

The Effect of Service Quality in an Indonesian hospital: Patient Satisfaction in a Coastal Emergency Department

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Background: Health workers are directed to provide services that fulfil high standards for improving public health. Poor service quality can affect the number of patient visits, because the level of patient satisfaction is determined by the quality of service components available. The hospital is one of the health service providers in which there are health service units such as an emergency room. The Emergency Department provides patient care first, then triage is performed. **Objective:** This study aims to reveal the quality of service to patient satisfaction in the Hospital Emergency Department. **Method:** The study design used a cross sectional study design. The study sample was 118 respondents. Data collection involved questionnaires and data analysis with chi-square. **Results:** The results showed that the overall service dimension, namely the suitability between tangible quality, reliability, responsiveness, assurances, and empathy to patient satisfaction with a P-value of 0.000. **Conclusion:** The quality of service has a significant effect on patient satisfaction at the Hospital Emergency Installation.

Key words: *Service Quality, Patient Satisfaction, Emergency Installation.*

Introduction

At this time, services that tend health problems have become a primary need for the community. The demand for excellent health services has increased along with the increase in the standard of community living (Yulianti and Madiawati, 2015). Service quality must start from customer needs (Thaha et al., 2019) and end on customer perception (Hasibuan et al. 2019), where customer perception of service quality is a comprehensive assessment of the service excellence (Aini and Andari, 2016). Patient satisfaction is a crucial endpoint for the main purpose of medical care (Gholami et al., 2016; Pakdil and Harwood, 2005; Pines et al., 2008).

Hospitals are playing a very strategic role in efforts to accelerate the improvement of public health status (Susilawati et al., 2018). A new paradigm of public health services involves hospitals provide quality services according to the needs (Nahlah et al., 2019) and desires of patients, while still referring to the code of professional and medical ethics. In the rapid development of technology and increasingly fierce competition, the hospital is required to improve the quality of its services (Jaya and Syarufuddin 2015).

Quality of hospital services refers to the level of service excellence and patient satisfaction. There are five dimensions of hospital service quality, namely: Speed of service, staff attitude, availability of drugs, place of care, provision of information and education (Larson et al., 2002). Satisfaction is one indicator in terms of quality of service. The level of patient satisfaction with the services provided can affect a patient's desire to use the service again. If the patient's experience of a service exceeds the service quality they expect, then they will voluntarily use the service again and they might promote the service to others (Purwastuti, 2005).

An Emergency Department (IGD) is a hospital unit that provides first care for patients, then triage and assistance is provided (Wiyono, 2016). One of the requirements in emergency services is it must have dexterity, skill and preparedness at all times (Sopianah et al., 2017), and be careful in handling a patient's welfare. The aim is to prevent the occurrence of disability or death in patients. In the emergency department (IGD), patient satisfaction must also be a strategic goal for health care management.

The provision of services for patient satisfaction, especially emergency services, can be assessed via nurse responsiveness (quick response) (Siregar, 2019), reliability (timely service), assurance (attitude in providing services), empathy (care and attention in providing services) (Fadli et al., 2018), and tangibility (quality of service) from nurses to patients (Jaya and Syarufuddin 2015). Ranajit and Anirban (2013) define each of the five components as concise and clear, namely reliability is described as the ability to do the promised service

accurately. The assurance is the level of consumer knowledge, politeness and ability to describe trust. Tangibility relates to performance of the facilities, equipment, personnel and communication goods. Empathy refers to the 'individualistic' attention to customers. Finally, responsiveness is the desire to help consumers and provide fast service (Ivyanno and Nila, 2012). The level of customer satisfaction is divided into two dimensions, namely, perception of service to performance, and behaviour predictors (Oliver, 1997; Truji and Bennett, 2007). Ranajit and Anirban (2013) state that ignorance about the dimensions of the services provided will lead to customer frustration (see also Anderson and Sullivan, 1993).

Satisfaction is difficult to define, especially in the health field (Alaloola and Albedaiwi, 2008; Masood et al., 2009; Priporas et al., 2008). Some authors define satisfaction in terms of psychology as the coincidence between expectations and results (Birgit, 2008). Satisfaction is a multidimensional concept involving user perception services, health workers and results treatment received (Ann et al., 2005; Naidu, 2009; Vinagre and José, 2008; Elleuch, 2008; Gill and White, 2009; Owusu et al., 2010).

The number of patient who visited the Hospital Emergency Department in 2018 was 23.905 patients between January to September. Data on emergency room visits based on triage indicators from January to September, namely green (non-emergency and non-emergency patients) was 275 patients. Yellow (emergency patients but not serious services can still be postponed) was as many as 22,502 patients. Red (emergency and emergency patients, priority services) was 315 patients. Blue (non-emergency patients) was as many as 78 patients. Black (patient died) was as many as 100 patients.

Whereas in 2019, emergency patient visits based on the Triage indicator decreased from January to July, namely green (non-emergency and non-emergency patients) of 2,616 patients. Yellow (emergency patients but not serious services can still be postponed) as many as 14,358 patients. Red (emergency and emergency patients, priority service) as many as 182 patients. Blue (non-emergency patients) as many as 54 patients. Black (patient died) as many as 59 patients.

In line with previous studies, there is a significant relationship between the variables reliability, responsiveness, and attention. Multivariate analysis found that reliability as a variable was dominant in patient satisfaction in the Emergency Hospital of Prof. RSUP Dr. R.D Kandou Manado (Kaban, 2015). Tangibility and assurance affected customer satisfaction at Sarila Husada hospital and the patients of Sragen (Supartiningsih, 2017).

Based on patient visit data in the emergency room, the results of previous studies, the authors want to examine the effect of service quality on patient satisfaction in the Emergency Coastal Hospital of Surabaya.

Method

This study was a quantitative analytic study with cross sectional study design. In quantitative study, authors looked at statistical analysis by collecting data through questionnaires. This study was conducted at the Emergency Unit of the Surabaya PHC Hospital. The study will be conducted in October 2019. The population in this study were patients who visited the Hospital. The sample in this study were patients with age criteria > 18 years and included 118 respondents.

The study variables consisted of independent variables and dependent variables. The independent variable consisted of tangible (including physical appearance, equipment, staff, and infrastructure), reliability (the ability to provide the promised service immediately, accurately, and satisfactorily), responsiveness (the willingness of officers to help patients and provide appropriate and fast services), assurances (polite and knowledgeable officers who provide trust and confidence), and empathy (including the care and attention of officers to patients). While the dependent variable is patient satisfaction, and the service is in line with expectations, willingness to recommend to others, satisfied with the quality of the service provided and the desire to re-use the service.

Data collection used primary data and secondary data. The measuring instrument used was a questionnaire, using a Likert scale namely category 1 (Strongly Disagree), category 2 (Disagree), category 3 (Neutral), Category 4 (Agree), and Category 5 (Strongly Agree). Data analysis techniques were performed using chi-square analysis.

Results

Table 1: Frequency Distribution and Percentage of Respondent Characteristics

Variable	Category	Frequency (n)	Percentage (%)
Sex	Male	64	54,2
	Female	54	45,8
Age	Adult	78	66,1
	Elderly	40	33,9
Education	Low	14	11,9
	High	104	88,1
Occupation	Unemployment	43	36,4
	Employment	75	63,6

Of the 118 respondents, 64 (54.2%) were male and 54 (45.8%) were female. It is known that 78 (66.1%) respondents are adults, while 40 (33.9%) respondents are older. Based on the education characteristics of the respondents, 104 (88.1%) high education and 14 (11.9%) low

education. Respondents with working status were 75 (63.6%), while respondents who did not work were 43 (36.4%).

Table 2: Effect of Service Quality on Patient Satisfaction

Variable	Category	N	Percentage	Patient Satisfaction				P
				No		Yes		
				N	%	N	%	
Sex	Male	64	54,2	13	20,3	51	79,7	0,806
	Female	54	45,8	10	18,5	44	81,5	
Age	Adult	78	66,1	17	21,8	61	78,2	0,378
	Elderly	40	33,9	6	15,0	34	85,0	
Education	Low	14	11,9	1	7,1	13	92,9	0,214
	High	104	88,1	22	21,2	82	78,8	
Occupation	Employment	43	36,4	9	20,9	34	79,1	0,765
	Unemployment	75	63,6	14	18,7	61	81,3	
Tangible	Less	22	18,6	22	100,0	0	0,0	0,000
	Good	96	81,4	1	1,0	95	99,0	
Reliability	Less	23	19,5	22	95,7	1	4,3	0,000
	Good	95	80,5	1	1,1	94	98,9	
Responsiveness	Less	22	18,6	22	100,0	0	0,0	0,000
	Good	96	81,4	1	1,0	95	99,0	
Assurances	Less	22	18,6	22	100,0	0	0,0	0,000
	Good	96	81,4	1	1,0	95	99,0	
Empathy	Less	22	18	22	100,0	0	0,0	0,000
	Good	96	81	1	1,0	95	99,0	

It is known that 44 (81.5%) female respondents and 51 (79.7%) male respondents were satisfied with the services in the emergency room, while as many as 10 (18.5%) female respondents and 13 (20.3%) male respondents were not satisfied with the services in the emergency room. P-value of the gender variable is $P = 0.806$.

A total of 61 (78.2%) respondent adults and 34 (85.0%) older respondents were satisfied with the services in the emergency room, while 17 (21.8%) respondent adults and 6 (15.0%) older respondents were not satisfied with the services in the emergency room. P-value of the age variable is $P = 0.378$.

Hirteen lower education level respondents (92.9%) and 82 higher education level respondents (78.8%) were satisfied with services in the emergency room, while 1 (7.1%) lower education

respondents and 22 (21, 2%) higher education respondents were dissatisfied with services in the emergency room. P-value of the education variable is ($P = 0.214$).

34 respondents who worked (79.1%) and 61 (81.3%) respondents who did not work were satisfied with the services in the emergency room, while as many as 9 (20.9%) respondents were employed and 14 (18, 7%) respondents who did not work were not satisfied with the service in the emergency room. P-value of the work variable is $P = 0.0.765$.

Tangible dimensions with less categories are 0 (0.0%) of respondents and good categories are 95 (99.0%) respondents who are satisfied with the service in the emergency department, while tangible dimensions with less categories are 22 (100.0%) respondents and good category 1 (1.0%) of respondents who were dissatisfied with services in the emergency department. The tangible dimension's P-value is $P = 0.000$.

The reliability dimension with less category was 1 (4.3%) of respondents and the good category was 94 (98.9%) of respondents who are satisfied with the service in the emergency department, while the reliability dimension with less categories was 22 (95.7%) of respondents and good category 1 (1.1%) of respondents who were dissatisfied with services in the emergency department. The tangible dimension's P-value is $P = 0.000$.

The dimension of responsiveness with less categories was 0 (0.0%) of respondents and the good category was 95 (99.0%) of respondents who were satisfied with the services in the emergency department, while the dimensions of responsiveness with less categories were 22 (100.0%) respondents and good category 1 (1.0%) of respondents who were dissatisfied with services in the emergency department. The tangible dimension's P-value is $P = 0.000$.

The insurance dimension with less categories was 0 (0.0%) of respondents and the good category was 95 (99.0%) of respondents who were satisfied with the service in the emergency department, while the insurance dimension with less categories was 22 (100.0%) of respondents and good category 1 (1.0%) of respondents who were dissatisfied with services in the emergency department. The tangible dimension's P-value is $P = 0.000$.

The dimensions of empathy with less categories were 0 (0.0%) of respondents and the good category was 95 (99.0%) of respondents who were satisfied with the services in the emergency department, while the dimensions of empathy with less categories were 22 (100.0%) of respondents and good category 1 (1.0%) of respondents who were dissatisfied with services in the emergency department. The tangible dimension's P-value is $P = 0.000$.

Discussion

Based on the analysis of the characteristics of respondents by sex, it can be concluded that more patients who visited the emergency department were male than female. The level of patient satisfaction is higher in male patients than female patients. There is no significant relationship between sex and patient satisfaction.

Analysis of the age characteristics of the respondents found that more patients who visited the hospital were adult patients than elderly patients with different levels of satisfaction. There is no significant relationship between age and patient satisfaction. Characteristics of respondents by age have different levels of satisfaction, this is because the expectations of a person are influenced by many factors such as growth and development, diving and others (Setiawan and Kariasa, 2013).

Based on an analysis of the educational characteristics of the respondents, it was concluded that more highly educated patients visited the emergency department than those with less education. The level of patient satisfaction based on the characteristics of respondents varies, where patients with low-level education are more satisfied with service at the hospital than patients with higher education. There is no significant relationship between education level and patient satisfaction. The higher a person's education level the greater his expectations so the higher a person's education the lower the level of satisfaction (Setiawan and Kariasa, 2013).

In the results of the analysis of the characteristics of respondents based on occupational categories, it was found that the patients who most visited the emergency department were patients who did not work more than patients who worked. The level of patient satisfaction in the non-working group of patients is more satisfied than in the working group of patients. There is no significant relationship between work and patient satisfaction.

The results of the analysis showed that the dimensions of tangible, reliability, responsiveness, assurance, and empathy had a positive effect on the level of patient satisfaction in the Emergency Department at the Surabaya Coastal Hospital.

Based on the results of previous studies, this study shows that the quality of service affects the satisfaction of outpatients at the General Hospital Dr. Soegiri Lamongan (Hanggraningrum et al., 2017). Other studies have shown that respondents are satisfied with the services provided by IMCs, where there is an effect of satisfaction on the quality dimensions of IMCs clinical services in Kota Bharu, Malaysia (Zun et al., 2018).



The assurance variable has a positive and significant influence on patient satisfaction for the Sarila Husada Sragen Hospital outpatients. This can be interpreted as the trustworthiness of the employee has increased the patient satisfaction at Sarila Husada Sragen Hospital, so that outpatients will also increase (Supartiningsih, 2017).

Conclusion

Based on the results of the study, it can be concluded that there is no significant relationship between the characteristics of respondents including gender, age, education level, and occupation on patient satisfaction. Statistical test results have a relationship between service quality dimensions (tangible, reliability, responsiveness, assurances, and empathy) to patient satisfaction, where each dimension has a positive effect.

Conflict of interest : None
Source of Funding : Self-Funding
Ethical Clearance : Approved

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