



**ANALYSIS OF HEALTH SERVICE QUALITY IMPACT ON NATIONAL
HEALTH INSURANCE PARTICIPANTS' SATISFACTION
AT THE PAKJO HEALTH CENTER PALEMBANG**

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ABSTRACT

Health service in the community health center is pivotal in the Indonesia health system since it is a primary public health facility. This paper examines six indicators of patient satisfaction on the quality of health services at the Pakjo Community Health Centre Palembang. Using a quantitative approach namely a cross-sectional survey design with 100 patients of the NHI participants as the sample. The data analysis technique used the ordinal logistic regression method. This paper finds all respondents/patients participating in the NHI were satisfied with the services at the outpatient installation of the Pakjo Health Center. There is a significant correlation between the dimensions of safety ($p=0.001$), effectiveness ($p=0.002$), patient-centered (0.015), and timely (0.035) to the satisfaction of the NHI participants, while there is no significant effect of the dimensions of efficiency (0.274) and equity (0.178) on the patient satisfaction. Based on the coefficient of determination test, it shows that the coefficient of determination is Mc Fadden (0.151), the coefficient of determination of Cox and Snell (0.310) and the coefficient of determination of Nagelkerke (0.339 or 33.9%) which means that the independent variables are aspects of safety, effectiveness, patient-centered, timely, efficient, and fairly able to influence the overall satisfaction rating of the NHI participants by 33.9%. For the improvement of the Pakjo Health Center service, several suggestions are endorsed such as improving the monitoring and evaluation of the patients' falling risk assessment; performing more discipline; conducting patient-centered care training; and implementing time management at the registration counter.

Keywords: health service quality; patient satisfaction; national health participants; health center;

Introduction

Improving service quality is one of the most important management issues for both the government and the private sector.¹ Quality is a dynamic condition related to products, human services, processes and environments that meet or exceed expectations. Service quality starts from customer needs and ends with customer perceptions.² The government makes various improvements to the program from time to time to create quality health services for all levels of society. To improve the quality of public health, the Government provides affordable health services for the community at community health centers in each sub-district.³ Community health center is a health service facility that carries out public health efforts and first-level individual health efforts, prioritizing promotive and preventive efforts in its work area.⁴

To achieve community access to health services, the government since 2014 has implemented a policy in the health sector, namely the National Health Insurance (the NHI) policy. The number of participants who have registered for the NHI program based on data obtained from the NHI Administration Board in Indonesia as of September, 2023, has reached 262.74 million people, or about 94.60% of the total population of Indonesia. According to data received from the Palembang City Health Office (the Health Office), the number of NHI participants in January 2021 was 1,534,390 out of 1,641,668 the total population of Palembang or 93.47% of the city's total population.⁵

The NHI health services focus on first level health services such as at community health centers. Thus, the quality of primary health facilities must be maintained, considering that the effect of implementing the NHI in the future will result in an increase in public demand for health services.⁶

The level of perfection in the quality of health services at the health center can be seen from patient satisfaction in receiving health services.⁷ Research conducted at the Cibitung Community Health Center found that there was a strong influence of service quality on patient satisfaction at the Cibitung Community Health Center, Sukabumi Regency.⁸ Based on research at the community health center, there is a significant relationship between the services of health workers and the interest in repeat visits of outpatients at community health center.⁹ Service quality influences patient satisfaction at the Urug Community Health Center in Tasikmalaya City by 0.732. This means that 73.2% of patient satisfaction at the Urug Community Health Center in Tasikmalaya City is influenced by the dimensions of service quality simultaneously.¹⁰ In line with this, there is a significant influence of quality, facilities and knowledge on patient satisfaction at the Batu-batu Community Health Center, Soppeng Regency.¹¹

Measurement of patient satisfaction aims to improve the quality of health services. Through these measurements, it can be seen to what extent the dimensions of the quality of health services provided can meet the expectations of patients with the NHI. The Pakjo Community Health Center (the Health Center) is a health center with Madya accreditation with a Community Satisfaction Index of 88.83 (Very Good). According to data from the Health Office, there were 223,225 participants on the NHI in 2020. This makes the Health Center is a health center with the second largest number of the NHI participants in the Ilir Barat I District. The Health Center is included in the top ten health centers with the highest number of visits by the NHI participants in Palembang City, where the number of visits by the NHI participant patients at the Health Center in 2019 was 25,175, and in 2020 the number of visits was 20,043. Therefore, the researchers are interested to conduct a study entitled "*Analysis of the Effect of Health Service Quality on Patient Satisfaction of National Health Insurance Participants at the Pakjo Health Center Palembang City in 2021*".

Methods

This research approach used a quantitative approach. The research design occupied in this study is a survey research design. The type of survey used is a cross-sectional survey design. This research was conducted from January to March 2022. The population in this study were patients participating in the NHI Program who used health services at the Health Center. Based on the data obtained, there were 223,225 the NHI participant patients in 2020, and the number of visits in December 2020 was 2,161 the NHI participants who used health services. The sampling method in this study was using a simple random sampling approach. The sample size needed in this study was 100 the NHI participants.

This research was conducted by distributing questionnaires to patients participating in the NHI who were included in the research criteria that had been chosen randomly. The questionnaire contains several statements related to the quality of health services at the Health Center, where the respondent must put a mark (√) on the answer that is considered correct. The *Likert* scale is used to measure the variables of this study, namely by giving a value of 1–5. After obtaining the values for each variable, the data will be sorted and processed into two categories based on the mean value, namely for the independent variable (good and not good), and the dependent variable (satisfied and dissatisfied). Then the data was processed using ordinal logistic regression analysis and presented using descriptive statistics.

Results

Table 1 shows the age distribution of respondents. Out of 100 respondents, the age group that mostly uses outpatient services at the Health Center is the age group > 45 years, which is 50%, and the least is the age group 25–29 years, which is 5%. As for the sex distribution, male respondents are 27 respondents (27%), while female respondent count for 73% (73 respondents). Respondents of the NHI participants with a high school education level used the most outpatient services at the Health Center, namely 41%, while junior high school education level was the lowest at 3%. For occupation category, housewife are the patient who uses the most outpatient services at the Health Center, which is 33%, while student patients use the outpatient services at the Health Center the least, which is 5%.

Table 1. Distribution of Frequency Based on Characteristics of Respondents at the Pakjo Health Center Palembang City in 2021

Characteristics	Category	n	%
Respondent Age	< 25	16	16
	25-29	5	5
	30-34	10	10
	35-39	11	11
	40-44	8	8
	> 45	50	50
	Total		100
Gender	Man	27	27
	Woman	73	73
	Total	100	100
Level of education	Elementary School Graduation	5	5
	Graduated Junior High School	3	3
	High School Graduation	41	41
	Diploma	12	12
	Bachelor	39	39
	Total	100	100
Work	Government employees/Army/Police	27	27
	Self-employed	13	13
	Housewife	33	33
	Student	5	5
	Other	22	22
Total	100	100	

Source: Primary Data, 2022

Based on table 2, it can be seen that all respondents who participating in the NHI were satisfied with the services at the outpatient installation of the Health Center. Also, all respondents have a good perception on service safety, patient-centered service, timeliness of service, service efficiency, and fairness of service at the Health Center. In addition, almost all respondent (99%) have a good perception of the effectiveness of services at the Health Center. One percent of respondent has a poor perception of the effectiveness of services at the Health Center regarding the schedule of doctor services to patients.

Table 2. Categories of Patient Respondents' Answers at the Pakjo Health Center Palembang City in 2021

Variable		n	%
Patient Satisfaction	Satisfied	100	100
	Not satisfied	0	0
Total		100	100
Variable		n	%
Safety	Good	100	100
	Not good	0	0
Total		100	100
Effective	Good	99	99
	Not good	1	1
Total		100	100
Patient-Centered	Good	100	100
	Not good	0	0
Total		100	100
On time	Good	100	100
	Not good	0	0
Total		100	100
Efficiency	Good	100	100
	Not good	0	0
Total		100	100
Justice	Good	100	100
	Not good	0	0
Total		100	100

Source: Primary Data, 2022

Table 3. Test of Model Goodness, Test of Model Significance, and Test of Coefficient of Determination

Test of Model Goodness	<i>Chi-Square</i>	<i>df</i>	<i>Sig.</i>
Pearson	442,075	490	0.941
Deviance	169,331	490	1.000
Test of Model Significance	<i>Chi-Square</i>	<i>-2 Log Likelihood</i>	<i>Sig.</i>
Intercept Only	218,429		
Final	181,278	37.151	0.000
Test of Coefficient of Determination	<i>Cox and Snell</i>	<i>Nagelkerke</i>	<i>McFadden</i>
	0.310	0.339	0.151

Source: Primary Data, 2022

Based on table 3, the results of the model fit test above show that the *Chi Square* value of the Pearson test is 442,075 with a *p-value* of 0.941. The Chi Square Deviance test value is 169,331 with a *p-value* of 1,000. So, the decision taken is to accept *H0* because the significance value is greater than 0.05. Thus, at the 95% confidence level, it can be said that the regression model used is suitable or feasible.

Based on the results in table 3 above, it is known that the chi square value is 37.151 and the *p-value* is 0. Then the decision taken is to reject *H0* and accept *H1* because the *p-value* < α . Thus, at the 95% confidence level, it can be said that the model with independent variables is better than the model without independent variables. In the data above, there is also a decrease in the value of *-2 Log Likelihood* from 218,429 to 181,278, indicating that the hypothesized model is fit by adding independent variables to the model to improve the fit of the model.

Table 3 above also shows the *Mc Fadden* coefficient of determination of 0.151, while the *Cox and Snell* coefficient of determination is 0.310 and *Nagelkerke's* coefficient of determination is 0.339 or 33.9%. The *Nagelkerke* coefficient of 33.9% means that the independent variable aspects of safety, effectiveness, patient-centered, timely, efficient, and fairness are able to influence the overall satisfaction assessment of the NHI participants by 33.9%.

Table 4. Wald Test

Variable	Wald	Df	Sig.
Safety	11.427	1	0.001
Effective	9.572	1	0.002
Patient-centered	5.905	1	0.015
On time	4.450	1	0.035
Efficient	1.199	1	0.274
Justice	1.814	1	0.178

Source: Primary Data, 2022

The results of the *Wald* parameter test in table 4 above explain that the safety variables, effective variables, patient-centered variables, and timely variables are variables that have a significant influence on patient satisfaction of the NHI participants at the Health Center because these variables have significant values (0.05), or in other words, reject *H0*, while for the efficiency variable and the justice variable, it can be said that they do not significantly affect the satisfaction of the NHI participant patients at the Health Center because they have a significance value > α (0.05).

Table 5. Parameter Estimation and Regression Model

Variable	Estimated Value
Threshold	
[Y = 16]	9.087
[Y = 17]	9.851
[Y = 18]	10.330
[Y = 20]	13.162
[Y = 21]	13.448
[Y = 22]	13.723
[Y = 23]	13.914
[Y = 24]	14.088
Location	
Safety (X1)	0.503
Effective (X2)	0.543
Patient-centered (X3)	-0.451
On time (X4)	0.212
Efficient (X5)	0.151
Justice (X6)	-0.293

From the output above, the following logistic regression equation is generated:

$$\text{Logit (Y}_i) = \text{estimated value}_i + 0,503X_1 + 0,543 X_2 - 0,451X_3 + 0,212 X_4 + 0,151 X_5 - 0,293X_6$$

Note: $i = 16, 17, 18, 19, 20, 21, 22, 23, 24$

If the ordinal logistic regression model has been tested and the model results are good and the significance is real, then the data can be interpreted using the *odds ratio* test. The following is the calculation and interpretation for the odds ratio value:

1. *Odds ratio* value for the safety variable (X_1): $\Psi = e^{0.503} = 1.65$. This can be interpreted as meaning that there is an increase in the tendency of 1.65 times for NHI participating patients to feel satisfied with services that prioritize safety compared to NHI participating patients who feel dissatisfied with services that prioritize safety at the Pakjo Health Center.
2. *Odds ratio* value for the effective variable (X_2): $\Psi = e^{0.543} = 1.72$. This can be interpreted as meaning that there is an increase in the tendency of 1.72 times for NHI participant patients to feel satisfied with effective service compared to NHI participant patients who feel dissatisfied with service, which is effective at the Pakjo Health Center.
3. *Odds ratio* value for patient-centered variables (X_3): $\Psi = e^{-0.451} = 0.63$. This can be interpreted as meaning that there is an increase in the tendency of 0.63 times for NHI participant patients to feel satisfied with patient-centered services compared to NHI participant patients who feel dissatisfied with patient-centered services in Pakjo Health Center.
4. *Odds ratio* value for the timely variable (X_4): $\Psi = e^{0.212} = 1.23$. This can be interpreted as meaning that there is an increase in the tendency of 1.23 times for NHI participant patients to feel satisfied with timely service compared to NHI participant patients who feel dissatisfied with timely service at Pakjo Health Center.
5. *Odds ratio* value for the efficient variable (X_5): $\Psi = e^{0.151} = 1.16$. This can be interpreted as meaning that there is an increase in the tendency of 1.16 times for NHI participant patients to feel satisfied with efficient service compared to NHI participant patients who feel dissatisfied with efficient service at the Pakjo Health Center.
6. *Odds ratio* value for the fairness variable (X_6): $\Psi = e^{-0.293} = 0.74$. This can be interpreted as meaning that there is an increase in the tendency of 0.74 times for NHI participant patients to feel satisfied with fair service compared to NHI participant patients who feel dissatisfied with fair service at the Pakjo Health Center.

Discussion

The results showed that out of 100 respondents, the age group that used the most services in the outpatient installation at the Health Center was the age group > 45 years, which was 50%, and the least was the 25-29 year age group, which was 5%. This is because the age structure > 45 years is an age period that requires more health services as a result of increasing age as patients tend to have different needs at each age level.

Older patients' age affects nurses in providing services. This is due to cultural values as parents are respected and given special rights by the younger generation so that it influences nurses to pay more attention to parents than young people.¹²

Apart from that, other research states that the older or older a person is, the more responsible and experienced he or she is in taking instructions and following procedures. The older a person is, the more mature his thoughts and actions become.¹³

The results showed that there were 27 male respondents (27%), while among the female the NHI participants there were 73 respondents (73%). Gender is an aspect that companies need to know when creating a product or service. The existence of gender differences will shape the behavior of consumers (patients) that are different. Perceptions and reactions to illnesses and disorders are influenced by gender, race, education, economic class, and cultural background.¹²

The frequency distribution of respondents is dominated by 34 female respondents (68.0%). Gender and gender have different meanings, where gender is the physiological and anatomical attributes that distinguish men and women, while gender is part of the social system, such as social status, age, and ethnicity. It is an important factor in determining roles, rights, responsibilities, and relationships between men and women. Appearance, attitude, personality, and responsibility are behaviors that will shape gender.¹⁴

The results showed that the respondents of the NHI participants with a high school education level used the most outpatient services at the Health Center, namely 41%, while junior high school education level was the lowest at 3%. A person's level of education will affect their lifestyle and mindset when considering something, including perceptions of service quality. Another estimate of a person's level of formal education is another estimate of the generally accepted social class position. So, the higher a person's education level, the more observant and intelligent consumers see the condition of the product or service being offered. Patients with a higher level of education can access information related to their care so that they can compare the treatment received with known information.¹²

From the results of the study, it was shown that the respondents of the NHI participants who had a job as housewives were the patients who used the most outpatient services at the Health Center, which was 33%, while student patients were the ones who used the least outpatient services at the Health Center, namely by 5%. This is because better employment status will affect

consumption patterns for health services. As stated by (Primaguna, 2018), A person's type of work will basically affect that person's economic status.¹⁵

Most of the respondents have the occupation of housewife, as many as 59 respondents (26.6%).¹⁶ Work is related to activities that are a source of income, which can describe a person's level of life and socio-economic conditions because it can affect some aspects of a person's life, including the demands of health care.¹⁷

The results of this study indicate that service safety significantly affects the satisfaction of the NHI participants at Health Center. This can be seen in the significant value of the *Wald* test that has been carried out, which is $0.001 < \alpha (0.05)$. In addition, based on the results of this study, it can be seen that as many as 100% of respondents have a perception that the safety of services at the Health Center is in good condition (*mean* value > 15), especially in the statement of service indicators in patient acceptance that can provide a sense of security, such as the availability of trolleys and wheelchairs, where 58% of respondents agreed.

Many factors cause the high number of Patient Safety Incidents (PSI) in health care facilities. In addition to causal factors, the impact of patient safety incidents also varies, one of which is a decrease in patient satisfaction, so that it affects the quality of the health service. Safe services can increase patient satisfaction so that it has a positive influence on the image of a health care facility.¹⁸ Different things were found in research in the United States, where patient safety indicators did not correlate with overall satisfaction. In this study, low mortality index was consistently found to be associated with high satisfaction.¹⁹

In the results of this study, it can also be seen that there are still 3% of respondents who stated that they quite agree and have complaints about services in the examination and maintenance rooms, such as that there are still slippery floors. Therefore, the person in charge of the room at the Health Center needs to improve monitoring and evaluation of the application of patient safety to all officers at the Health Center, especially the reassessment of fall-risk patients related to the application of patient safety goals in accordance with standard operating procedures. Fall prevention has a relationship with patient satisfaction, where this nursing service can provide a sense of security in the nursing environment. This is very important in providing welfare and survival.¹²

The results of this study indicate that service effectiveness significantly affects the satisfaction of the NHI participants at the Health Center. This can be seen in the significant value of the *Wald* test that has been carried out, which is $0.002 < \alpha (0.05)$. In addition, based on the results of this study, it can be seen that as many as 99% of respondents have a perception that the effectiveness of services at the Health Center is in good condition (*mean* value > 15), especially in the statement that medical personnel can accurately diagnose patients' illnesses and find solutions, which is strongly agreed by as many as 56% of respondents.

The results of this study are also supported by Milanda, Usman and Ukkas who, based on the results of statistical tests using chi-square, obtained p (value) = $0.04 < 0.05$, which indicates that there is an effect of service effectiveness.²⁰ Health services at the health center can be said to be effective if in the process of providing health services to the community it is in accordance with established health service standards and the services provided are sufficient in accordance with community expectations.

The results of this study are also in accordance with research conducted by Aisah, who found that service effectiveness is an aspect of service quality that affects patient satisfaction and has an impact on the desire to reuse services.²¹ However, in this study, it was found that in general, there were significant differences between the effectiveness and efficiency of the BPJS patient group and the general patient group. This means that BPJS services are less effective and efficient. In addition, due to the referral of health service institutions appointed by BPJS Health, it is also limited and inflexible. BPJS participants may only choose one health facility to obtain a referral and may not go to another health facility even though they are cooperating with BPJS²¹. The findings in this study are also contained in the findings of this study. BPJS patients can only choose one health facility according to their domicile, but if the patient meets the requirements, the health facility can be changed.

The findings in this study are supported by research Setyaningsih, which states that BPJS applies a service flow with a tiered referral system. So, before going to a hospital or specialist doctor, participants must first go to a level I health facility that has been appointed, namely a health center, family doctor, or clinic, to get a referral letter. In addition to the emergency department, participants cannot go directly to the hospital or a specialist doctor.²²

In the results of this study, it can also be seen that there are still 1% of respondents who disagree and have complaints about the service schedule that is not in accordance with the agreed rules, such as if patients who come after 1 pm will find it difficult to get services from doctors and services replaced by nurses and midwives who were in the room. Therefore, the Health Center needs to maximize the availability of existing doctors by implementing discipline for all doctors and providing punishment in the form of verbal or written warnings, as well as salary deductions for doctors who violate the provisions of the predetermined schedule (8am to 4pm), so that implementation of services can run smoothly and effectively. It was explained that a service can be categorized as effective if the community gets easy service with short, fast, precise, and satisfying procedures. The success of increasing service effectiveness is generally determined by a person's ability to factor in improving the work discipline of each service provider.

Patient-centered health care means providing care that respects and responds to the patient's desires, needs and values and ensures that these values are maintained throughout the service. Furthermore, health services strive to increase community accessibility.

The results of this study indicate that patient-centered services significantly affect the satisfaction of the NHI participants at the Health Center. This can be seen in the significant value of the *Wald* test that has been carried out, which is $0.015 < \alpha$ (0.05). In addition, based on the results of this study, it can be seen that as many as 100% of respondents have a perception that patient-centered services at the Health Center are in good condition (*mean* value > 15), especially in the statement that the health center environment is comfortable for patients and their families. which states strongly agree as many as 63% of respondents.

The results of this study are supported by the results of research from Aisha who found that patient-centered care is an aspect that must be prioritized in health services because it can increase patient satisfaction and, of course, affect the patient's psychology, so that when the patient or the patient's family is in need of health services in the future, they will again want to use health services.²¹

In the results of this study, it can be seen that there are still 3% of respondents who stated that they quite agree and have complaints against officers who are not friendly in answering patient questions.

Therefore, the management of the Health Center needs to propose holding training related to patient-centered care at the Health Office for health workers who deal directly with patients, such as doctors, nurses, and midwives, in order to improve communication between health workers and patients. To conduct training related to patient-centered care, the Health Center can submit an application to the Health Office for the Human Resources section, which will then be followed up by the Health Office. In the implementation of patient-centered care training, it can be more focused on the four core concepts in the PCC (Patient Centered Care) concept, namely dignity and respect, information sharing, participation, and collaboration. Patient centered care as a philosophy in providing medical services is an approach that can be done because in this approach there is a reciprocal relationship between service providers and patients so that it will minimize conflicts that have arisen as a result of lack of communication and information. Patient-centered care can also be applied in all stages of age and various backgrounds.²³

The results of this study indicate that timely service significantly affects the satisfaction of the NHI participants at the Health Center. This can be seen in the significant value of the *Wald* test that has been carried out, which is $0.035 < \alpha$ (0.05). In addition, based on the results of this study, it can be seen that as many as 100% of respondents have a perception that timely services at the Health Center are in good condition (*mean* value > 15), especially on the statement that officers act quickly in handling patient complaints, where the stated strongly agree with as many as 74% of respondents.

The results of this study are supported by research (Datuan, Darmawansyah and Daud, that of a total of 189 respondents who stated that the punctuality was good, and the results of statistical

tests using the chi-square test obtained a $p\text{-value} = 0.048$ because the $p\text{-value} < 0.05$ there is the effect of timeliness on patient satisfaction.¹⁶ Timeliness and speed of service provided by service providers can reflect work effectiveness. It also states that the service provided can be relied upon if it is in accordance with the wishes of the patient related to the speed of service time and accuracy in providing services, which will ultimately have an impact on achieving patient satisfaction.

In the results of this study, it can be seen that there are still 4% of respondents who state that they quite agree and have complaints about the waiting time for registration. When observing directly in the field, the service at the Health Center registration counter was good and regular; it's just that due to the large number of visitors every day, patients were required to wait for a predetermined queue.

Therefore, the Health Center still has to improve services at the registration counter in order to meet patient satisfaction by carrying out a time management method of patient waiting time at the registration counter using the new counter staff working mechanism. This method, namely the procedure for the officer at the counter, There are 3 people with a division of tasks: 1 person on duty at the counter, and the other 2 at the counter, to record patient data into the medical record and visit book. Meanwhile, one other person called the patient's queue number and looked for his medical record. The results of the study Oktaviani, also stated that there was a change in patient waiting time at the registration counter to be shorter after the implementation of time management, which was previously the average patient had to wait approximately 30 minutes to 15 minutes by changing service procedures or mechanisms. registrar's job.²⁴

The results showed that service efficiency did not significantly affect the satisfaction of the NHI participants at the Health Center. This can be seen in the significant value of the *Wald* test that has been carried out, which is $0.274 > \alpha (0.05)$. Based on the results of this study, it can also be seen that as many as 100% of respondents have a perception that the efficiency of services at the Health Center is in good condition (*mean* value > 15), especially in the statement that the officers provide treatment in accordance with the results of existing diagnostic examinations, with which as many as 57% of respondents agree.

The results of this study are supported by the results of research Batubara, which states that the efficiency level variable does not have a significant effect with $p\text{-value} = 0.236 > 0.05$ and the regression coefficient (β) is 0.623. In his research, it is said that the efficiency level has met the standard for as many as 68 respondents (78.2%). Efficiency is a measure of the level of use of resources in a process. The more efficient the use of resources, the more efficient the process is. An efficient process is characterized by process improvement so that it becomes cheaper and faster.²⁵

From the results of this study, it can be seen that there are still 8% of respondents who stated that they quite agree and have complaints about the equipment (buildings, medical devices,

medicines, etc). Researchers get an overview of the availability of medicines and medical devices from health workers, but researchers do not directly check and ensure that this is true, such as there are still medical devices that are not suitable for use and delays in the procurement of medicines. Therefore, the Health Center needs to ensure and evaluate medical devices and medicines that are sufficient and suitable for use by patients with observation guidelines. In addition, the Health Center needs to evaluate the parking space, especially for patients who use cars.

Public services are said to be excellent if the public service providers fix the tangibles, namely the physical building of the health center; inpatient rooms; outpatient rooms; doctors on duty; medicine; nurses; administrative staff; and locations. health centers that are easily accessible to the public. Tangibles are very important because the first thing the patient sees is whether there are buildings, doctors, medicines, nurses, officers, and the facilities and infrastructure they have. If all these components are not owned or partially fulfilled, then the service can be said to be of poor quality, which, of course, can lead to patient satisfaction not being realized.

The results of this study indicate that service fairness does not significantly affect the satisfaction of the NHI participants at the Health Center. This can be seen in the significant value of the *Wald* test that has been carried out, which is $0.178 > \alpha (0.05)$.

Based on the results of this study and based on interviews with several respondents, it can be seen that as many as 100% of respondents have a perception that the fairness of services at the Health Center is in good condition (*mean* value > 15), especially in the statement that each officer gives sufficient attention to the problems that arise, which stated that 55% of respondents strongly agree.

This is in line with the research results of Nepe's research. Respondents feel accepted and served well without seeing and distinguishing the economic background of the patient. They feel cared for and given support for the patient's condition.¹³ According to Santoso in Nurhaida and Sudirman, in his, the responsiveness of officers emphasizes attention and speed in dealing with requests, statements, complaints, and customer difficulties.¹⁴

Although the results of this study are not supported by research Reswari, which states that in addition to quality evaluation, fairness acts as a predictor in influencing satisfaction. Service justice is assumed to be a concept of equity in treating customers and triggering satisfaction. Service justice is divided into three dimensions in its measurement, namely interactional justice, procedural justice, and distributive justice. Interactional fairness related to the company's interpersonal skills can be measured through politeness, effort, respect, and empathy. Procedural fairness can be measured by experience of process, convenience, and responsibility. The value of distributive justice can be measured using economic indicators, wants, and needs.²⁶

In the results of this study, it can be seen that there are still 3% of respondents who state that they quite agree and have complaints against officers who have not treated patients fairly and

politely. Based on an interview with one of the patients, there are still officers who put their family or their closest friends first. Although not all officers do this, this can reduce patient satisfaction with health services at the Health Center, where health workers are required to work professionally and apply predetermined SOPs. Therefore, the Health Center needs to show appreciation to officers who have shown hard work to please patients, such as a salary increase based on outstanding patient service. This opinion is supported by the statement Handayani, in his research that there is a relationship between rewards and nurse performance. If management wants employees to provide good service, then officers must be properly rewarded.²³

Conclusion and Recommendation

Based on the results of research on the satisfaction of the NHI participants at the Health Center, it was concluded that as many as 100% of respondents have the perception that the quality of health services at the Health Center on the dimensions of safety, patient-centered, timely, efficient, and fair is in the good category, and 99% of respondents have the perception that the quality of health services at the Health Center on the dimension of effectiveness is in the good category. Respondents are satisfied with health services on the dimensions of safety, effectiveness, patient-centered, timely, efficient, and fair at the Health Center.

There is an effect of service safety on patient satisfaction of the NHI participants at the Health Center (*sig* 0.001 < 0.05). There is an effect of service effectiveness on patient satisfaction of the NHI participants at the Health Center (*sig* 0.002 < 0.05). There is an effect of patient-centered services on patient satisfaction of the NHI participants at the Health Center (*sig* 0.015 < 0.05). There is an effect of timely service on the satisfaction of the NHI participants at the Health Center (*sig* 0.035 < 0.05). There is no effect of service efficiency on patient satisfaction of the NHI participants at the Health Center (*sig* 0.274 > 0.05). There is no effect of service fairness on patient satisfaction of the NHI participants at the Health Center (*sig* 0.178 > 0.05). Therefore, it is hoped that the Health Center will improve monitoring and evaluation of the application of patient safety to all officers at the Health Center, especially the reassessment of patients at risk of falling related to the application of patient safety goals in accordance with standard operating procedures.

The Health Center is expected to be able to apply discipline to all doctors and provide punishment in the form of verbal or written warnings, as well as salary deductions for doctors who violate the provisions of the predetermined schedule. The management of the Health Center needs to propose holding training related to patient-centered care at the Health Office for health workers who deal directly with patients, such as doctors, nurses, and midwives. The Health Center still has to improve services at the registration counter by using a time management method of patient waiting time at the registration counter using the new counter staff working mechanism. It is hoped

that the Health Center will ensure and evaluate that medical devices, medicines, and parking spaces are available and adequate for use by patients with observation guidelines. The Health Center needs to show appreciation to officers who have shown hard work to please patients, such as a salary increase.

Author Contributions

Reviska Anghrama and Dian Safriantini designed and executed the experiments; Reviska Anghrama analyzed the data; Nurmalia Ermi and Siti Halimatul Munawarah contributed reagents, materials, and analysis tools; and Reviska Anghrama and Dian Safriantini wrote the paper.

Conflicts of Interest

The authors declare no conflict of interest. The founding sponsors had no role in the design of the study; in the collection, analysis, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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