

EMPIRICAL STUDY ON PATIENT SATISFACTION AND PATIENT LOYALTY ON PUBLIC HOSPITAL IN BANDUNG, INDONESIA

Dudung Juhana¹, Ester Manik², Catleya Febrinella³ and Iwan Sidharta⁴

Abstract: *This study aims at examining the effect of quality services and brand image on patient satisfaction and patient loyalty on public hospital in Bandung, Indonesia. The data were collected through questionnaires. It uses Structural Equation Modeling (SEM) to determine the degree of closeness of the examined variables through second order estimation methods of confirmatory factor analysis to determine the effect of direct and indirect independent variable on the dependent variable. The results show that the service quality affected satisfaction through brand image and service quality. Simultaneously, service quality and brand image affected patient satisfaction of public hospital in Bandung, Indonesia. Thus, patient satisfaction affected patient loyalty. The results support previous research which states that the service quality, brand image influence on customer satisfaction and patient loyalty. The implication of this study is that the manager of a hospital needs to improve service quality and brand image so that patient satisfaction can be improved, which in turn can gain patient loyalty.*

Keywords: *Service Quality, Brand Image, Patient Satisfaction, Patient Loyalty.*

1. INTRODUCTION

Every organization of companies and public organizations in the era of globalization is now required to continuously improve service in a professional manner in accordance with their respective fields. The development of technology and information flow very quickly and push every organization of companies and public organizations to generate innovative products and services that can meet the needs and wants of customers, so that customers are satisfied with what they

^{1.} School of Economic Pasundan, Bandung, Indonesia JL. Turangga No. 37-41, Bandung, Indonesia. 40263 Tel 622-7303249, 622-7302537, 622-7302491, Fax 622-7309128. Email: dudung@stiepas.ac.id

^{2.} School of Economic Pasundan, Bandung, Indonesia JL. Turangga No. 37-41, Bandung, Indonesia. 40263 Tel 622-7303249, 622-7302537, 622-7302491, Fax 622-7309128. Email: ester@stiepas.ac.id

^{3.} School of Economic Pasundan, Bandung, Indonesia JL. Turangga No. 37-41, Bandung, Indonesia. 40263 Tel 622-7303249, 622-7302537, 622-7302491, Fax 622-7309128 Email: catleya@stiepas.ac.id

^{4.} School of Economic Pasundan, Bandung, Indonesia JL. Turangga No. 37-41, Bandung, Indonesia. 40263 Tel 622-7303249, 622-7302537, 622-7302491, Fax 622-7309128. Email: i_sidh@stiepas.ac.id

get from organization's service product. Many ways have been done by corporate organizations and public organizations to meet the needs and wants of customers which are giving the image both in terms of production and services. One form of public organization is owned by the public hospital. This is very necessary because the people are starting to realize how precious health for their lives knowing how expensive health care costs that are often difficult to reach.

With the increasing public awareness of the importance of health, the health services were primed to be very needed by the people to meet their health needs. As mandated by Law No. 36 of 2009 on the National Health System that the implementation of health development by all the potential of the nation, whether public, private, and government synergistically, effective and efficient, to realize that a maximum degree of public health. And also affirmed that every person has the same right to gain access to resources in the health sector and health services that are safe, quality, and affordable. Instead, each person also has the obligation to participate in the social health insurance program. Health is a human right and a constitutional right that its rights are protected by the rule of law. Health is also one indicator of nation progress, because people's health means seeking to promote human resource development. Health care will be the people's rights, is no longer a commodity that can only be enjoyed by those who can afford to pay but all citizens of Indonesia will be protected in health insurance.

Regulation of the President of the Republic of Indonesia 2013 on Health Insurance, precisely in Chapter I General Provisions Article 1 No. 14 stated that health care facilities are used to organize the efforts of personal health services, both promotive, preventive, curative and rehabilitative undertaken by the Government, Local Government, and/or community. Referring to the rule of President of the Republic of Indonesia in 2013 that it was supposed to health services provided by The Hospital of the community can provide health care services so that they feel satisfied.

Good quality of service will surely create user satisfaction with the service. Good quality service will ultimately provide several benefits, including the establishment of a harmonious relationship between the providers of goods and services with patient provide a good foundation for the creation of customer loyalty that is profitable for the service providers. The quality of service has a close relationship with patient satisfaction. Good service quality provided the impetus to customers to establish strong ties with the company. In the long run such bonding allows hospitals to understand carefully the patient's expectations and needs. Thus the hospital can improve patient satisfaction in a way to maximize a pleasant experience and minimize or eliminate unpleasant experience for the patient. In this case, hospital as service provider has a strong contribution to achieve these goals. For service providers, including hospitals, there is one thing

that is most important in attempt to create patient satisfaction, ie services. The quality of services as a measure of how good a given level of service that is able to meet the expectations of patients.

Quality of services is an advantage that is perceived by the consumer services company of the comparison between what customers want with what is acceptable to the consumer after the purchase of services. This can be realized through the fulfillment of the needs and wants of patients and accuracy of delivery to compensate for patient expectations. According to Parasuraman, et al. (1988) the primary factor affecting the quality of service is expected service and perceived service. This concept is a development of the concept of satisfaction measurement based on technical quality and functional quality (Grönos, 1984; 2000). The technical quality of the main attributes such as infrastructure, facilities, places of healing while the quality of the functional covering attribute how the delivery of services to patients as honestly, friendly attitude, the waiting time (Padma et al, 2009) and can be used to improve the quality of health care in hospitals (Atiga, 2012; Khudair & Raza, 2013), which can ultimately improve patient satisfaction (Padma et al, 2010). Brady & Cronin (2001) state the quality of services consisting of the interaction quality, physical environment quality and outcome quality. The experts have the view that all three of these qualities during the process of service delivery give a great effect on the perception of service quality.

According to Brady & Cronin (2001), the customer will evaluate the subdimension to shape perceptions of the organization's performance on each of the main dimensions. This perception underlies the overall perception of service quality. In other words, a customer form perceptions of the quality of services based on the evaluation of performance at various levels and combines these evaluations in order to determine the overall quality of services. The patient's perception of health care is made up of the image of the hospital based on experience and references obtained by patients in the form of skills, attitudes and behavior of hospitals, which in turn can form the initial perceptions of patients about the hospital that influence patient satisfaction (Dron Dahl et al, 2013). Perception is then expected to form the image of the hospital. The image of the hospital is a concrete manifestation of the perception of customers with the services provided through what customers acquired as a result of transactions between providers and users of services as well as how customers obtain such services (Gonroons, 2000).

A positive image in the perception of consumers will reduce the disappointment on poor health care experience and help in hospital marketing reverse a negative image caused consumers dissatisfaction, and in case of a bad experience, consumers need a lot of good experience to change the overall image of the bad (Sumaedi et al, 2014). Brand image is affected by the components of the corporate image, the image of the user (user brand) and the image of the product (product brand) (Wu,

2011) Preferences patients to health services is one of the factors that support in the interaction providers with patients, according Jahng et al (2005) collaboration between physician-patient and positive output in health services may increase the patient's expectations. The patient compliance in the treatment, can shorten the healing period and can develop health promotion in general. Further more it can improve patient satisfaction on health services (Cheraghi-Sohi et al, 2005). So that the patient's perception can form satisfaction as a positive feedback for patient assessment over post-health services (Vinagre & Neves, 2008).

The image and patient satisfaction are important factor for companies to influence both tangible patient loyalty for re-purchasing and recommend it to others. Customer loyalty is a deep commitment to re-purchase and the re-service product in the future, which led to purchase the same brand or a set of the same brand, despite of the involvement of situational factors and marketing efforts that could potentially lead to brand switching behavior. Research conducted by Nugraheni & Purnomo (2011) in hospitals Setjonegoro Wonosobo on health care Pharmacy Outpatient (IFRS) for public patients, patients Askes, the patient Social Security, and the patient JAMKESNAS stating patient satisfaction can be optimized by improving the quality of health services. Hospitals parties' especially government-owned hospitals must be able to be a means for the public health, therefore health services provided must be qualified in order to satisfy the public as consumers. It is already an obligation for the hospitals in accordance with the Decree of the Minister of Health Regulation No. 129 of 2008 on Hospital Minimum Service Standards in order to improve health services. One of the main ways of maintaining patient satisfaction is by providing higher quality health care consistently which meet customer expectations so it can form an image that can be patient's preference to form optimal patient satisfaction so it will increase the loyalty of the patients.

Noting the background, problem identification and restrictions on the formulation of the problem are how the patient's perception on service quality, brand image, patient satisfaction, loyalty of patients and its influence either simultaneously or partially. While the purpose of this study determines the patient's perception on service quality, brand image, patient satisfaction, patient loyalty and its influence either simultaneously or partially.

2. LITERATURE REVIEW AND FRAMEWORK

2.1 Service Quality

Measurement of the gap between the expectations and perceptions of consumers about the services of a routine performed by major companies as feedback that

measure the quality and make corrections if the quality was less satisfactory consumer. Model gap Parasurama regarded as Parasuraman's Servqual model (Parasuraman et al., 1985). They studied the effect of consumers' perception of quality of service (customer-perceived quality) in four service industries, namely retail banking, credit cards, securities brokerage, and product repair and maintenance. Grönroos (1990) emphasizes the importance of consumers' assessment of the service as a result of the comparison between expectations and performance or experience in using or use the services consisting of what, which include technical quality, including outcome and how, services functional explaining the nature or state of the services consumed, While that is no less important between the two services for corporate image. User experience can be categorized into three criteria, namely in the form of what can be felt (technical quality), delivery services (functional quality), and a good impression or a bad impression about the company (corporate image) that is formed in his mind before or after he take benefit from services. If the expectation according to what he felt after take benefit from these services means that service quality was good. In other words, if the impression is positive, it means that customers were satisfied or very satisfied, which is an indicator that the services provided good quality. If what is perceived by consumers are still below expectations, then the quality of services must be still low.

2.2 Brand Image

Brand equity is the positive effect of differentiation that can be seen from the response of consumers to the goods or services. Brand equity is the power of a brand that can increase or decrease the value of the brand itself, which can be seen from the response of consumers to the goods or services sold (Kotler, 2003). For consumers in general, brand equity can increase or decrease the value of a product because of brand equity in large numbers on certain products and brands, but also affects the brand equity, consumer confidence in making purchasing decisions in consuming a product. Brand identity is a set of incorporation of a unique brand and strategic brands inspire and nurture, this merger represents what the basis of that company promised to consumers (Aaker, 2003). Brand image is a description of the association and confidence in a particular brand. A positive brand image will make the consumers to prefer a product with the mark concerned in the future for producers while good brand image will help the company's activities in marketing. So that the brand image can be formed as or close to the brand identity which is expected by the company, the company as a manufacturer must be able to understand and exploit the elements that make up a brand a good image.

2.3 Satisfaction

Simply say, complacency can be interpreted as an effort to fulfill something or make something adequate. Customer satisfaction is a condition in which the wants, expectations and needs of customers are met. A service is considered satisfactory if the service can meet the needs and expectations of customers. According to Kotler (2003), customer satisfaction as the feeling of pleasure or disappointment of someone to a product after he compared the results of products which was thought to the expected product performance. If performance meets expectations, it means that the customer is satisfied. But if the performance doesn't meet customer expectations, then the customer isn't satisfied. Patient satisfaction is patient perception that the expectations have been met or exceeded. Patient satisfaction is a patient's level of feeling that arises as a result of the performance of health services obtained after patients compared with what was expected. If the results are felt to equal or exceed expectations, then it will cause a feeling of satisfaction, otherwise there will be a feeling of disappointment or dissatisfaction when the results are not along with expectations.

2.4 Loyalty

Loyalty is a person against an object of loyalty or commitment to customers to a brand, store or supplier, based on a very positive attitude and reflected in a consistent repeat purchases (Wu, 2011). While the customer loyalty in the context of marketing services defined by Dick & Basu (1994) as a response are closely linked to pledge or promise to uphold the commitment of the underlying continuity of the relationship, and usually reflected in sustainable purchasing from providers of similar services on the basis of dedication and pragmatic constraints. Loyal consumers make repurchasing and sustained by positive words. Patients will provide economic value to the hospital. Loyal patient is an invaluable asset to the hospital, while the characteristics of patients who are loyal is that they keep making repurchasing, buying between product lines and services, referencing to others, and showing resistance to the competitors.

2.5 Hypotheses

2.5.1 The Influence of Service Quality towards Patient Satisfaction

The quality of health services have a close relationship with patient satisfaction, because the quality of giving a boost to the patient to establish stronger ties with the implementation of health (providers) and ultimate patient satisfaction can increase the number of implementation (provider). Quality of service aims to provide customer satisfaction. Customer satisfaction of a service is determined by the customer's interest before using the service that compared with the results of customer perception of the service after the customer perceives the service

performance that above expectations causing a sense of satisfaction. In his studies about customers in Sweden, Fornell (1992) in Suzanto & Sidharta, (2015) proved that there is a relationship between the perceived quality (performance) and satisfaction. Cronin & Taylor (1992) found a strong causal relationship between the positive and the overall service quality and satisfaction. An outline of a number of studies we can conclude that the quality of service-related determines customer satisfaction (Sidharta & Suzanto, 2015). Patient satisfaction serves as a medium between service quality and behavioral intentions. The quality of health care is not just concerned with how the services of medical personnel providing services to patients, but also how the patient feels comfortable with the conditions and situations that hospitals create. (Arab et al, 2012).

H₁: Higher service quality would lead to higher customer satisfaction.

2.5.2. The Influence of Brand Image toward Patient Satisfaction

The image becomes very important for any company, because the image is seen as the success of marketing activities. This is because the image of an abstract depiction of the brand becomes the product due to marketing activities and interaction of market perception, the image has the ability to influence customer perception of the product or service being offered (Zeithaml & Bitner, 2000). The result of Sumaedi's research (2014) proves that the brand image will directly influence the high customer satisfaction with the product. This is supported by Wu (2011) which states that the development of the market is so rapid. It requires companies to improve customer satisfaction by encouraging consumers to pay more attention to brand image than the physical characteristics of a product in making decision to purchase. The study was also supported by research from Chahal & Bala (2012) which states that the brand images affect the level of customer satisfaction. Image and patient satisfaction is an important factor for companies to influence both tangible patient loyalty in their repurchasing and recommending it to others.

H₂: Higher brand image would lead to higher customer satisfaction

2.5.3. The Influence of Service Quality and Brand Image towards Patient Satisfaction

Kumar & Thota (2014) examined the effect of image quality health care to hospital proves that the quality of services and significant positive effect on the image of the hospital. However, research findings also prove that the image of the hospital has a positive and significant impact to customer satisfaction. That is, the improvement of quality of service will improve the hospital's image in the eyes of the patient. As a result, customer satisfaction will be increased as well (Pai & Chary, 2013). Similarly, research conducted by Srivastava & Kumar (2014) about satisfaction of patients to health services (Chaabouni & Abednnadher, 2014) and pharmacy services is determined by the brand image of the hospital.

H₃: Higher service quality and brand image would lead to higher customer satisfaction.

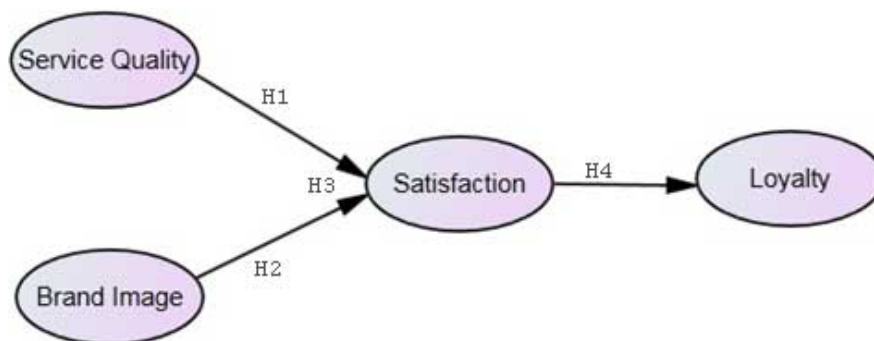
2.5.4. The Influence of Patient Satisfaction towards Patient Loyalty

Fornel et al. (1999) found customer loyalty (eg, intention to repurchase, willingness to give a positive word) is a function of customer satisfaction, which again is a function of cognitive comparison of expectations prior to consumption and actual experience. According to Aliman & Mohamad (2013) what can shape the behavior of the patient's intention is ultimately improve patient loyalty. Hu, et al (2010) in his research found that customer satisfaction has a positive and significant relationship towards customer loyalty. Wu (2011) state that customer loyalty is an endogenous variable caused by a combination of satisfaction so that customer loyalty is a function of satisfaction. If the relationship between satisfaction and customer loyalty is positive, then the high satisfaction will increase customer loyalty.

Cronin & Taylor (1992), Dick & Basu (1994), and Oliver (1997) argues that consumer satisfaction is one of the few causes of the formation of customer loyalty. Cronin et al (2000) through their research explained that customer satisfaction is able to provide a potential direct impact on consumer loyalty. Positive patient preference will form trust which in turn can provide a positive judging to the hospital (Ross, et al, 1993; Brennan & Strombom, 1998; Bunniran, 2010).

H₄: Higher patient satisfaction would lead to higher patient loyalty.

Figure 1: Framework



3. METHOD

The population in this study is patients with revisited patient in a public hospital in Bandung, Indonesia, RSUD Dr. M. Salamun who have never received the overall

process in health care. The amount of sample determined by slovin formula, the number of population in the study is 820 people, with a sampling error rate 5%, the minimum sample is 270 people. The final sample that can be used is 300 people.

The method used in this research is the survey method, the measurement process to gather information with a higher structure called a questionnaire. Survey methods specified an explanatory survey because it would explain the relationship between the studied variables (Hair et al, 2006). Explanatory research refers to the theoretical hypotheses to be tested as the cause of the phenomenon. Data collection methods used by the researchers are to disseminate the questionnaire or questionnaires. The questionnaire used is a closed questionnaire. While the kind of scale that is used to answer questions in the questionnaire was a Likert scale of 5 points is the method used to measure attitudes, opinions, and perceptions of a person or a group of social phenomenon that aims to know the opinion of the respondents about satisfaction regarding patient loyalty.

The independent variable is used as an exogenous construct is a service quality (X1) and brand image (X2). The dependent variable is a variable that is affected (response) or a variable whose value depends on other variables change. The dependent variable is used as an endogenous construct is loyalty (Z). Intervening variable/mediator is a variable intermediary or mediates the relationship variable. Variables used as exogenous and endogenous construct is patient satisfaction (Y).

The service quality variabel domains included in the survey were 3 dimension namely; Interaction Quality, Physical Environment Quality, Outcome Quality and the indicator of instrument was adopted from Brady & Cronin (2001) namely; 1) attitude, 2) behavior, 3) skill, 4) ambien condition, 5) physical design, 6) social environment, 7) waiting time, 8) physical factor, and 9) valence. Moreover, the instruments of brande image variable domains adopted were 3 dimension namely; corporate image, user image, product image, and the indicator instrument was adopted from LeBlanc & Nguyen (1998) and Aschmer (1999), namely 1) reputation, 2) credibility, 3) careness, 4) corporate identity, 5) innovation, 6) The pride of the brand, 7) The experience of the brand, 8) Personality brands, 9) Support others, 10) Benefits, 11) personal care, 12) facility, 13) waiting, 14) price, and 15) situation.

The instruments of patient satisfaction variable domains were 5 dimension namely; care quality, process quality, public service quality, price, cost and adopted from a study by Pohan, (2007) which had been modified in accordance with the study, namely 1) health services available at the time and place when needed, 2) ease of access to health services, 3) patient's perception of health services, 4) competency of doctor and physician, 5) the end result of disease or changes experienced by the patient 6) Perception of caring physician or other health care professions, 7) patient confidence, 8) understand the doctor's advice, 9) the physical facilities and

environmental health services, 10) system of agreements, 11) waiting time, 12) mechanisms for solving problems and complaints, 13) the scope and nature of the health benefits and services, 14) perceived price, 15) fairness costs, 16) clarity of the cost of services, 17) comparison with similar hospitals, 18) no waivers cost.

Loyalty variable domains included were 5 dimension namely; behavior measuring, linking the brand, commitment, immunity, referral and the instrument was adopted from a study by Oliver, (1996) which had been modified in accordance with the study, namely 1) conduct regular purchase or repurchase, 2) feeling happy patient treatment at the hospital, 3) the desire of patients to return to hospital treatment, 4) confidence patients with quality of care in hospitals, 5) the patient refused offers another hospital, and 6) patients are recommended to others about the hospital.

Validity test used in this study is the construct validity, namely finding a way to correlate the validity of the scores obtained by each item question with a total score. Test the validity of using the correlation Pearson Product Moment. Reliability testing intended to determine whether the measuring instruments used showed levels of precision, accuracy, stability, or consistent, although carried to the questions that have been valid to determine the level of consistency of measurement results when the measurements were taken back to the same symptoms (Hair et al., 2006). An item declared invalid if it has validity index (correlation coefficient) of less than 0.3 and a number of items in one variable is declared has a level of reliability that can be used if it has a reliability index of more than 0.7.

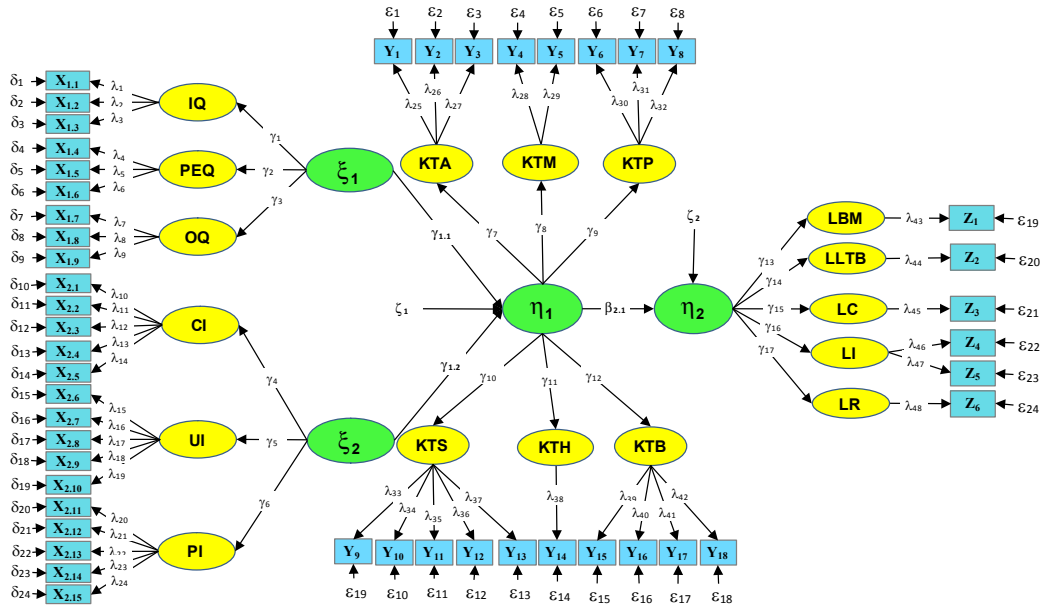
Table 1
Result of Validity and Reliability Test

<i>Variable</i>	<i>Item</i>	<i>Not Valid</i>	<i>alpha-cronbach's value</i>	
			<i>before</i>	<i>after</i>
Service Quality	118	16 item	0,967	0,968
Brand Image	20	1 item	0,906	0,912
Patient Satisfaction	29	–	–	0,947
Patient Loyalty	6	–	–	0,844

The analysis will be carried out verification of hypothesis testing using Structural Equation Modeling with connection with the measurement level for variables X1, X2, and Y and Z.

Complete the structural model in this study can be seen in Figure 2.

Figure 2: Variable Structure Analysis Research on Overall



Where η_1 is patient satisfaction, η_2 is patient loyalty, ξ_1 is service quality, ξ_2 is brand image, l is a latent factor weights of variables with the indicator, d is exogenous latent indicators of measurement error variable, e is endogenous latent indicators of measurement error variable, g is the coefficient of direct influence of exogenous latent variable with endogenous latent variables, β is the coefficient of direct influence of exogenous latent variable with endogenous latent variables.

Goodness of fit test is as follows;

Table 2
Goodness of fit

GoF	Result	Decision
Chi-Square	160,1 (df=115)	
p-value	0,004	Moderate fit
RMSEA	0,036	fit
GFI	0,941	fit
AGFI	0,921	fit

Based on table 2 shows the result of godness of fit overall with used χ^2 test (*chi-square*) then the model is not yet fit overall. However, when viewed from the value of GFI (Goodness of Fit Index) for models studied by 0.941 shows a model obtained already fit, ie, greater than 0.90. Similarly, when referring to the value of RMSEA is below 0.08 then the model is acceptable. Thus, the results indicate the size of the absolute conformity of the model obtained meet the criteria for goodness of fit to the size of the RMSEA (0.036), χ^2 test (*chi -square*) obtained a value of 160.1 with a p-value = 0.004.

4. RESULT AND DISCUSSION

4.1 Respondent Characteristic

Analysis profile of respondents intended to identify data based on respondents by sex, the last education, age, employment and number of visits. In accordance with the results of research conducted, there were 300 respondents who filled out questionnaires and all of them are eligible for further processing. Profile of respondents by sex is shown in Table 3.

Table 3
Characteristic of Respondents

<i>Item</i>	<i>Category</i>	<i>%</i>
Gender	Male	47,33
	Female	52,67
Age	17-32 years old	12,00
	33-48 years old	25,33
	49-64 years old	50,33
	65-80 years old	13,00
Education	Other	0
	Junior High School	0
	Senior High School	29,33
	Diploma/Bachelor	70,67
Occupation	Unemployment	7,33
	Entrepreneur	29,33

	Government employee	49,00
	Other	14,33
Number of visit	2 - 4 times	47,00
	5 - 7 times	32,67
	8 - 10 times	17,00
	>10 times	3,33

4.2 Result

Based on the results of data processing are known as follows:

Figure 3: Result of structural model

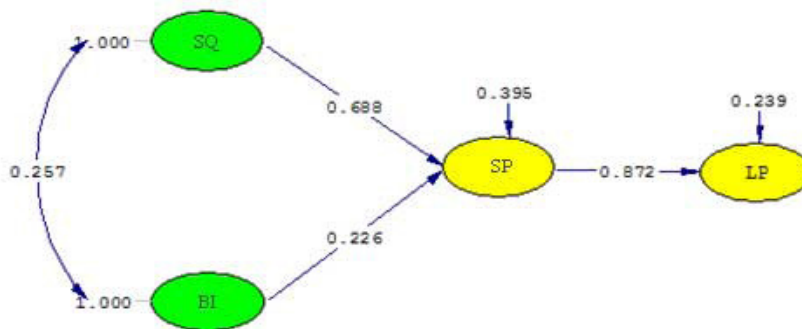


Table 4
Structural Equation on Effect of Service Quality and Brand Image on Satisfaction

Path	Direct Effect	Indirect Effect	Total	T Table	Decision
Service Quality → Satisfaction	47,3%	4,0%	51,3%		
Brand Image → Satisfaction	5,2%	4,0%	9,2%		
Service Quality → Loyalty	0,688	0	0,688		
Brand Image → Loyalty	0,226	0	0,226	14,154	Accept
Service Quality & Brand Image → Satisfaction	60.5%	0	60.5%	4,566	Accept
Satisfaction → Loyalty	76,0%	0	76,0%	12,496	Accept
				16,849	Accept

The Influence of Service Quality towards Patient Satisfaction

The first hypothesis to be tested is the influence of the quality of services to satisfaction of patients. Based on the test results can be seen tcount variable quality of services (14.154) is greater than t table (1.96). Because t value greater than t table, then the error rate of 5% so it was decided to reject Ho and Ha received. So based on the test results it can be concluded that the quality of services partially influence on patient satisfaction. Directly quality of services accounted for 47.3% of patient satisfaction. Then the indirect effect of service quality for its association with the brand image of 4.0% so that the total effect of the quality of services to satisfaction of patients amounted to 51.3%.

The Influence of Brand Image Towards Patient Satisfaction

The second hypothesis to be tested is the influence of brand image on patient satisfaction. Based on the test results can be seen tcount variable quality of services (14.154) is greater than t table (1.96). Because t value greater than t table, then the error rate of 5% so it was decided to reject Ho. So based on the test results it can be concluded that the quality of services partially influence on patient satisfaction. Directly quality of services accounted for 47.3% of patient satisfaction. Then the indirect effect of service quality for its association with the brand image of 4.0% so that the total effect of the quality of services to satisfaction of patients amounted to 51.3%.

The Influence of Service Quality and Brand Image towards Patient Satisfaction

The third hypothesis to be tested is the influence of service quality and brand image simultaneously on patient satisfaction Together the two independent variables (service quality and brand image) contribute to or influence amounted to 60.5% of patient satisfaction. While the balance of 39.5% is the influence of other factors beyond the quality of service and brand image. From Table F for a 0.05 significance level and degrees of freedom (2.297) was obtained value of F table at 3.026. Because of the results obtained by the F value (227.45) and greater than the F table (3.026), then the error rate of 5% was decided to reject Ho so that Ha is accepted. Thus, based on the test results it can be concluded that the quality of service and brand image simultaneously significant effect on patient satisfaction.

The Influence of Patient Satisfaction Towards Patient Loyalty

The fourth hypothesis to be tested is the influence patient satisfaction with patient loyalty. Based on the test results can be seen t value variable patient satisfaction (16.849) is greater than t table (1.96). Because the t value is greater than t table, then the error rate of 5% so it was decided to reject Ho and Ha received. Thus, based on

the test results it can be concluded that the effect on the patient satisfaction patient loyalty. In total, patient satisfaction contributes / influence for 76.1% of patient loyalty.

4.3 Discussion

The Influence of Service Quality towards Patient Satisfaction

The test results prove the hypothesis that service quality has positive influence on patient satisfaction; can be interpreted if the quality of the interaction, the quality of the physical environment and the quality of the results increases, tends to improve patient satisfaction.

The influence can be seen from one of the purposes of doing some hospital quality improvement through improved building design, the arrangement of the garden in the courtyard outside and inside the hospital, increasing the number of human resources, training, expansion of the parking area and additional hemodialysis services facilities. The quality of health care services have a close relationship with patient satisfaction, because the quality of giving a boost to the patient to establish stronger ties with the implementation of health (providers) and ultimately patient satisfaction can increase the number of implementation (provider). Hospitals as companies operating in the service sector will consider a policy on how important is quality to satisfy the consumers. Quality of service aims to provide customer satisfaction. Customer satisfaction with a service is determined by the level of customer interest before using the service compared with the results of customer perception of the service after the customer perceives the service performance exceeds reality desired expectations, causing a sense of satisfaction. The results support previous research conducted by Grondahl et al (2013); Vinagre & Naves (2008); Atiga (2012); Al-Borie & Damanhour (2013); Butt & De Run (2010).

The Influence of Brand Image towards Patient Satisfaction

The test results prove the hypothesis that the brand image that has positive effect on patient satisfaction can be interpreted if the hospital image, user image, and services image increasing and it is likely to improve patient satisfaction. This influence can be seen from one of the goals in adding attributes to the identity of the hospital, the promotion through online and offline media, the activities of social services taking the ASKES drug 24 hours, play a role in the implementation of the state program as one of the hospitals chosen for implementation health services, providing service with a reasonable rate of payment transparency, providing service between drugs and home care, help give patients control schedules that can improve care to patients.

Brand image is an antecedent of patient satisfaction. Therefore, positive brand image tends to influence level of patient satisfaction. The better the image of a product, the higher the satisfaction received by the patient. Creating a strong image on the product will provide customer satisfaction. On the basis of experience which has been owned by the patient, they will provide an assessment and evaluation of the performance of services throughout the hospital. Based on the comparison of the quality of service performance expectations with quality, then the customer will give a positive or negative to neutral, depending on whether the customer's expectations are met. Empirical evidence suggests that the influence of brand image on customer satisfaction was expressed with how the brand image of the dominant strategic impact on the achievement of perceived value. Especially in the hospital business, brand image is still the size of a determinant in the minds of the users of hospital services. So brand image becomes a positive process flow if the hospital continues to regain brand image to be increasingly well. These results prove the brand image with the consumer satisfaction proves that the brand image provide immediate effect on patient satisfaction (Chahal & Bala, 2012; Wu, 2011; Sumaedi, 2014).

The Influence of Service Quality and Brand Image Towards Patient Satisfaction

Hypothesis testing results show the quality of service and brand image that simultaneously have positive effect on patient satisfaction, can be defined by the service quality and brand image which are getting better in a hospital that will improve patient satisfaction with access, quality of service, public health system, process of interaction of health services, costs and prices.

Besides the two variables studied that affect patient satisfaction, there are still several other variables that presumably can affect, among others, emotional factors, the price, performance, durability drug products, equipment and supplies, location, communication, quality of care, administrative procedures and the results of treatment. Then, based on test results, patient satisfaction is predominantly shaped by the dimensions of the fifth the price compared to other dimensions. It means to improve patient satisfaction, the main pillars that must be considered is the price. Price includes conformity with the benefits received by patients and affordability to the purchasing power of patients. Prices may include the price of medicines, medical devices, diagnosis and treatment rooms. These results support the research conducted by Khudair & Raza (2013); Padma & Lokachari (2010); Arasli & Katircioglu (2008); De Jager et al (2010); Mosadeghrad (2014); Alrubaiee & Alkaa'ida (2011). When explored, further patient satisfaction will be achieved with optimum result if the dimensions of the price retained or always a major concern of a hospital, however, optimal patient satisfaction is a system where each component from one to another contribute in achieving the goal. Thus, patient

satisfaction should be accompanied by access to services, quality, public service system, the service interaction, and service charges.

The Influence of Patient Satisfaction Towards Patient Loyalty

The test results prove the hypothesis that patient satisfaction has positive influence on patient loyalty, can be interpreted if the patient satisfaction with access, quality health care, community services system, the process of interaction of services, cost and price increases, and tends to increase patient loyalty. Results of research Srivastava & Kumar (2014) proved that the feeling of satisfied customers arise when customers exceed customer perception of the service performance with customer expectations. Oliver (1999) stating customer satisfaction arises because psychological conditions generated by emotional factors expectancy compared with the previous customer experience. Lien, et al. (2014) proved that trust on health care providing patient satisfaction. Loyalty as a deeply held commitment to the product or service is consistently causing the repeated brand purchase (Rashid & Jushoff, 2009). Loyal customers tend to show two behaviors, the behaviors that expect to be overrun purchase by issuing a positive word of mouth and behavior is strongly influenced by the perceived quality of service and satisfaction before.

Wu (2011) who conducted the research at two hospitals Taiwan revealed that patient satisfaction has positive influence on loyalty. The positive emotion of patients after hospital using health services will show their satisfaction with hospital services. Patient satisfaction influence buyer behavior which satisfied customers tend to be loyal. Patient satisfaction will produce a positive impact on the hospital. (Gaur et al., 2011; Tuan, 2012; Chen, 2006; Jenkinson, et al., 2002; Fonseca, 2013) If consumers are satisfied with hospital care, it will create the assessment that the hospital has been able to provide maximum services to community (Kumar & Thota, 2014; Choi & Kim, 2013; Elleuch, 2008; Rashid & Jushoff, 2009). If the patient is satisfied with hospital services, it will increase confidence and belief that the hospital will continue to provide optimum service to the patient so that it will remain faithful to use the services of the hospital in the future.

5. CONCLUSION, RECOMMENDATION, AND LIMITATION

Based on the results of the research that has been done on the effect of service quality and brand image on satisfaction and loyalty implications for patients in public hospital in Bandung, Indonesia which showed that the quality of service and brand image simultaneously affect the patient's satisfaction. Service quality partially has significant effect on patient satisfaction and brand image partially has significant effect on patient satisfaction and patient satisfaction partially has significant effect on loyalty.

Some limitations and at the same advice that deserves attention is the following. First, the results of this study are expected to be a valuable input for further research, especially related to service quality, brand image, patient satisfaction and loyalty variable. For, it is advisable to future researchers in order to examine these variables in greater depth, especially concerning its dimensions in a more restrictive loading factor and the unit of analysis in health workers and certain clinic.

Secondly, this research has not revealed all the variables that can affect patient satisfaction and loyalty. As inputs for further research needs to consider factors such as government regulations related to health care legislation, policies of partner companies, promotion, perceived value, trust, health care systems Institution of Social Security, information systems and the availability of hospital resources, emotional factors, system administration, communication, patient characteristics (age, socio-cultural, employment, education, income), ease of service, rate/economy class, freedom of choice of products services at the hospital, security measures, diagnosis, achievement and continuity of service, as well as the effectiveness and efficiency of service in accordance with the standards of the health care profession.

References

- Akter, S., D'Ambra, J., & Ray, P. (2010). *User perceived service quality of m-Health services in developing countries*. 18th European Conference on Information Systems (pp. 1-12). Pretoria, South Africa: University of Pretoria.
- Al-Borie, H. M., & Damanhour, A. M. S. (2013). Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis. *International Journal of Health Care Quality Assurance*, 26(1), 20-30.
- Aliman, N. K., & Mohamad, W. N. (2013). Perceptions of Service Quality and Behavioral Intentions: Mediation Effect of Patient Satisfaction in the Private Health Care in Malaysia. *International Journal of Marketing Studies*, 5(4), 15-29. doi:10.5539/ijms.v5n4p15.
- Alrubaiee, L., & Alkaa'ida, F. (2011). The Mediating Effect of Patient Satisfaction in the Patients' Perceptions of Healthcare Quality – Patient Trust Relationship. *International Journal of Marketing Studies*, 3(1), 103-107.
- Arab, M., Tabatabaei, S.M. G., Rashidian, A., & Rahimi Forushani, A. R. (2012). The Effect of Service Quality on Patient loyalty: a Study of Private Hospitals in Tehran, Iran. *Iranian J Publ Health*, 41(9), 71-77.
- Arasli, H., Ekiz, E. H., & Katircioglu, S. T. (2008). Gearing service quality into public and private hospitals in small islands: Empirical evidence from Cyprus. *International Journal of Health Care Quality Assurance*, 21(1), 8-23.

- Aschner, G. S. (1999). Meeting customers' requirements and what can be expected. *The TQM Magazine*, 11(6), 450-455.
- Atiga, R. A. (2012). Healthcare quality under the National Health Insurance Scheme in Ghana; Perspectives from premium holders. *International Journal of Quality & Reliability Management*, 29(2), 144-161.
- Biel, A. L. (1992). How brand image drives brand equity. *Journal of advertising research*, 32(6), 6-12.
- Brady M. K., & Cronin. (2001). *Perceived Service Quality*. McGraw-Hill Companies, Inc., USA.
- Brady, M.K. & Robertson, C. J. (2001). Searching for a consensus on the antecedent role of service quality and satisfaction: an exploratory cross-national study. *Journal of Business Research*, 51, 53- 60.
- Brady, M.K. & Cronin, J.J. (2001). Some new thoughts on conceptualizing perceived service quality: a hierarchical approach. *Journal of Marketing*, 65, 34-49.
- Brennan, P. F., & Strombom, I. (1998). Improving Health Care by Understanding Patient Preferences. *J Am Med Inform Assoc*. 5(3), 257-262.
- Bunniran, S. (2010). Patient Service Experiences in Community Pharmacy: An Examination of Health Criticality, Service Failure Incidents, and Service Recovery Efforts and Their Influence on Patronage Outcomes. Dissertation: The University of Mississippi.
- Butt, M. M., & de Run, E. C. (2010). Private healthcare quality: applying a SERVQUAL model. *International Journal of Health Care Quality Assurance*, 23(7), 668-673.
- Chaabouni, S., & Abednnadher, C. (2014). The relationship between patient satisfaction and service quality: A study of hospitals in Tunisia. *Indian Journal of Health and Wellbeing*. 5(3), 330-334.
- Chahal, H., & Bala, M. (2012). Significant components of service brand equity in healthcare sector. *International Journal of Health Care Quality Assurance*, 25(4), 343-362. DOI 10.1108/09526861211221518.
- Chen, W-C. (2006). Satisfaction with pharmaceutical care service at Taipei "an-add" community pharmacy. Dissertation: School of Saint Louis University.
- Cheraghi-Sohi, S., Bower, P., Mead, N., Ruth McDonald, R., Whalley, D., & Roland, M. (2005). What are the key attributes of primary care for patients? Building a conceptual 'map' of patient preferences. *Health Expectations*, 9, 275-284.
- Choi, B. J., & Kim, H. S. (2013). The impact of outcome quality, interaction quality, and peer-to-peer quality on customer satisfaction with a hospital service. *Managing Service Quality*, 23(3), 188-204. DOI 10.1108/09604521311312228.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *The journal of marketing*, 55-68.

- De Jager, J. W., du Plooy, A. T., & Ayadi, M. F. (2010). Delivering quality service to in-and out-patients in a South African public hospital. *African Journal of Business Management*, 4(2), 133-139.
- Dick, A. S., & Basu, K. (1994). Customer Loyalty: toward an integrated conceptual framework. *Journal Acad. Mark.*, 22(2), 99-113.
- Elleuch, A. (2008). Patient satisfaction in Japan. *International Journal of Health Care Quality Assurance*, 21(7), 692-705. DOI 10.1108/09526860810910168.
- Fonseca, J. R. S. (2013). How satisfied are Portuguese citizens with public hospitals' service?. *International Journal of Health Care Quality Assurance*, 26(6), 522-535. DOI 10.1108/IJHCQA-02-2012-0024.
- Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J., and Bryant, B.E. (1999). The American Satisfaction Index: Nature, purpose, and findings, *Journal of Marketing Research*, 60, 7-18
- Gaur, S. S., Xu, Y., Quazi, A., & Nandi, S. (2011). Relational impact of service providers' interaction behavior in healthcare. *Managing Service Quality*, 21(1), 67-87. DOI 10.1108/09604521111100252.
- Grondahl, V. A., Hall-Lord, M. L., Karlsson, I., Appelgren., & Wilde-Larsson, B. (2013). Exploring patient satisfaction predictors in relation to a theoretical model. *International Journal of Health Care Quality Assurance*, 25(1), 37-54.
- Grönos, C. (1984). A Service quality model and its marketing implication. *European Journal of Marketing*. 18(4), 36-44.
- Grönos, C. (2000). *Service Management and Marketing: A Customer Relationship Management Approach*. New York, NY: John Willey and Sons Ltd.
- Hair, Jr, J. F., William C. B., Barry J. B., Rolph E. A., & Ronald L.T. (2006). *Multivariate Data Analysis*. Sixth edition. Pearson Prentice Hall Education International.
- Hu, S-Y., Chiu, S-I., Cheng, C. C., & Hsieh, Y-F. (2010). A study on investigating patient satisfaction of medical centers using Taiwan customer satisfaction index in Taiwan. *African Journal of Business Management*, 4(14), 3207-3216.
- Jahng, K, H., Martin, L, R., Golin, C, E., & DiMatteo, M, R. (2005). Preferences for medical collaboration: Patient-physician congruence and patient outcomes. *Patient Education And Counseling*, 57, 308-314.
- Jenkinson, C., Coulter, A., Bruster, S., N Richards, N., & T Chandola, T. (2002). Patients' experiences and satisfaction with health care: results of a questionnaire study of specific aspects of care. *Quality Safe Health Care*, 11, 335-339.
- Keptenkes No 129 Tahun 2008 Tentang Standar Pelayanan Minimal Rumah Sakit.
- Khudair, I. F., & Raza, S. A. (2013). Measuring patients' satisfaction with pharmaceutical service at a public hospital in Qatar. *International Journal of Health Care Quality Assurance*, 26(5), 308-419.

- Kotler, P. A. G. (2003). *Principles of Marketing*, Pearson Education, Singapore.
- Kumar, P. N., Jacob, A., & Thota, S. (2014). Impact of Healthcare Marketing and Branding on Hospital Services. *International Journal of Research Foundation of Hospital & Healthcare Administration*, 2(1):19-24.
- Lien, C-H., Wu, J-J., Ying-Hueih Chen, Y-H., & Wang, C-J. (2014). Trust transfer and the effect of service quality on trust in the healthcare industry. *Managing Service Quality*, 24(4), 399-416. DOI 10.1108/MSQ-11-2013-0255.
- Mosadeghrad, A. M. (2014). Factors Affecting Medical Service Quality. *Iranian Journal Public Health*. 43(2), 210-220.
- 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.
- Nugraheni, T. P., & Purnomo, A. (2011). Analisis Tingkat Kepuasan Pasien Rawat Jalan Terhadap Kualitas Pelayanan Instalasi Farmasi RSUD Setjonegoro Wonosobo. *Jurnal Manajemen dan Pelayanan Farmasi*, 1(2), 118-125.
- Oliver, R. L. (1999). Whence consumer loyalty?. *the Journal of Marketing*, 33-44.
- Padma, P., Rajendran, C., & Lokachari, P. S. (2009). A conceptual framework of service quality in healthcare: Perspective of Indian patients and their attendants. *Benchmarking An International Journal*. 16(2), 157-191.
- Padma, P., Rajendran, C., & Lokachari, P. S. (2010). Service quality and its impact on customer satisfaction in Indian hospitals, perspectives of patients and their attendants. *Benchmarking An International Journal*. 17(6), 807-841.
- Pai, Y, P., & Chary, S. T. (2013). Dimensions of hospital service quality: a critical review, perspective of patients from global studies. *International Journal of Health Care Quality Assurance*, 26(4), 308-340.
- Parasuraman, A., Zeithalm, V., & Berry L. (1988). SERVQUAL: A Multiple item Scale for Measuring Consumer Perceptions of Service Quality, *Journal of Retailing*, 64, 12-40.
- Peraturan Presiden Republik Indonesia Tahun 2013 tentang Jaminan Kesehatan.
- Pohan, I. S. (2007). Jaminan mutu layanan kesehatan. *Cetakan I, EGC*.
- Rashid, W. E. W., & Jushoff, K. (2009). Service quality in health care setting. *International Journal of Health Care Quality Assurance*, 22(5), 471-482.
- Ross, C. K., Steward, C. A., & Sinacore, J. M. (1993). The importance of patient preferences in the measurement of health care satisfaction. *Medical care*, 1138-1149.
- Sidharta, I., & Suzanto, B. (2015). Pengaruh Kepuasan Transaksi Online Shopping Dan Kepercayaan Konsumen Terhadap Sikap Serta Perilaku Konsumen Pada E-Commerce. *Jurnal Computech & Bisnis*, 9(1), 23-36.

- Srivastava, R. K. & Kumar, S. J. (2014). Understanding of consumer's awareness about brands in pharmaceutical industry: An empirical study. *Journal of Medical Marketing*, 14(2-3), 99-107. DOI: 10.1177/1745790414559141.
- Sumaedi, S., Bakti, I. G. M. Y., Rakhmawati, T., Astrini, N. J., Tri Widiarti, T., & Yarmen, M. (2014). The empirical study on patient loyalty: The role of trust, perceived value, and satisfaction (a case study from Bekasi, Indonesia). *Clinical Governance: An International Journal*, 19(3), 269-283. DOI 10.1108/CGIJ-04-2014-0018.
- Suzanto, B., & Sidharta, I. (2015). Pengukuran End-User Computing Satisfaction Atas Penggunaan Sistem Informasi Akademik. *Jurnal Ekonomi, Bisnis & Entrepreneurship*, 9(1), 16-28.
- Tuan, L. T. (2012). Clinical governance: a lever for change in Nhan Dan Gia Dinh Hospital in Vietnam. *Clinical Governance: An International Journal*, 17(3), 223-247. DOI 10.1108/14777271211251345.
- Valarie, A. Z., & Bitner, M. (2000). Services marketing: integrating customer focus across the firm. *Copyright by the McGraw-Hill Education*.
- Vinagre, M. H., & Naves, J. (2008). The influence of service quality and patients' emotions on satisfaction. *International Journal of Health Care Quality Assurance*, 21(1), 87-103.
- Undang-Undang nomor 36 Tahun 2009 tentang Sistem Kesehatan Nasional
- Wu, C-C. (2011). The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management*, 5(12), 4873-4882. DOI: 10.5897/AJBM10.1347.