: the case of Alpine ski resorts. *Managing Service Quality: An International Journal*, 18(2), 163–178. https://doi.org/10.1108/09604520810859210
- Firman, A., Mustapa, Z., Ilyas, G. B., & Putra, A. H. P. K. (2020). Relationship of TQM on managerial perfomance: Evidence from property sector in Indonesia. *Journal of Distribution Science*, 18(1), 47–57. https://doi.org/10.15722/jds.18.01.20201.47
- Firman, A., Putra, A. H. P. K., Mustapa, Z., Ilyas, G. B., & Karim, K. (2020). Re-conceptualization of Business Model for Marketing Nowadays: Theory and Implications. *Journal of Asian Finance, Economics and Business*, 7(7), 279–291. https://doi.org/10.13106/jafeb.2020.vol7.no7.279
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382–388.
- Ghozali, I. (2013). Multivariate Analysis Applications with IBM and SPSS Programs. In multivariate analysis application with IBM SPSS program 19 (p. 113). https://doi.org/10.2307/157994
- Giao, H. N. K., Thy, N. T. A., Vuong, B. N., Kiet, T. Van, & Lien, L. T. P. (2020). Outpatient Satisfaction at Private General Hospitals in Ho Chi Minh City, Vietnam. *Journal of Asian Finance, Economics and Business*, 7(7), 323–334. https://doi. org/10.13106/jafeb.2020.vol7.no7.323
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J., Jr., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013). Organizational Research Methods, 17(2), 182–209. https://doi.org/10.1177/1094428114526928
- Haming, M., Murdifin, I., Zulfikar Syaiful, A., & Aditya, H. P. K. P. (2019). The Application of SERVQUAL Distribution In Measuring Customer Satisfaction of Retails Company. *Journal of Distribution Science*, 17(2), 25–31. https://doi.org/10.15722/jds.17.02.201902.25
- Handayani, P. W., Hidayanto, A. N., Sandhyaduhita, P. I., & Ayuningtyas, D. (2015). Strategic hospital services quality analysis in Indonesia. *Expert Systems with Applications*, 42(6), 3067–3078. https://doi.org/10.1016/j.eswa.2014.11.065
- Ilyas, G. B., Rahmi, S., Tamsah, H., Munir, A. R., & Putra, A. H. P. K. (2020). Reflective Model of Brand Awareness on Repurchase Intention and Customer Satisfaction. *Journal of Asian Finance, Economics and Business*, 7(9), 427–438. https://doi.org/10.13106/jafeb.2020.vol7.no9.427
- Kalaja, R., Myshketa, R., & Scalera, F. (2016). Service Quality Assessment in Health Care Sector: The Case of Durres Public Hospital. *Procedia - Social and Behavioral Sciences*, 235(November), 557–565. https://doi.org/10.1016/j.sbspro.2016. 11.082
- Kitapci, O., Akdogan, C., & Dortyol, İ. T. I. T. (2014). The impact of service quality dimensions on patient satisfaction, repurchase intentions and word-of-mouth communication in the public healthcare industry. *Procedia - Social and Behavioral*

- Sciences, 148(August), 161–169. https://doi.org/10.1016/j.sbspro.2014.07.030
- Klongthong, W., Thavorn, J., Watcharadamrongkun, S., & Ngamkroeckjoti, C. (2020). Determination of Factors in Cultural Dimensions and SERVQUAL Model Affecting the Corporate Image of Pharmacy Retail Stores. *Journal of Asian Finance, Economics and Business*, 7(10), 875–884. https://doi. org/10.13106/jafeb.2020.vol7.no10.875
- Kotler, P., Kartajaya, H., & Setiawan, I. (2016). Marketing 4.0: Moving from traditional to digital. Hoboken, NJ: John Wiley & Sons.
- Kumar, J., & Nayak, J. K. (2018). Brand community relationships transitioning into brand relationships: Mediating and moderating mechanisms. *Journal of Retailing and Consumer Services*, 45(January), 64–73. https://doi.org/10.1016/j. jretconser.2018.08.007
- Li, M., Lowrie, D. B., Huang, C. Y., Lu, X. C., Zhu, Y. C., Wu, X. H., Shayiti, M., Tan, Q. Z., Yang, H. L., Chen, S. Y., Zhao, P., He, S. H., Wang, X. R., & Lu, H. Z. (2015). Evaluating patients' perception of service quality at hospitals in nine Chinese cities by use of the ServQual scale. *Asian Pacific Journal of Tropical Biomedicine*, 5(6), 497–504. https://doi.org/10.1016/j.apjtb.2015.02.003
- Lee, H. J., & Seong, M. H. (2020). A Study on the Effects of Business Service Quality on Satisfaction, Commitment, Performance, and Loyalty at a Private University. *Journal* of Asian Finance, Economics and Business, 7(9), 439–453. https://doi.org/10.13106/jafeb.2020.vol7.no9.439
- Mashur, R., Gunawan, B. I., Ashoer, M., Hidayat, M., Perdana, H., & Putra, K. (2019). Moving From Traditional to Society 5.0: Case study by Online Transportation Business. *Journal Distribution Science*, 17(9), 93–102. http://dx.doi.org/10.15722/jds.17.09.201909.93
- Mashur, R., Muhammad, H., Ansir, L., AHP, K. P. A. H. P., & Shandra, B. (2020). Antecedents and consequence of brand management: empirical study of Apple's brand product. *Journal of Asia Business Studies*, 14(3), 307–322. https://doi.org/10.1108/JABS-01-2019-0030
- Meesala, A., & Paul, J. (2018). Service quality, consumer satisfaction and loyalty in hospitals: Thinking for the future. *Journal of Retailing and Consumer Services*, 40(January), 261–269. https://doi.org/10.1016/j.jretconser.2016.10.011
- Merdika, D., Sule, T., Kartini, D., Oesman, M., Halim Perdana Kusuma, A., Putra, K., & Chamidah, N. (2019). Moderating of the Role of Technology Theory to the Existence of Consumer Behavior on e-commerce. *Journal Distribution Science*. 17(7), 15–25. https://doi.org/10.15722/jds.17.07.201907.15
- Mohebifar, R., Hasani, H., Barikani, A., & Rafiei, S. (2016).
  Evaluating Service Quality from Patients' Perceptions:
  Application of Importance–performance Analysis Method.
  Osong Public Health and Research Perspectives, 7(4),
  233–238. https://doi.org/10.1016/j.phrp.2016.05.002

- Naumann, E. (1995). *Creating customer value*. Nashville, TN: South-Western Publishing.
- Nguyen, N., & LeBlanc, G. (1998). The mediating role of corporate image on customers' retention decisions: an investigation in financial services. *International Journal of Bank Marketing*, 16(2), 52–65. https://doi.org/10.1108/02652329810206707
- Nguyen, T. Q., & Nguyen, H. T. T. (2020). Factors Affecting Industry and University Collaboration in Education in the Hospitality Industry in Vietnam: A Business Perspective. *Journal of Asian Finance, Economics and Business*, 7(2), 291–300. https://doi.org/10.13106/jafeb.2020.vol7.no2.291
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: implications for further research. *The Journal of Marketing*, 58(1), 111–124. https://doi. org/10.2307/1252255
- Perwitasari, D. A., Abror, J., & Wahyuningsih, I. (2010). Medication errors in outpatients of a government hospital in Yogyakarta Indonesia. *International Journal of Pharmaceutical Sciences Research and Review, 1*(1), 8–10.
- Pham, C. D., Vu, S. T., Pham, Y. T. K., & Vu, N. T. (2020). Evaluating Performance of Vietnamese Public Hospitals Based on Balanced Scorecard. *Journal of Asian Finance, Economics* and Business, 7(6), 339–349. https://doi.org/10.13106/ jafeb.2020.vol7.no6.339
- Purcărea, V. L., Gheorghe, I. R., & Petrescu, C. M. (2013). The Assessment of Perceived Service Quality of Public Health Care Services in Romania Using the SERVQUAL Scale. Procedia Economics and Finance, 6(13), 573–585. https://doi. org/10.1016/S2212-5671(13)00175-5
- Rahaman, M. A., Ali, M. J., Kejing, Z., Taru, R. D., & Mamoon, Z. R. (2020). Investigating the Effect of Service Quality on Bank Customers' Satisfaction in Bangladesh. *Journal of Asian Finance, Economics and Business*, 7(10), 823–829. https://doi. org/10.13106/jafeb.2020.vol7.n10.823
- Saeed, K. A., Grover, V., Kettinger, W. J., & Guha, S. (2011). The successful implementation of customer relationship management (CRM) system projects. ACM SIGMIS Database: The DATABASE for Advances in Information Systems, 42(2), 9–31. https://doi.org/10.1145/1989098.1989100
- Shieh, J.-I., Wu, H.H., & Huang, K.K. (2010). A DEMATEL method in identifying key success factors of hospital service quality. Knowledge-Based Systems, 23(3), 277–282. https://doi. org/10.1016/j.knosys.2010.01.013
- Tran, V. D., & Le, N. M. T. (2020). Impact of Service Quality and Perceived Value on Customer Satisfaction and Behavioral Intentions: Evidence from Convenience Stores in Vietnam. *Journal of Asian Finance, Economics and Business*, 7(9), 517–526. https://doi.org/10.13106/jafeb.2020.vol7.no9.517
- Tran, V. D., Vo, T. N. L., & Dinh, T. Q. (2020). The Relationship between Brand Authenticity, Brand Equity and Customer Satisfaction. *Journal of Asian Finance, Economics and*

- Business, 7(4), 213–221. https://doi.org/10.13106/jafeb.2020.vol7.no4.213
- Tucker, J. L., & Adams, S. R. (2001). Incorporating patients' assessments of satisfaction and quality: an integrative model of patients' evaluations of their care. *Managing Service Quality: An International Journal*, 11(4), 272–287. https://doi.org/10.1108/EUM0000000005611
- Wallin Andreassen, T., & Lindestad, B. (1998). Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International Journal*
- of Service Industry Management, 9(1), 7–23. https://doi.org/10.1108/09564239810199923
- Woo, J. (2017). Designing fit for purpose health and social services for ageing populations. *International Journal of Environmental Research and Public Health*, 14(5), 457. https://doi.org/10.3390/ijerph14050457
- Yusuf, M., & Putra, A. H. P. K. (2019). The Impact of Product Quality, Price, and Distribution on Satisfaction and Loyalty. *Journal Distribution Science*, 17(10), 17–26. http://dx.doi. org/10.15722/jds.17.10.201910.17