



The Influence of Service Quality and Patient Safety Against Satisfaction And Loyalty Installation Hemodialysis Patients In Hospital

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ABSTRACT

The hospitals have obligation to provide quality services, according to the standard of quality of service, no discrimination, maintaining the security and safety of patients. Accreditation of hospitals aimed at improving the quality of care and patient safety maintaining a sustainable and increasing. The incidence of patient safety in the hospital in 2018 collected as many as 114 cases, with 98,2% incident almost injured

distribution, and undesirable event by 1,8%, the data show that there are patient safety incidents that occurred in the hospital. Community satisfaction index survey in accordance Regulation of the Minister of Administrative Reform and Bureaucratic Reform No. 14 Years of research results obtained in 2017 with an index of 3.01 where the value is C that is less good. In a study to be carried out is aimed to determine the effect of quality of care and patient safety to the satisfaction and loyalty of installation hemodialysis patients in the hospital. The study design was cross-sectional with quantitative approach. The population in this study were all patients who had undergone hemodialysis therapy and with formula samples taken slovin 77. The number of primary data collection using structured questionnaires, the data is then analyzed by descriptive and inferential analysis which Smart PLS. The results of this study indicate that service quality has no significant effect on patient satisfaction and patient loyalty, but for patient safety has a significant effect on patient satisfaction and patient loyalty, and for patient satisfaction has a significant effect on patient loyalty.

Keywords: service quality, patient safety, patient satisfaction, patient loyalty.

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Introduction

The hospital is an institution for the service provider community that has its own characteristics, influenced the development of health science, technological advances, economic and social life, so it should be able to provide quality and affordable services (Kementrian Kesehatan, 2009). Quality of service is the result of a system in health care organizations that are affected by structural components and processes. Components consist of organizational structure (structure and culture), management, human resources, technology, equipment, financial, while the components of the process include the service process, action procedures, information systems, administrative systems, control systems, and guideline (Mukti, 2008). According to Azrul Azwar quality of service is a health service that can satisfy every user's health services tailored to the level of satisfaction average service providers in accordance with the standards and code of professional conduct, to meet and exceed the needs and expectations of customers through continuous improvement of the whole process (Azrul, 1996). Pasuraman affected by service quality and related to two main factors that are expected service quality expectations of existing services on the customer and that is perceived service quality of service received by the customer (Tjiptono, 2002). Measuring the quality of different services to gauge the quality of products, quality of service is measured according to desire that vary from one individual to another, are produced and consumed at the same time, and the output of the intangible services. To measure the quality of service according to Zeithmal, Parasuraman, and Berry there are five dimensions in the measurement include tangibles, Reliability, responsiveness, assurance, and empathy (Tjiptono & Chndra, 2005). The performance of officers in providing optimal services is also very influential on the quality of services provided, therefore the performance of these officers is a serious concern to always be monitored and evaluated (Surya, Suliistyaningsih, & Puspitaningtyas, 2019). Patient safety is a system that makes patient care safer, including risk assessment, identification and management of patient risk, reporting and analysis of incidents, the ability to learn from the incident and follow-up and implementation of solutions to minimize the risks and precautions to prevent injuries caused by faulty as a result of carrying out an action



or not taking action that should be taken (Kementrian Kesehatan Republik Indonesia, 2017). National policies in Indonesia are required throughout the health care facilities to implement six patient safety goals which consists of: the accuracy of patient identification, increase effective communication. improve the safety of drugs that must be watched, ensuring precise location right procedure, the right patient at the right surgical patients, reducing the risk of infection, reduces the risk of patient falls. Data incidence of patient safety published KKPRS (Patient Safety Committee Hospitals) in the year 2006 to 2007 there were 145 reports, in 2008 there were 61 reports, in 2009 there were 114 reports, in 2010 there were 103 reports, and in 2011 as many as 34 reports, bringing the total there were 457 reports of patient safety incidents, distribution IKP report includes incidence almost injury (KNC) amounted to 47,6% ((KKPRS), 2008). The incidence of patient safety incidents at the hospital where the research in 2018 there were 114 cases, with the composition almost injured distribution (KNC) 98,2%, and by 1,8% undesirable event KTD, it shows the incidence of security incidents which occurred at most incidence almost injury / KNC (T. K. P. RS, 2018). According to Kotler patient satisfaction is feeling happy or disappointed someone who is experienced after comparing the perception of performance or the result of a product with expectations. Patient satisfaction is measured using indicators include no complaints with the service, feeling satisfied with the overall service, fitness services obtained with patient expectations (Kotler, 2009). Community satisfaction survey conducted by the district government hospital in accordance with the Regulation of the Minister of Administrative Reform and Bureaucratic Reform No. 14 In 2017, the result of community satisfaction index value of nine of these services amounted to 3,01 with conversion value of 75,30 where the value is C deficien t(Mustafa, 2018). From Sri Murtini's research conducted with the results of bivariate analysis, it was found that factors related to patient satisfaction were the type of education, patien status, and duration patient treatment. As for age, sex, occupation, income, treatment experience, perceived cost, knowledge, and attitude are factors not related to patient satisfaction (Murtini, Suryoputro, & Widjanarko, 2019). Loyalty is a customer loyalty shown by the regular purchasing behavior over a long period through a series of decisions of customers ".



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Zeithaml et. al. said the ultimate goal of success to establish relationships with customers to establish a strong loyalty to the indicator a strong loyalty includes Say positive things to say anything positive about the products that have been consumed, Recommend friend to recommend a product that has been consumed to a friend, Continue purchasing ie purchase which is performed continuously for the product (Zeithaml & Berry, 1996). Hemodialysis services by data center and information associations hospitals throughout Indonesia, the number of patients with chronic renal failure is estimated at about 50 people per one million inhabitants, 60% are aged and elderly, Riskesdas 2013 also showed that the prevalence increases with age, with a sharp increase in 35-44 age group compared to the age group of 25-34 years while the prevalence in men is higher than women. Installation hospital hemodialysis which became the research unit has 21 hemodialysis machines with a total of 105 patients(K. RS, 2018). In this study analyzed the effect of quality of care and patient safety to the satisfaction and loyalty of patients on hemodialysis Installation hospital.

Research Methods

This research is an observational analytic research which has the objective to analyze the extent of the influence of quality of care and patient safety to patient satisfaction and loyalty Installation Hemodialysis patients at the hospital. Using cross sectional design, where the variable data were taken at a time and at the same time. Total population is taken at 95 and for determining the number of samples using the formula slovin and obtained samples of this study amounted to 77 people (Widayat, 2004). Variables in this research that the quality of services consisting of the dimensions of quality of care and patient safety in the six target patient safety. as exogenous, patient satisfaction as an intervening variable, and loyalty to the patient as an endogenous variable. Measurement of variables developed in accordance with Parasuraman theory that the service quality dimensions laid down in the eleven indicators (X1.1 - X1.11) and for the six patient safety goals outlined in the eleven indicators (X2.1 - X2.11). Variable patient satisfaction



has three indicators (Y1.1 - Y1.3) while for patient loyalty elaborated by three indicators (Y2.1 - Y2.3). The research instrument was developed based on each variable.

Test the validity there are two convergent validity is demonstrated by looking at the value of AVE (Average Variance Extracted) higher than 0.5, which means the probability of the indicator variable convergent and entered in the above 50%, discriminant validity was shown by comparing the root of AVE (Average Variance Extracted) indicator of a variable to another variable that the result is higher compared with other variables. The test can be viewed using a score cross loading. While the reliability test by looking at the value of Cronbach's alpha > 0,6 and Composite reliability values > 0,7 (Abdillah & Jogiyanto, 2015).

Results and Discussion

In this study, the distribution characteristics of respondents are illustrated in the table below:

Table 1. Distribution characteristics of respondents.

characteristics	Category	Frequency	percentage
Gender	Man	44	57,1
	woman	33	42,9
Age	Age 21-30	5	6,5
	Age 31-40	9	11,7
	Age 41-50	18	23,4
	Age 51-60	29	37,7
	Age 61-70	16	20,8
Residence	Grobogan	66	85,7
	outside Grobogan	11	14,3
Education	SD	18	23,4
	SMP	31	40,3
	High School	17	22,1
	D3	9	11,7
	S1	2	2,6
Type of payment	General	4	5,2
	BPJS	73	94,8



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Judging from the above table of the respondents amounted to 77 people can be drawn that the basis of sex is dominated by male respondents, namely 57,1%, by the age of most respondents are in the age between 41-50 years amounted to 37,7%, based on residence dominated by the respondents residing in Grobogan amounted to 85,7%, based on the level of education is dominated by junior last educated respondents amounted to 40,3%, and by payment type is dominated by respondents who use this type of payment that is equal to 94,8% BPJS.

The variables in this study include the quality of care, patient safety and patient satisfaction patient loyalty which each are described according to the following table:

Table 2. Description of Service Quality.

Code	Statement	STS		TS		N		S		SS	
		f	%	f	%	f	%	f	%	f	%
X1.1	Conditions of service are maintained room cleanliness and tidiness.	0	0	0	0	0	0	20	26	57	74
X1.2	The condition and state of convenient services space.	0	0	0	0	0	0	19	24,7	58	75,3
X1.3	In providing services officer groomed.	0	0	0	0	0	0	23	29,9	54	70,1
X1.4	Procedure and flow of the service is easy and straightforward straight forward.	0	0	0	0	2	2,6	16	20,8	59	76,6
x1.5	The services provided are in accordance with the service schedule.	0	0	0	0	0	0	19	24,7	58	75,3
X1.6	Officers quickly responded relief to the patients who need further assistance.	0	0	0	0	0	0	21	27,3	56	72,7
X1.7	Officers in providing services to be calm and steady.	0	0	0	0	7	9,1	16	20,8	54	70,1
X1.8	The clerk patiently and clearly communicated to the patient in providing an explanation.	0	0	0	0	1	1,3	15	19,5	61	79,2
X1.9	The clerk provides the opportunity for patients to	0	0	0	0	0	0	16	20,8	61	79,2



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	consult is well.											
X1.10	Patients feel the presence of the officer provides security and comfort.	0	0	0	0	0	0	12	15,6	65	84,4	
X1.11	The clerk does not discriminate in providing services to differentiate patients.	0	0	0	0	1	1,3	17	22,1	59	76,6	

Seen from Table 2 above shows the eleven indicators of quality of service of nearly all agree and strongly agree however on indicators procedures and service flow that is easy and not complicated serpentine two respondents who answered hesitation, indicators officer in providing services to be calm and steady there headed respondents who answered hesitation, indicators clerk patiently communicate to the patient and clear in explaining one respondent who answered hesitation, and the indicator does not discriminate distinguished officers in providing services to patients one respondent answered hesitation, so there are few respondents who have not agreed to assess the service quality is good.

Table 3. Description of Patient Safety.

Code	Statement	STS		TS		N		S		SS	
		f	%	f	%	f	%	f	%	f	%
X2.1	The clerk before taking action on the patient performs identity checking first.	0	0	0	0	3	3,9	39	50,6	35	45,5
X2.2	Their Good communication between officers of the other officers.	0	0	0	0	3	3,9	24	31,2	50	64,9
X2.3	Good communications between officers with patients	0	0	0	0	1	1,3	25	32,5	51	66,2
X2.4	The clerk asked about the patient's arrival.	0	0	0	0	2	2,6	22	28,6	53	68,8
X2.5	The clerk before giving the drug must first conduct	0	0	0	0	0	0	26	33,8	51	66,2



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	thorough checking with.											
X2.6	Officers skilled and efficient in providing care for patients.	0	0	0	0	3	3,9	21	27,3	53	68,8	
X2.7	The services provided were impressed sequential and coherent	0	0	0	0	4	5,2	22	28,6	51	66,2	
X2.8	Officers help the patient and directing the beds will be occupied.	0	0	0	0	1	1,3	15	19,5	61	79,2	
X2.9	Patients using existing beds right beside her seat and left.	0	0	0	0	4	5,2	4	5,2	69	89,6	
X2.10	Officers do wash their hands before taking action into the patient.	0	0	0	0	7	9,1	15	19,5	55	71,4	
X2.11	Officers in taking action to patients with gloves	0	0	0	0	1	1,3	18	23,4	58	75,3	

Seen from Table 3 above shows eleven patient safety indicators There are several indicators that respond hesitate officer before taking action to carry out checking of the identity of the patient first three respondents hesitate, good communication between officers of the other officers three respondents hesitate, good communications between officers with patients one respondent answered hesitate, the officer asked about the patient's arrival two respondents answered hesitate, Skilled personnel and efficient in providing services to patients three respondents answered hesitation, services provided impressed sequential and coherent four respondents answered hesitation, Officers help the patient and directing the beds will be occupied by one respondents answered hesitation, patients using the existing bed addition to the right and left seat four respondents answered hesitation, the clerk did wash their hands before taking action into the patient go respondents answered hesitation, the officer in taking action to patients with gloves one respondents answered hesitation.



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Table 4. Description Patient Satisfaction

Code	Statement	STS		TS		N		S		SS	
		f	%	f	%	f	%	f	%	f	%
Y1.1	The patient does not have any complaints with the service provided	0	0	0	0	2	2,6	38	49,4	37	48,1
Y1.2	The patient is satisfied with all the services provided	0	0	0	0	1	1,3	30	39	46	59,7
Y1.3	The Patients get care in accordance with what patients expect	0	0	0	0	1	1,3	29	37,7	47	61

Judging from Table 4 above shows three indicators of patient satisfaction, there are several indicators that respond hesitate ieas the patient did not have any complaints with the service provided two respondents answered hesitation, as patients are satisfied with all the services provided by the respondents answered hesitation, patients get care in accordance with what patients expect one respondents answered hesitation.

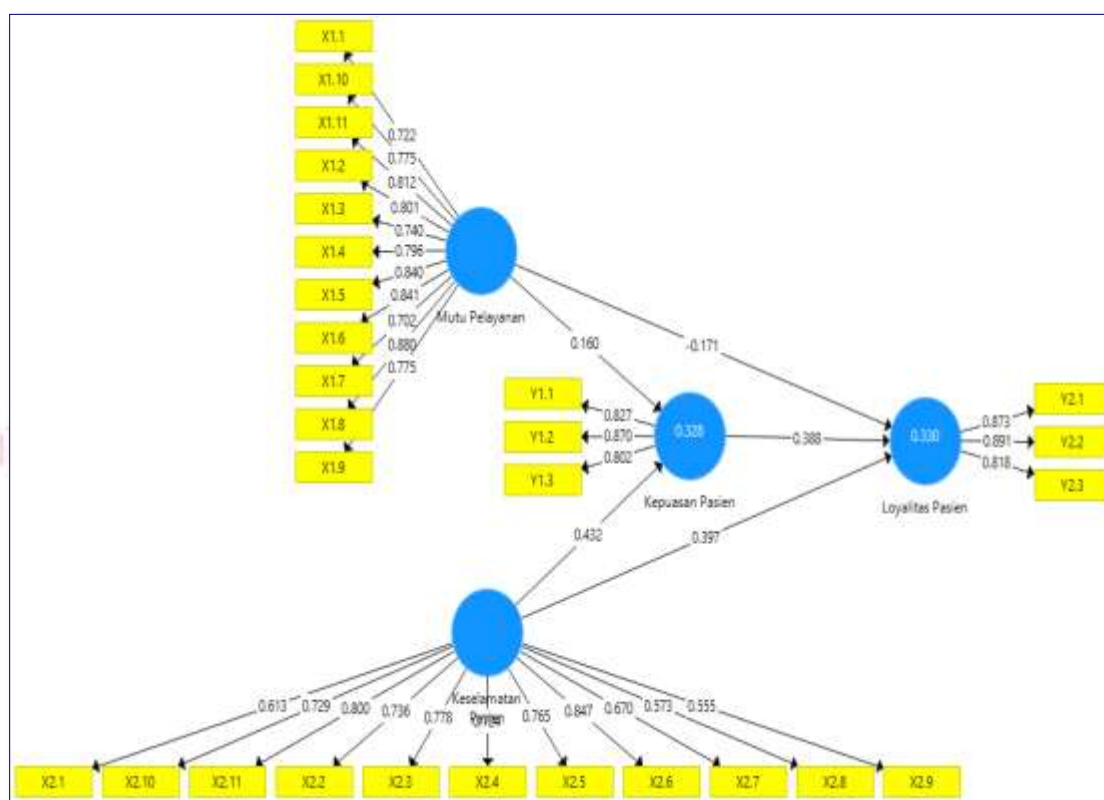
Table 5. Description Patient Loyalty

Code	Statement	STS		TS		N		S		SS	
		f	%	f	%	f	%	f	%	f	%
Y2.1	As a patient will convey good information related to the installation of hemodialysis services at the hospital.	0	0	0	0	0	0	46	59,7	31	40,3
Y2.2	As a patients will not be moved to perform dialysis therapy / hemodialysis at another hospital.	0	0	0	0	0	0	28	36,4	49	63,6
Y2.3	For patients who are already undergoing hemodialysis therapy in this hospital want to promote it to others to perform the treatment to this hospital	0	0	0	0	1	1,3	23	29,9	53	68,8



Seen from Table 5.above shows three indicators of patient loyalty are the respondents who answered hesitate ie indicators patients who are already undergoing hemodialysis therapy want to promote it to others to carry out the treatment to the hospital.

Picture 1. Structural Model that describes the influence of service quality and safety of patient to patient satisfaction and patient loyalty



In the course of a study is required validity and reliability test which is a prerequisite test to look at the data is valid or not. In conducting the test validity can see the value of Cronbach's alpha and the value of Average variance extracted (AVE).



Table 6. Construct reliability and validity.

variables	Cronbach Alpha	Rho_A	composite Reliability	Average variance extracted (AVE).
patient satisfaction	0,779	0,782	0,872	0,695
patient safety	0,902	0,912	0,918	0,510
patient loyalty	0,831	0,869	0,896	0,742
quality of Services	0,940	0,943	0,948	0,626

From the above table for values obtained Average variance extracted (AVE) of more than 0,5 where data showed convergent validity correlations among the indicators have been met with a variable has been reached, while the reliability test with Cronbach Alpha see the value and the value of Composite Reliability, if the value of Cronbach Alpha more 0,6 Composite Reliability and value more than 0,7 then the data has met the requirements in terms of reliability so that the table data above is reliable.

Hypothesis testing to see the effect of variables done by looking at the value of the Values $P \leq 0,05$ or see the value of T Statistics $\geq 1,993$, the research hypothesis accepted.

Table 7. Test the Effect of Service Quality and safety of patient to patient satisfaction and loyalty.

No	Variables influence	T Statistics	T Table	P Values	Information
H1	Quality Services => Patient satisfaction	1,06	1,99	0,291	Not significant
H2	Patient Safety => Patient satisfaction	2,83	1,99	0,005	Significant
H3	Patient satisfaction => Loyalty patients	3,13	1,99	0,002	Significant
H4	Quality of Service => Loyalty patients	1,10	1,99	0,289	Not significant
H5	Patient Safety => Loyalty patients	2,31	1,99	0,024	Significant



The above table describes the results of testing the hypothesis in this study are:

Testing Hypothesis 1, by looking at the value of T Statistics $1,06 < 1,99$ then H_0 is accepted, which means that quality of service does not significantly influence patient satisfaction in Hemodialysis installation, so that the research hypothesis is unacceptable

Testing Hypothesis 2, to see the value of T Statistics $2,83 > 1,99$ then H_0 is rejected, which means patient safety significantly influence patient satisfaction in Hemodialysis installation so that the research hypothesis can be accepted.

Testing Hypothesis 3, to see the value of T Statistics $3,13 > 1,99$ then H_0 is rejected, which means patient satisfaction significantly influence patient loyalty in Hemodialysis installation, so that the research hypothesis can be accepted.

Testing Hypothesis 4, to see the value of T Statistics $1,10 < 1,99$ then H_0 is accepted, which means that quality of service does not significantly influence patient loyalty in Hemodialysis installation, so that the research hypothesis can not be accepted.

Testing Hypothesis 5, to see the value of T Statistics $2,31 > 1,99$ then H_0 is rejected, which means a significant effect on patient safety in the installation Hemodialysis patient loyalty, so that the research hypothesis can be accepted.

Conclusions and Recommendations

From research by looking at the data analysis can be summarized as follows:

1. Of the 77 respondents who researched mostly male that is equal to 57,1%, most respondents aged between the ages of 41-50 years by 37,7%, of the place of residence of respondents from the region amounted to 85,7% Grobogan , the education level of education last dominated junior high at 40,3%, and of the mode of payment most respondents use BPJS financing in the amount of 94,8%.
2. Quality of service no significant effect on the patient satisfaction and loyalty gratification of installation hemodialysis patients in hospital.



3. Patient safety significant effect on the patient satisfaction and loyalty gratification of installation hemodialysis patients in hospital.
4. Patient satisfaction significant effect on the loyalty of installation hemodialysis patients in hospital.

Quality of service reflected by the dimensions of quality and patient safety through the six goals of patient safety are closely linked, because if the quality of service quality of hospitals are good and the level of patient safety is also guaranteed would have an impact on patient satisfaction and loyalty of patients, so the hospital is continuously improving quality of care and patient safety efforts without ever stopping (Ulumiyah, 2018).

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