# The Effect Of Service Quality On Patient Loyalty Mediated By Patient Satisfaction (A Case Study on Health Clinic in Indonesia)

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Abstract: Corporate services that move in the health field other than the hospital one of them clinics. Clinic development is characterized by increase and decrease of the number of treated patients and poor patient satisfaction index to health service quality. The number of public patients who went to clinic declined from 2013 to 2016 (medical records of Mulia Asih Clinic of Tangerang, 2017). Due to reduced number of general patient, service quality should be addressed to create patients loyal to the clinic and who are supported by patient satisfaction. Good service quality created patient satisfaction, so patients are loyal to the clinic. There are many previous studies on quality, customer satisfaction, and loyalty, but no one has studied health clinics in Indonesia. In this study, the researchers investigated service quality, customer satisfaction, and loyalty to health clinic in Indonesia using Structural Equation Modeling (SEM), which was analyzed by LISREL to differentiate it from previous studies on service agencies instead of health clinics. There are studies on health industry, although not clinic, and study using Structural Equation Modeling (SEM) analyzed by AMOS instead of LISREL which has never been used in other studies. This study was conducted on 170 male and female outpatient respondents in Mulia Asih clinic in Tangerang, Indonesia using questionnaire. The data analysis method in this study was Structural Equation Modeling (SEM) and the data was analyzed by LISREL. The research found that good service quality will create patient loyalty, good service quality will create patient satisfaction, and good patient satisfaction will create loyalty. This study found that patient satisfaction mediated the effect of service quality on patient loyalty.

**Keywords -** service quality, patient loyalty, patient satisfaction.

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## I. Introduction

Patient satisfaction is a valuable asset in the health industry because if patient is satisfied they will keep using the service, but if they're not, they will tell others about the bad experience twice as badly (Wahyuni, et al., 2013). One of the factors affecting patient satisfaction is service quality. Good service quality will create or lead to feelings of being accepted, respected, understood, and served well, impacting patient loyalty and even patient loyalty. Service quality has rather close relation with patient satisfaction. Good service quality will encourage people to have good relation with health clinic. In the long term, this relation will enable clinic to understand patients' expectations and needs. Patient satisfaction eventually creates patient loyalty to company which provides service which satisfies them. Customer service doesn't only answer customers' questions and complaints on a product or service which doesn't satisfy them, but rather solution emerging after using the health service.

Service in the field of health will always be required by people and develop to be better. The more sophisticated the development in technology, the better the services in the field of health, modern facilities and infrastructures, and more accurate services. The Law of the Republic of Indonesia Number 25 of 2000 on national development program (PROPENAS) states that a public satisfaction index should be prepared as a measure to assess the service quality of a service company. Public satisfaction index data can also be used to assess service elements which require improvement and encourage every service unit to improve their service quality (IKM, 2004).

Health clinics often compete with each other. Today, there are many health clinics in Indonesia, specifically Tangerang, so competition in the health service across the health industry becomes fiercer. Clinic managers compete to make their service quality acceptable by the patients. The number of public patients who went to Mulia Asih clinic declined from 2013 to 2016 (medical records of Mulia Asih Clinic of Tangerang, 2017). Due to reduced number of general patient, service quality should be addressed to create patients loyal to the clinic and who are supported by patient satisfaction. Good service quality created patient satisfaction, so patients are loyal to the clinic.

Sheng and Liu (2010) discuss the research topic to determine what affects customer satisfaction and loyalty in online shopping. The research result shows that efficiency and fulfillment have positive effects on customer satisfaction, fulfillment and privacy have positive effect on customer loyalty. Reena, et al., (2011) in India study banking services and find that service quality and technology usage for ease and reliability have positive and significant impact on customer satisfaction and loyalty. They also find that technology usage and customer satisfaction have significant and positive impact on customer loyalty. In banking service, a bank's service quality to their customer satisfies the customers and makes them loyal to save their money in the bank. Lei and Jolibert (2012) in Cina discuss the relations of quality, patient satisfaction and loyalty in hospital patients. They find that quality and satisfaction are different concepts and satisfaction mediates service quality and patient loyalty. Good service quality to patients will provide satisfaction and patient satisfaction mediates good service quality on patient loyalty. Lonial and Raju (2015) in USA study the role of service attributes in the development of patient satisfaction and patient loyalty in healthcare regulation, and highlight the role of doctors in hospitals and offer suggestions to increase patient satisfaction and loyalty. It's found that service attributes play an important role in distinguishing high and low satisfaction and loyalty, although some attributes are more important than others and some different attributes emerge as the main affecting factors of patient satisfaction and loyalty.

There are many previous studies on quality, customer satisfaction, and loyalty, but no one has studied health clinics in Indonesia. In this study, the researchers investigated service quality, customer satisfaction, and loyalty to health clinic in Indonesia using Structural Equation Modeling (SEM), which was analyzed by LISREL to differentiate it from previous studies on service agencies instead of health clinics. There are studies on health industry, although not clinic, and study using Structural Equation Modeling (SEM) analyzed by AMOS instead of LISREL, so the present study is different from previous studies. Based on the research gap above, the purpose of this study is providing clarity of the effect of service quality on patient loyalty, explaining the effect of service quality on patient satisfaction, and explaining the effect of patient satisfaction on the loyalty on outpatients in health clinic in Indonesia.

# **II.** Literature Review

# 1. Service Quality

Service quality according to Parasuraman, Zeithmal and Berry (1988) is a measurement of how goo a service matches customer's expectation. Kotler and Keller (2012) define service quality as all activities performed by company to meet customers' expectations. Service here is defined as service given by service owner in the forms of ease, speed, ability and hospitality shown through attitudes and characters in providing services for consumer satisfaction. Parasuraman, et al. (1988) state that service quality is measured by a scale consisting of 5 (five) dimensions, i.e.: first, tangible which is a dimension of service quality, e.g. physical facility, equipment, employee, means of communication and environment, which is a real evidence of services provided by service provider. Second, reliability which is a dimension in service quality in the form of ability to provide the promised service on time consistently and reliably. Third, responsiveness is a dimension of service quality of staff's ability to help customers and provide services responsively. Fourth, assurance which is a dimension of service quality which covers ability, politeness, and trustworthiness of staff, free of risk or doubt. Fifth, empathy covers ease in good communication and understanding customers' needs.

#### 2. Satisfaction

Satisfaction according to Oliver (2010) is a response to the fulfillment of consumer's expectation. Feature of a product or service should give pleasure for the fulfillment of consumer's expectation. A satisfied customer receives significant added value from supplier, not just additional products, services or systems. A satisfying supplier is someone who gives significant added value to a customer, not just added goods or services (Hanan and Karp, 1991). Meanwhile, customer satisfaction according to Kotler and Keller (2012) is one's happiness or disappointment due to comparison between the experienced and expected achievements or products. Customer satisfaction can be measured by quality in general, overall service, and overall performance of medical workers (Ware, Snyder and Wright, 1976).

#### 3. Loyalty

According to Heizer and Render (2011) customer loyalty can be defined as a response closely related with vow or promise to hold on to commitment which becomes the basis of continuation of relation, and is usually reflected in consistent repeat purchase. Oliver (2010) defines loyalty as customer deep commitment to remain to patronage or purchase selected product or service again consistently in the future, although situation and marketing efforts potentially cause behavioral change. Therefore, is a customer has bought the same product twice or three times, they are automatically considered a loyal customer (Hermawan, 2007). Meanwhile, Lin and Ding (2006) state that loyal behavior can be measured from three dimensions, i.e.: repeat patronage, switching behavior, and word of mouth (WOM) recommendation.

# III. Hypotheses Development

Good service quality can encourage customers to be loyal to a company. In the long term, this relation enables a company to understand what the customers expect and need (Kotler and Keller, 2012). Since customers basically assess a service based on their expectation, if service quality exceeds their expectation, they will be loyal. Conversely, if the service quality is below their expectation, they won't want to use the service in the future. Quality should start from expectation and customers' needs and end with customers' assessment. If customers consider a service quality to be good, they will perform repeat purchase and even promote it to colleagues and family without thinking about external influence to switch (Griffin, 2010). Customers will assess a received service quality based on what they expect or want (Parasuraman, et al., 1998). Companies which can consistently provide service quality will have competitive advantage, so they can develop good relations with their customers to create loyalty. It means service quality is an aspect which contributes to the success of an organization.

A previous study by Reena, et al., (2011) in India aims to identify the dimensions of the service quality of banking-based technology and examine the effect of the dimensions on customer satisfaction and customer loyalty. This study uses AMOS to analyze data result. The study finds that service quality and technology usage for ease and reliability have positive and significant on customer satisfaction and customer loyalty. It also finds that comfort in technology usage and customer satisfaction have significant and positive impact on customer loyalty. Company or service provider should consistently provide good quality service to develop good relationship with customers to create customer loyalty. Moreover, company will also be able compete in the market and gain success. Once of the possible steps for company to create and develop service quality is providing perfect service. Perfect service quality will develop loyalty in customers in using services, benefiting service provide company. From the description above, the following hypothesis is proposed:

#### H<sub>1</sub>: Good service quality will create patient loyalty

If service company or service provider can provide good service quality, there is a great chance of creating satisfaction in customers. The satisfaction will emerge if their experience of the service quality is good or fulfill their expectations. As stated by Tjiptono (2014), if a service quality becomes an expected advantage and control over the advantage to fulfill customers' desires, satisfaction will emerge. Consumer satisfaction is an evaluation for consumer after experiencing what the select, whether it meets or exceeds their expectation (Engel, et al., 2012). The meeting of these interests determines the amount of consumer satisfaction on a service quality.

Customer's satisfaction will illustrate their feeling after comparison service quality or the experience with the expectation (Kotler and Keller, 2012). Satisfaction illustrates one's happiness or disappointment from comparing their impression on the result of a service and their expectations (Engel, et al., 2012). Customer satisfaction depends on the implemented service marketing concept which is generally service quality concept. A health service quality is multidimensional and can be viewed generally based on two point of views, i.e. broad and narrow (Donabedian, 1980). According to the Department of Health, the quality of a hospital service is the level of perfection of hospital service to fulfill people's needs for health service in accordance with service standard by using resources potentials available in hospital reasonably, efficiently, and effectively, and providing senses of safety and satisfaction consistent with norms, ethics, laws, and socio and cultures, by considering the limits of government and society's abilities (Regulation of the Minister of Health of the Republic of Indonesia No. 920 of 1986).

A study in USA by Lonial and Raju (2015) discusses the role of service attributes experienced in developing overall customer satisfaction (OCS) and customer loyalty (CL) in healthcare regulation. This study also highlights the role of hospitalist doctors (HPS) and offers suggestions to improve patient satisfaction and loyalty. This study uses Structural Equation Modeling (SEM) in analyzing data. The result shows that service attributes play important roles in differentiating high and low satisfaction and quality, although some attributes are more important than others, an some different attributes emerge as the main influence on satisfaction and loyalty.

Good service quality is an important factor in creating consumer satisfaction. Service quality is an application of delivery of the performance and competence to consumers of a service company in providing services to fulfill consumers' needs and give satisfaction. Fulfilling consumer's expectation means the service quality given to consumer can be considered good. Good service quality or service quality which exceeds consumer's expectation is expected by consumer from the offered service, so that the consumer who keeps using the service will always be satisfied with the service. From the description above, the following hypothesis is proposed:

# H<sub>2</sub>: Good service quality will create patient satisfaction

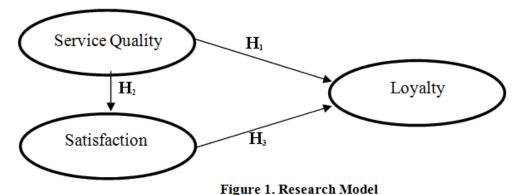
Overall satisfaction is described as affective statement on emotional reaction on experience of product or service influenced by customer satisfaction for the product or service and by information used to select the

product or service. Most loyal consumers are satisfied consumers and not all satisfied consumers become loyal consumers, so the relation between them is asymmetrical (Oliver, 2010). Consumer or customer satisfaction will be the stretch for every company to maintain good relationship with their customers, so customer satisfaction is an important element in improving marketing performance in a company or organization. Consumer satisfaction or dissatisfaction will affect the consumer's future attitude and behavior (Kotler and Keller, 2012). Evaluation is an evaluation by customer on product or service they select to see whether it has met their needs and expectations (Zeithaml, et al., 2013). Meanwhile, according to Kotler and Keller (2012), the relation between satisfaction and loyalty happens when consumer has the highest satisfaction, leading to strong emotional bond and long term commitment with corporate brand.

A previous study by Hafiza, et al. (2011) in Pakistan discusses customer satisfaction in creating customer loyalty. The study uses multiple regression model to see the influence of the research variables. This study is performed on telecommunication service, where the sample consists of 105 respondents. The research result shows that customer satisfaction contributes to the development of customer loyalty and partial mediating result is also found. Consumer loyalty is important in creating loyal customer. Satisfaction is evaluation for company in the future in improving company performance and competence in providing service. Satisfaction is a measurement for consumer on what is offered to see whether it has fulfilled their expectations. The higher the consumer satisfaction on a product or service, the bigger the possibility of the consumer to be loyal to the product or service. From the description above, the following hypothesis is proposed:

## H<sub>3</sub>: Good satisfaction will create patient loyalty.

The description above can be illustrated in the research model below:



# IV. Research Method

This study was performed on outpatients in Mulia Asih clinic, Tangerang, Indonesia. The studied aspects were service quality, patient satisfaction and loyalty. The research was performed on March 2017 by survey method. The study is analysis descriptive with causality model. Data was collected by distributing questionnaires to outpatients of Mulia Asih clinic, Tangerang, Indonesia. Data analysis method in this study was Structural Equation Modeling (SEM), and data was processed by statistical software using LISREL.

Bentler and Chou (1987) state that the sample size of estimated maximum likelihood (ML) should at least be 5 times the number of independent parameters in the model, including error, so in this study, the number of operational items was thirty four, so the sample collected in this study was 170 (34x5) respondents. The variables were service quality, patient satisfaction and patient loyalty. Collected data was measured in Likert scale from one to five. The analysis result was interpreted and the final step was drawing conclusion and making suggestions.

#### 1. Measurement

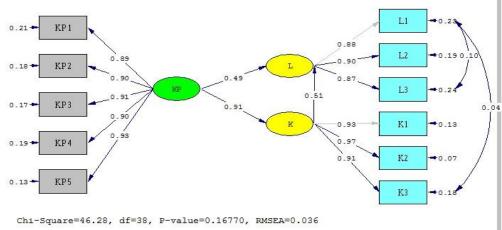
There was one exogenous variable in the present study, i.e. service quality, and two endogenous variables i.e. patient satisfaction and patient loyalty. Service quality was measured by nineteen indicators from Parasuraman, et al. (1988), patient satisfaction by the indicators of Ware, et al. (1976) consisting of three questions, loyalty which was adapted from Lin and Ding, (2006) adopted by Syah (2014) consisting of nine questions. The measurement indicators were displayed as questionnaire and validity and reliability tests were performed.

The present study used confirmatory factor analysis by performing validity test by Kaiser-Meyer-Olkin measure of sampling (KMO) and measures of sampling adequacy (MSA). In this test, the value should be bigger than 0,5, meaning factor analysis is correct or appropriate for use and can be processed further (Malhotra, 2012). The service quality scale consists of 22 statements and 19 questions are valid (MSA > 0,5). Questions which

were accepted were KP7 because the Measures of Sampling Adequacy (MSA) is lower than 0,5 and there are component matrices, while KP5 and KP12 weren't accepted because they have two component matrices when inserted in data processing, so they're not included in the questionnaire. Patient satisfaction scale consists of 3 statements and all of them are valid. Patient loyalty scale has 9 statements and all of them are valid. Reliability test used Alpha Cronbach > 0,6 to mean it's reliable (Anindita and Hasyim, 2009). So, service quality, patient satisfaction and patient loyalty are reliable as data collection instrument in the study.

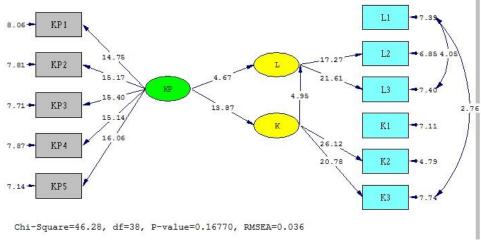
#### 2. Result and Discussion

Analysis of all tests shows good compatibility, including Chi Square, ECVI, AIC and CAIC, Fit Index, Critical N and Goodness of Fit. RMSEA produces close fit. From the analysis result, it's concluded that the compatibility of overall model is qualified (goodness of fit). The study produces the following path diagram.



Source: Data analysis

**Table 1. Path Diagram Standardized Solution** 



Source: Data analysis

Table 1. Path Diagram T-Value

Hypothesis	Hypothesis statement	T-Value	Note
$H_1$	Good service quality will create patient loyalty	4,67	Data supports hypothesis
$H_2$	Good service quality will create patient satisfaction	13,87	Data supports hypothesis
$H_3$	Good satisfaction will produce patient loyalty	4,95	Data supports hypothesis

Table 3. Research Model Hypothesis Test

In the present study, the examination of the first hypothesis  $(H_1)$  on the relation between service quality and loyalty found that the analysis result supported hypothesis  $H_1$  i.e. good service quality will improve patient loyalty by 4,67 (Table 2). The result showed that service quality had significant influence on patient loyalty. Path Diagram t-value (Table 2) showed that service quality in the present study used 5 dimensions, i.e.: 14,76

Tangible (KP1), 15,17 Reliability (KP2), 15,40 Responsiveness (KP3), 15,14 Assurance (KP4) and 16,06 Empathy (KP5).

The examination of the second hypothesis  $(H_2)$  found that the analysis result supported hypothesis  $H_2$  that good service quality will improve patient satisfaction by 13,87 (Table 2). It showed that the service quality of health clinic in Indonesia was good and exceeded the patients' expectations, creating satisfaction for the services. It showed that satisfied patients were loyal and comfortable with the service quality of health clinic in Indonesia, so they didn't hesitate to choose health clinic in Indonesia to get treatment, creating loyalty in the future.

The examination of the third hypothesis  $(H_3)$  found that the analysis result supported hypothesis  $H_3$  that good satisfaction could improve patient loyalty by 4,95 (Table 2). It showed that patient satisfaction had significant influence on patient loyalty. It showed that good patient satisfaction would be able to create patient loyalty to the choice they had experienced. This was shown by patient's loyalty in using the services of health clinic in Indonesia had reciprocal relation with the satisfaction they felt from health clinic in Indonesia. It meant that satisfaction is a very important factor in providing a service for patients in Mulia Asih clinic, so that the patients were satisfied, happy and comfortable, having positive impact on patient loyalty.

The present study analyzed mediating variable by two approaches, i.e. coefficient difference and multiplication. The first stage was examination by analyzing with and without mediating variable. In the first stage, mediating variable was put aside first, while the second method was performed using Sobel procedure (Hair, et al., 2010). In the second method, coefficient multiplication method was performed. The hypothesis test result showed that relationship quality influenced the relation between service quality and loyalty. Analysis of relationship quality was performed to connect service quality and loyalty.

Based on examination of coefficient difference test on the research model (Table 3), service quality had direct effect on satisfaction with t-value = 13.87 (>1.96), service had direct effect on loyalty with t-value = 4.67 (>1.96) and relationship satisfaction and loyalty has t-value = 4.95 (>1.96). So, it's concluded that satisfaction could mediate the relation between service quality and patient loyalty. Service quality directly influenced patient loyalty and service quality indirectly influenced patient loyalty through satisfaction. It's commonly called partial mediation because it can affect something directly and indirectly.

#### 3. Discussion

A previous study by Sheng and Liu (2010) discusses what affects customer satisfaction and loyalty in online shopping. The result shows that efficiency and fulfillment have positive effects on customer satisfaction, fulfillment and privacy have positive effects on customer loyalty.

The examination of the first hypothesis (H1) on the relation between service quality on loyalty found that the analysis result supported the first hypothesis H1 that good service quality will improve patient loyalty. The research result supported a previous study by Sheng and Liu (2010) in China. Patients who received good service quality from clinic tended to be loyal to the clinic. It's in line with the study by Reena, et al., (2011) in India in their study on banking service. They find that service quality and technology usage for ease and reliability have positive and significant impact on customer satisfaction and loyalty. This research also coincides with previous research conducted by Omar, Wel, Aziz and Alam (2013) in Malaysia that investigates how the quality of service programs will increase the value of perceived programs and satisfaction programs thereby creating loyalty among program cardholders. So it can be said that patients who received ease and reliability in service quality would be loyal by repeatedly going to the clinic to get treatment when sick or bringing family, friends, and others to health clinic in Indonesia.

The examination of the second hypothesis (H2) found that the analysis result supported hypothesis H2 that good service quality will improve patient satisfaction. It showed that good service quality provided by clinic will please and satisfy patient. The present study supported the previous study by Reena, et al., (2011) in India on banking service which shows that service quality and technology usage for ease and reliability have positive and significant impacts on satisfaction. Satisfied patients were shown by reduced number of complaints from patients. The research result was in line with previous studies by Lei and Jolibert (2012) and Lonial and Raju (2015) which state that service quality influence satisfaction. Based on the analysis above, the better the service quality, the better the patient satisfaction. Patients who get good service will tend to show satisfaction with the clinic. With high patient satisfaction will decrease the protests of the patient to the clinic.

The examination of the third hypothesis (H3) found that the analysis result supported hypothesis H3 that good satisfaction could improve patient loyalty. It showed that good patient satisfaction could create patient loyalty to selections they had benefited from. It was evident in patient's loyalty in using the services of Mulia Asih clinic. There was reciprocal relation of their satisfaction in health clinic in Indonesia. It meant that satisfaction is a very important factor in providing a service to patients in health clinic in Indonesia, so patients who were satisfied, happy and comfortable would have positive impact, creating loyalty in the

patients. The research result supported a previous study by Sheng and Liu (2010) who state that satisfaction influences loyalty. Loyalty is positively influenced by satisfaction and satisfaction is the factor which most strongly determines the level of patient loyalty to clinic

# 4. Managerial Implications

The present study discussed factor influencing patient loyalty in Mulia Asih clinic, Tangerang, Indonesia, i.e. service quality mediated by patient satisfaction. The suggested managerial implications are: tangible; first, showing physical facilities, equipment and means of communication. Mulia Asih clinic should have modern medical equipment to help doctors examine patients as doctors will be able to diagnose patients more easily with modern and sophisticated medical equipment. Second, existing physical qualities such as building and facilities in Mulia Asih clinic should be improved, starting from maintaining cleanliness. Examination rooms should be clean to provide comfort for patients coming for treatment. Third, doctors should look attractive and dress well to create confidence to the doctors. Examination rooms should also be organized. Reliability, the managerial implication to consider is services provided by doctors to patients. Doctors should seriously listen to patients' complaints. Medical and nonmedical staff should be able to to provide the promised services immediately, accurately, and satisfyingly.

The next managerial implication is making good medical record on each patient coming for treatment. Organized and clear medical records make patients feel their medical history is continuous and documented continuously in Mulia Asih clinic. Responsiveness, The managerial implication to be applied is medical staff's desire to help patients by providing responsive services and information on treatment schedules. Regular work evaluation should be performed by working with the HRD to know which medical staffs have good performance. Every year, the head of the clinic may give reward for good performance by giving higher compensation and other bonus allowances. Assurance, the managerial implications include knowledge, ability, politeness, and trustworthiness of medical and nonmedical staffs, free from danger, risk or doubt. Assurance from clinic and doctors make patients confident in seeking treatment from doctors in Mulia Asih clinic. Empathy, the managerial implications include ease of medical and nonmedical staffs in developing relationship, good communication, personal attention, and understanding patients' needs. The proposed implications are: medical staff should win patients' hearts when providing services because it can benefit them both. The next managerial implication to be implemented by clinic is policy for doctors to give attention to patients coming for treatment to the clinic. Good service quality is expected patient loyalty and satisfaction, so outpatients' visit to clinic, Tangerang, will increase.

## V. Conclusion

# 1. Conclusion

The results concluded from this study were: first, good service quality would create patient loyalty (first hypothesis supported). It meant good service quality would improve patient loyalty. Patients who received good service quality tended to be loyal to clinic and employees in the clinic. Second, good service quality would create patient satisfaction (second hypothesis supported). Service quality strongly influenced improved patient satisfaction. Third, good satisfaction would create patient loyalty (third hypothesis supported). High patient satisfaction could significantly improve patient loyalty. So, it's concluded that patient satisfaction mediated the influence of service quality on patient loyalty.

# 2. Limitations

The limitations in this study can be used as consideration for future studies. This study used questionnaire for measurement instrument to save time and energy. However, questionnaire has limitations such as bias in answering questions. There was possibility that respondents didn't answer the questionnaires truthfully or only filled them based on the expected ideal condition instead of the real condition. It may cause measurement to not describe variables actually. Furthermore, limited numbers of sample and variable influencing service quality on patient loyalty mediated by patient satisfaction, and the number of analysis made the researchers unable to dig deeper on other factors influencing patient satisfaction and patient loyalty.

## 3. Suggestion for Future Studies

The present study is very limited because it only studied the influence of service quality on Patient loyalty mediated by patient satisfaction. To develop the research, future studies should add other variables influencing patient loyalty and satisfaction. Future studies should also be performed on research objects in other service companies, e.g. hospitality company, notary company, etc., to get more objective and representative results with greater scope.

#### References

- [1]. Anindita, R. & Hasyim. (2009). Prinsip-prinsip Dasar Metode Riset Bidang Pemasaran. Jakarta: UIEU-University Press.
- [2]. Bentler, P.M. & Chou, C.P. (1987). Sociological Methods and Research. Practical Issues in Structural Modeling. 16, 78–117.
- [3]. Donabedian, A. (1980). Explorations in Quality Assessment and Monitoring Vol. 1. The Definition of Quality and Approaches to Its Assessment. Ann Arbor, MI: Health Administration Press.
- [4]. Engel, B. & Miniard. (2012). Perilaku Konsumen. Tangerang: Binarupa Aksara.
- [5]. Griffin, J. (2010). Customer Loyalty, Menumbuhkan dan Mempertahankan Kesetiaan Pelanggan. Jakarta: Erlangga.
- [6]. Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (2010). Multivariate Data Analysis, Fifth Edition. USA: Prentice Hall International.
- [7]. Hafiza, N.S., Shah, S.S. & Jamsheed, H. (2011). Relationship Between Rewards And Employee's Motivation In The Non Profit Organizations of Pakistan. Business Intelligence Journal, 4: 327-334.
- [8]. Hanan, M. & Karp, P. (1991). Customer Satisfaction: How to Maximize, Measure and Market your company's Ultimate Product. New York: American Management Association.
- [9]. Heizer, J. & Render, B. (2011). Operations Management. Tenth Edition. Pearson, New Jersey, USA.
- [10]. Hermawan, K. (2003). Marketing In Venus. Jakarta: Gramedia Pustaka Utama.
- [11]. Kotler, P. & Keller, K.L. (2012). Marketing Management 13. New Jersey: Pearson Prentice Hall, Inc.
- [12]. Lei, P. & Jolibert, A. (2012). A Three-Model Comparison of the Relationship between Quality, Satisfaction, and Loyalty: an Empirical [13]Study of the Chinese Healthcare System, Health Service Research. 12: 436.
- [13]. Lin, C.P. & Ding, C.G. (2006). Evaluating the Group Differences in Gender During the Formation of Relationship Quality and Loyalty in ISP Service. Journal of Organizational and End User Computing. Vol. 18, 38-62.
- [14]. Lonial, S. & Raju, P.S. (2015). Impact of Service Attributes on Customer Satisfaction and Loyalty In A Healthcare Context. Leadership in Health Service. Vol. 28 No. 2, Pp. 149-166.
- [15]. Malhotra, N.K., Birks, D.F. & Wills, P. (2012). Marketing Research: an applied approach, 4th edition. Harlow: Pearson education, inc.
- [16]. Oliver, R.L. (2010). Satisfaction: a Behavioural Perspective on the Consumer. New York: M.E. Sharpe, Inc.
- [17]. Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). Servqual A. Multiple item for Measuring Customer Perception of Service Quality. Journal of Retailing. Vol.64. p.12-40.
- [18]. Reena, R., Vaijayanthi, P. & Shreenivasan, K.A. (2011) "Service Quality Gap of Foreign Banks in India using PZB Service Quality Model an Empirical Study", International Conference On Software And Computer Applications, Singapore, Vol. 9, Pp. 142-146.
- [19]. Sheng, T. & Liu, C. (2010). An Empirical Study on The E-Service Quality on Online Customer Satisfaction and Loyalty. Nankai Business Review International. Vol. 1. pp. 273-283.
- [20]. Syah, T.Y.R. (2014). Fasilitas Partisipasi Provider Sebagai Pembentuk Loyalitas Pelanggan, dengan Mediasi Kualitas Relasional, dan Dimoderasi Implicit Self Theorist. Disertasi pada Program Doktoral Universitas Indonesia. Depok.
- [21]. Tjiptono, F. (2014). Pemasaran Jasa. Yogyakarta: Andi.
- [22]. Wahyuni, A., Nurachmah, E. & Herawati, T. (2013). Analisis praktik residensi keperawatan medikal bedah pada pasien gangguan sistem kardiovaskuler dengan pendekatan model adaptasi di rumah sakit jantung dan pembuluh darah harapan kita Jakarta. Jurnal Sains
- [23]. Sheng, T. & Liu, C. (2010). An Empirical Study on The E-Service Quality on Online Customer Satisfaction and Loyalty. Nankai Business Review International. Vol. 1. pp. 273-283.
- [24]. Ware, J.E., Snyder, M.K. & Wright, W.R. (1976). Development and validation of scales to measure patient satisfaction with health care services Vol. 1: [final report]. Carbondale, Ill.: The University.
- [25]. Zeithaml, V.A., Bitner, M.J. & Gremler. D.D. (2013). Services Marketing: Integrating Customer Focus Across the Firm. 6th ed. Boston: Mc.Graw-Hill.

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