

Patient Satisfaction Level based on Demographic Factors using SERVQUAL Instruments in Public Hospital in Banda Aceh, Indonesia

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Abstract: Quality health services are any efforts made by the service providers with the aim of providing high quality and excellent services to improve the health of individuals, groups or communities alike. This study aims to determine the differences in satisfaction among the patients in Type I, Type II, Type III, service rooms based on the demographic characteristics of health services at the Regional General Hospital of dr. Zainoel Abidin (RSUDZA) in Banda Aceh. This quantitative comparative study employed the Cross-Sectional design. The population was all Type I, Type II, Type III, patients treated in the inpatient rooms. The probability sampling method with the simple random sampling criteria was used to draw 383 patients while the data were harnessed using the SERVQUAL Instrument. The results show that no differences were observed in satisfaction among the Type I, Type II, Type III, patients with the p-value of > 0.05 ($p = 0.237$). The management of RSUDZA needs to improve the quality of health services to provide satisfaction to its patients by focusing on all service dimensions.

1 INTRODUCTION

Since January 1, 2014, Indonesia ratified its health financing system. The National Health Insurance System (SJSN) Act No. 40 of 2004 stated that from 2014 to 2019 health insurance will gradually cover the health costs of all Indonesians. The system will cover the cost of health maintenance and primary health care to those who have paid health insurance fees either by themselves or by the government. The system is realized in the form of a compulsory social health insurance mechanism. The Health Insurance Agency (BPJS) is in charge of the National Health Insurance (JKN). The agency follows the technical guidelines for JKN implementation stated in the Minister of Health Regulation Number 28 of 2014. The regulation demands the hospital health facilities to provide excellent quality services. The regulation also stipulates that all health insurance participants have the right to health facilities based on the amount of contribution fee paid.

Thus, all hospitals in Indonesia have to provide services following the provisions by the National Health Insurance. Hospitals, as the provider of health facilities, accommodate individual health services such as promotion, preventive, curative and rehabilitative services and provide inpatient, outpatient and emergency services (Permenkes RI No 129, 2008). Furthermore, the Article 24 of paragraph 1 in the Public Hospital Act No. 44 of 2009, classified the public hospitals in Indonesia into four categories, A, B, C, and D. Each type of hospital has inpatient service facilities for Type I, Type II, Type III, and VIP.

Service quality is an inherent aspect of a hospital. The quality of service delivered by the nurses in a hospital dictates the patient satisfaction. Several factors influence patient satisfaction one of which is the patients' demographic. To measure the quality of health services, Parasuraman, Zeithaml, and Berry, (1988) conducted a unique study on several types of services and managed to identify ten dimensions of service quality that determine patient

satisfaction. The findings have been empirically tested and developed into the measurement instrument for quality perspective according to the customer called The SERVQUAL Instrument (service quality). The instrument aimed at measuring the five dimensions of patient satisfaction toward public health services, namely, tangible, reliability, responsiveness, assurance, and empathy.

2 METHODS

The descriptive, comparative study used a cross-sectional approach. The study compared the patient satisfaction of the Health Care and Social Security Agency (BPJS) type I, type II and type III cardholders based on their demographics with the service quality determined by the hospital (Sugiyono, 2016). Furthermore, The population in this study were all BPJS cardholders, 185.390 people, treated in the inpatient rooms at the RSUDZA of Banda Aceh in 2016. With the confidence level of 95%, a total sample of 383 people was drawn using the Statcalt Epi Info Version 7.2 application. Simple random sampling was used to determine the samples while their criteria were identified beforehand. Only the patients with a BPJS health insurance and treated more than three days at hospital inpatient wards were involved in this study.

The instrument consists of three parts; Part A, B, and C. Part A reviewed patient's demographic characteristics while Part B and C, adopted from SERVQUAL questionnaires by Parasuraman et al., (1988), surveyed their satisfaction toward health services at the hospital. The study was carried out at a public hospital in Banda Aceh between March 13 and April 13, 2018. It commenced by drawing the respondents, explaining the aims of the study, interviewing the respondents regarding the level of satisfaction felt. The study used the one-way ANOVA statistical test. The test looked at whether there was a significant difference in satisfaction among the type I, type II and type III patients by observing the significance value of (P) in the analysis results. The Logistic Regression Test was administered to identify the factors that most influence the level of health service satisfaction based on the demographic characteristics of respondents at a significance level of ($p < 0.05$).

3 FINDINGS

3.1 Demographic Data

Demographic data of study participants are described in Table 1. Table 1 shows that the number of the senior citizens in the inpatient rooms of RSUDZA, Banda Aceh was 157 patients (41%), 202 patients (52.7%) were males, 357 patients (93.2%) came from outside Banda Aceh, and 342 patients (89%) lived more than 10 km from the hospital. The number of patients who suffered from the illness within the last few days and few weeks were 208 people (54%), and 256 respondents (66.8%) reported to have been in the hospital for more than four days. Nuclear family accounted for 230 patients (60.1%), and patients with a school diploma reached 108 persons (28.2%). Most of the patients were farmers, unskilled laborers, and pensions totaling 191 people (49.9%) and those who had an income of more than IDR 2.700.000,- were 249 people (65%). The figure for the non-smoking respondents were 317 patients (82.8%), those whose family and friend never visited reached 230 patients (60.1%), and 160 patients (41.8%) never purchased food outside the hospital. More than half of the patients received health service fee assistance (PBI) and the figures for those whose fees paid by the central government were 236 persons (61.6%). While 182 patients (47.5%) frequently paid the BPJS fees, 291 patients did not know the BPJS fees paid. The number of patients who had to pay for the health service of more than IDR 500.000,- reached 201 people (52.5%) while only 185 people (48.3) were not fined due to the late payment of the health insurance fees.

3.2 Measuring Satisfaction

The findings show that most respondents, 277 respondents (72.3%), were not satisfied with health services provided in the wards at the public hospital. The analysis of variance (ANOVA) test shows that the type I, type II and type III respondents have a minus mean value of satisfaction with a p-value of 0.24, indicating that there is no difference in the satisfaction level of the patients treated in type I, type II, and type III inpatient care.

Table 1: Respondents characteristic (n = 383).

Characteristics	Categories	f	%
Age	Adolescent	107	27.9
	Adult	119	31.1
	Elderly	157	41.0
Sex	Male	202	52.7
	Female	181	47.3
District of origin	Banda Aceh	26	6.8
	Outside Banda Aceh	357	93.2
Distance from the hospital	< 5 km	10	2.6
	5-10 km	31	8.1
	>10 km	342	89.3
Length of illness	Day/week	208	54.3
	Month	107	27.9
	Year	68	17.8
Number of family members	Nuclear family	230	60.1
	Extended family	126	32.9
	Dyad family	27	7.0
Level of Education	Not completed education	3	0.8
	Primary School	88	23.0
	Middle School	89	23.2
	High School	108	28.2
	Diploma III	45	11.7
Occupation	Undergraduate	50	13.1
	Civil servant	62	16.2
	Private employee	56	14.6
	Businessman	46	12.0
	Not working	28	7.3
Income (IDR)	Others	191	49.9
	≤ 2.700.000	134	35.0
	> 2.700.000	249	65.0
Length of care	<4 days	127	33.2
	> 4 days	256	66.8
Smoking history	Yes	66	17.2
	No	317	82.8
Family or friend visits	Never	230	60.1
	Sometimes	129	33.7
	Always	24	6.3
Food purchase	Never	160	41.8
	Sometimes	143	37.3
	Always	80	20.9
BPJS insurance status	PBI	243	63.4
	NON-PBI	103	26.9
	Self-funding	14	3.7
	Others	23	6.0
BPJS insurance fees (IDR)	80.000	49	12.8
	51.000	18	4.7
	25.000	25	6.5
	Others	291	76.0
Routinely pay BPJS fees	Yes	182	47.5
	No	20	5.2
	Others	181	47.3
BPJS Payment Status	Central government	236	61.6
	Salary Deduction	94	24.5
	Self-funding	24	6.3
	Others	29	7.6

BPJS penalty fees	Ever	24	6.3
	Never	185	48.3
	Unknown	174	45.4
Healthcare fees at the hospital (IDR)	≤500.000	128	33.4
	>500.000	201	52.5
	Unknown	54	14.1

Table 2: Distribution of respondents based on satisfaction (n=383).

Category	Frequency	%
Satisfied	106	27.7
Unsatisfied	277	72.3
Total	383	100

Table 3: Differences in patient satisfaction (n=383).

Health care level	Mean	SD	95% CI	P-Value
Type I	-8.46	9.03	(-10.72) – (-6.21)	0.24
Type II	-10.21	10.29	(-12.40) – (-8.01)	
Type III	-8.01	10.82	(-9.41) – (-6.61)	

Table 4: A comparison of patient satisfaction based on the quality dimensions (n=383).

Service quality	Health care level	Mean	SD	P-Value
Tangible	Type I	-1,21	2,22	0,737
	Type II	-1,28	1,98	
	Type III	-1,43	2,23	
Reliability	Type I	-1,75	2,00	0,129
	Type II	-2,26	2,61	
	Type III	-1,61	2,64	
Responsiveness	Type I	-2,26	2,80	0,092
	Type II	-2,68	3,19	
	Type III	-1,85	3,10	
Assurance	Type I	-1,10	1,95	0,575
	Type II	-1,40	1,76	
	Type III	-1,17	1,97	
Empathy	Type I	-2,12	2,84	0,23
	Type II	-2,56	2,85	
	Type III	-1,93	3,01	

Table 5: Factors Influencing the Level of Patient Satisfaction.

Demographic Characteristics	df	95% CI	P-Value
Age	1	1.113-1.982	0.007
District of Origin	1	0.116-0.608	0.002
Education	1	0.558-0.996	0.047

The comparison of patient satisfaction based on the quality dimension indicated that the highest difference was observed in the responsiveness dimensions, especially in the type II care facility (95% CI = (-3.37) - (-2.01)). For the empathy dimension, a significant difference was also found in the type II care facility (95% CI = (-3.17) - (-1.95)).

The district of origin is the factor that most contributes to satisfaction with the p-value of <0.05 ($p = 0.002$).

4 DISCUSSION

The findings show that 277 out of 383 patients (72.3%) treated in the inpatient rooms of RSUDZA, Banda Aceh, were not satisfied with the health service at the hospital. The Analysis of Variances (ANOVA) test produced the mean of each insurance class at -8.5875 with the interval between -9.6367 and -7.5382. With the p-value of $>\alpha 0,05$ ($p=0,247$) it means that there was no difference in patient satisfaction based on health insurance classes at the inpatient rooms of RSUDZA, Banda Aceh.

Equal services provided for the type I, type II and type III health insurance beneficiaries seems to contribute to such result. The qualifications of Human Resources at the hospital across each treatment class made the patient feel satisfied with the treatment class received according to the guideline of BPJS paid either by the central government, salary deductions or self-funding.

According to Tjiptono (1996), customer satisfaction is a post-purchase evaluation in which the chosen alternatives at least provide an equal outcome or beyond customer expectations, while dissatisfaction arises when the post-purchase assessment does not meet customer expectations.

The public hospital in Banda Aceh continues to improve its health service quality. It was apparent from the accreditation it received in 2016 as a 5-star hospital in Aceh. The standard aims to increase the commitment, awareness, and ability of the health workers, especially those who are directly related to patients.

The findings from the five determining dimensions of the health service quality will be discussed.

The analysis on tangibility shows that the majority of type I, type II and type III patients were not satisfied with the health service provided and no significant correlation was found between physical proof and patient satisfaction ($p= 0.737$). According to Parasuraman et al., (1988), services in the dimensions of physical evidence include facilities, equipment, staff appearance, cleanliness and room comfort. Besides, the ability of the hospital as the service provider to regulate and provide sound conditions of its personnel is an essential factor in this dimension. The appearance and readiness of health workers, rooms and equipment will have a significant impression on the quality of health services because patients will firstly look at the physical evidence when visiting the hospital.

The public hospital seems to place reliability as its second priority in meeting patient satisfaction. It

was apparent from the result of the study ($p=0.129$). According to Parasuraman et al., (1988), reliability is the ability of health workers to provide fast, precise and non-convoluted services. It can have a significant effect on patients in getting the desired health services.

The p-value of ($0,092 > 0,05$) indicates that most of type I, type II and type III patients were not satisfied with the hospital reliability performances. It means that the health workers have not performed their best in delivering health services. They have failed to react accordingly to patient complaints and meet their needs. According to Parasuraman et al., (1988), responsiveness is the ability of health workers to respond to patient complaints and meet their needs as best as possible.

The majority of the respondents were not satisfied with the assurance dimension with the p-value of ($0,575 > 0,05$). Dissatisfaction describes the real experience of the patients that do not correspond to their expectation on how health workers can assure the patients to feel safe during treatment, be consistent and have sufficient knowledge to answer patient questions. According to Parasuraman et al., (1988), service assurance is the ability of health workers to provide safe and comfortable services following the standards set by the service provider.

On the average, the beneficiaries of type I, type II, and type III health insurance were not satisfied toward empathy dimension with the p-value of ($0.234 > 0.05$). According to Parasuraman et al., (1988), empathy service is the ability of health workers to provide care with mindfulness and compassion about what patients experience. The wards in the public hospital have not comprehensively implemented emphatic services such as giving special attention, having comfortable service hours, always prioritizing the interests of patients and understanding the specific needs of its patients.

An analysis of the factors that contribute to the level of satisfaction shows that age, district of origin, and education have a significant influence on patient satisfaction with p-value of < 0.05 at ($p = 0.007$), ($p = 0.002$), and ($p = 0.047$) respectively.

The age of a patient determines how the patients behave toward his illness and their relationship with the health workers (Gunarsa and Gunarsa, 2012). The results showed that of the 157 elderly respondents, 52.8% were satisfied with the health services provided in the inpatient room of this hospital. Resmisari (2008) argued that older patients found themselves to be more satisfied than younger patients. Elderly patients often make use of their

time to ask health workers about their condition. The study also found that 47 respondents (58.5%) with low education were satisfied with the health services at the hospital. According to Notoatmodjo (2005), the level of education is one of the determining factors that influences patient expectations and perceptions toward health services.

The final factor that influences patient satisfaction is the district of origin. 357 respondents (93%) who come from outside Banda Aceh felt satisfied with the health service given at hospital wards. This finding contradicts with Husin's (2004) statement that people who live far away from healthcare facilities tend to be dissatisfied compared to those who live nearby. If the effort made to reach a healthcare facility is not comparable to the services provided, the patients will tend to be displeased.

5 CONCLUSION

Patient satisfaction has a considerable impact on the hospital because as the consumer of health care, they often expect high-quality services. Therefore, there is a need for further studies on the implementation of national health insurance in term of the membership status and BPJS health insurance fees by primarily focusing on the right of the patients.

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