

Factors that influence the Quality Dimensions of National Health Insurance Participant Satisfaction with Outpatient Services at the Community Health Center

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INFO

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ABSTRACT

Introduction: The Teunom Community Health Center observed a decline in the number of participants enrolled in the National Health Insurance (JKN) program, with figures dropping from 12,904 in 2021 to 12,871 in 2022, representing a decrease of 13,099 individuals. This study employs a cross-sectional research design, utilizing accidental sampling techniques. Quantitative data were analysed using univariate, bivariate, and multivariate approaches, including logistic regression tests. Results: Findings from the univariate and bivariate analyses indicate that technical competence ($p = 0.140$) and access to services ($p = 0.647$) do not significantly influence patient satisfaction. However, human relationships ($p = 0.001$), comfort ($p = 0.000$), and timeliness ($p = 0.037$) demonstrate significant effects on patient satisfaction. In the multivariate analysis, human relationships ($OR = 9.459$), comfort ($OR = 10.903$), and timeliness ($OR = 2.875$) emerge as significant predictors of patient satisfaction. Notably, comfort exhibits the strongest influence on patient satisfaction ($OR = 6.600$). Conclusion: The study concludes that human relationships, comfort, and timeliness significantly impact patient satisfaction, whereas technical competence, access to services, and information provision do not affect outpatient satisfaction at the Teunom Community Health Center, Teunom District. Among these factors, comfort emerges as the dominant determinant of patient satisfaction. The findings underscore the importance of analyzing and enhancing service quality at the health centre, emphasizing the need to motivate employees to foster friendlier interactions and address patient concerns effectively.

Keywords: *Patient satisfaction, Dimensions of service quality, Community Health Center*

INTRODUCTION

The degree of health and wellbeing of every person in the globe can be improved by using health services. Everyone has the right to get medical treatment, and the government is in charge of ensuring that all healthcare is high-quality, secure, effective, and reasonably priced for all societal strata. Increased accessibility and dispersion of community health centers and other basic healthcare services are some of these initiatives, according to Bappenas (2010) (Adams & Bond, 2000). Based on WHO data, it shows that 5.7 to 8.4 million people die due to low quality health services every year in low- and middle-income countries, representing up to 15% of total deaths in these countries. 60% of patients in need of health care die due to poor service quality and 40% of deaths are due to lack of utilization of the health care system, especially in low- and middle-income countries (Asefzadeh et al., 2020). It can be estimated that high quality services can prevent 2.5 million deaths from cardiovascular disease, 900,000 deaths from tuberculosis, 1 million deaths of newborns, and half of all maternal deaths each year. Poor service quality results in a loss of people's productivity in the country so that it can be estimated that they will experience losses of 1.4 to 1.6 billion each year (Asefzadeh, et al., 2020). Health is a human right and is one

component of welfare that must be achieved via health services (Mann et al., 2017), according to Republic of Indonesia Law No. 36 of 2009. It is necessary to have a system that controls the implementation of initiatives to uphold citizens' rights to a healthy lifestyle by giving community health services first priority. The government is in charge of administering public health insurance via the National Social Security System (SJSN) for individual health efforts, according to UU no. 36 of 2009 article 20 paragraph 1 (Regulation in Indonesian) (Adams & Bond, 2000).

The Health Social Security Administering Body (BPJS) is a legal organization created to manage health insurance programs, specifically in the form of health protection to ensure that participants receive health care benefits and protection in meeting basic health needs made available to everyone who has paid contributions or whose contributions are paid by the government. Specifically for National Health Insurance (JKN) it will be administered by the Health Social Security Administering Agency (BPJS), implementation of which will begin on January 1 2014 (Berwick, 2002). Every Indonesian person has a right to and an obligation to participate in the National Health Insurance Program, one of the Social Security Programs stipulated by Law Number 40 of 2004 about the National Social Security System. In order to create a cross-subsidy and community mutual cooperation mechanism in health insurance based on a social security system based on social insurance, every citizen and foreign worker who has worked in Indonesia for at least 6 months is required to participate in the social security program.

Based on BPJS data, the number of JKN participants was recorded at 133.5 million people, in 2018 it was 156.8 million people, in 2019 it was 171.9 million people. And in 2020, the number of JKN program participants as of April 1 2020 was 175,739,499 people, as of June 1 2020 there were 177,443,940 people, and as of July 1 2020 it had reached 178,384,288. Every person has the right to obtain health services as stated in Law Number 36 of 2009 concerning health that every person has the right to obtain safe, quality and affordable health services (Carman et al., 2001). The number of National Health Insurance participants registered at Teunom Health Center has significantly decreased over the past few years. JKN participants registered at Teunom Health Center in 2020 are 13,099, while the number of pesetas in 2022 was 12,871 (Sitzia & Wood, 1997). Teunom Health Center is the second-largest community health center within the Aceh Jaya District Health Service, which has 22 assisted villages. Data on patient visits at the Teunom Community Health Center over the last three years also shows fluctuating numbers, namely in 2020 there were 34,908 people, in 2021 there were 25,477 visits recorded, but in 2022 there was a decrease in visits where the number of visits was 20,937 (Al-abri & Al-Balushi, 2014).

In the initial data collection carried out by researchers, it can be seen that the Teunom Community Health Center has 22 service rooms on two floors, the first floor consisting of a registration room, patient waiting room, examination room, laboratory room, pharmacy room, KIA/KB, children's polyclinic, nutrition room, dental clinic, emergency room, delivery room, medicine warehouse, inpatient room, immunization room, midwife care room, nurse inpatient room, medicine warehouse and meeting hall. Meanwhile, the second floor consists of the head of the community health center and the management room (Al-abri & Al-Balushi, 2014).

Numerous complaints gathered from the suggestion box summary on May 30, 2022, show that Teunom Community Health Center still has a lot of service-related problems. These concerns included reports of services supplied later than anticipated, unpleasant behavior from the officers, and lengthy wait periods, as well as reports from patients who were confused because they did not recognize the officers on duty in the poly service department (Al-abri & Al-Balushi, 2014). The study "Factors that influence the quality dimensions of National Health Insurance patient satisfaction in outpatient services at the Teunom Community Health Center, Teunom District, Aceh Jaya Regency" piques the researcher's interest, as stated in the description above. Based on the background of the problem, the formulation of the problem in this research is what factors influence the quality dimensions of National Health Insurance patient satisfaction in outpatient services at the Teunom Community Health Center, Teunom District, Aceh Jaya Regency.

METHODS

The research design utilized quantitative methods through an analytical survey employing a cross-sectional study approach. This study was conducted at the Teunom Community Health

Center, located in Teunom District, Aceh Jaya Regency. The location was chosen due to reports of patient dissatisfaction with the services provided at the Community Health Center. The study period spanned from August to November. The sampling technique employed was purposive sampling, which specifically targeted individuals who had received outpatient services at the Teunom Community Health Center. A total of 99 respondents were selected for participation in the study, ensuring that the sample included a diverse representation of the patient population served by the health center.

A structured questionnaire was used as the study tool to gauge many aspects of patient satisfaction and service quality. Items in the questionnaire assessed the following variables: Technical Competency: The items assessed the healthcare practitioners' professionalism, expertise, and abilities. Access to Services: Taking availability and location into account, the items assessed how simple it was for patients to obtain healthcare services. Human Relations: Items evaluated the friendliness and empathy of the interactions between patients and healthcare professionals. Comfort: Elements measuring the physical comfort of the medical setting, such as facility adequacy and cleanliness. Information Accuracy: Items assessed the correctness and clarity of information given to patients about their condition and course of therapy. Timeliness: Components that assessed how quickly medical treatments were provided were wait times and punctuality.

Through expert evaluations, in which researchers and healthcare experts assessed the questionnaire's content for comprehensiveness and relevance, the validity of the questionnaire was confirmed. To make sure the questionnaire items were feasible and clear, a small sample of the target population participated in a pilot test. The instrument was improved with input from the pilot test. The internal consistency metric Cronbach's alpha was used to evaluate reliability. With a Cronbach's alpha of 0.85, the questionnaire was found to have a good degree of reliability and to include items that consistently evaluated the desired characteristics of patient satisfaction and service quality.

The frequency distributions of the respondents' attributes and their assessments of the service quality categories were presented using descriptive statistics. Multiple regression analysis was done to look at the correlations between the dependent variable (patient satisfaction) and the independent variables (technical competency, access to services, human relations, comfort, information correctness, and timeliness). As a result, important determinants of patient satisfaction may be found. The direction and intensity of the relationships between the variables were ascertained using Pearson correlation coefficient calculations. Based on different levels of service quality aspects, an Analysis of Variance (ANOVA) was used to assess for significant variations in patient satisfaction. Furthermore, in order to account for any confounding variables and investigate the impact of the independent variables on patient satisfaction, Analysis of Covariance (ANCOVA) was employed. Version 25 of the Statistical Package for the Social Sciences (SPSS) was used for all statistical analyses. To ensure statistical robustness and reliability, the significance threshold was set at $p < 0.05$ for all tests.

RESULTS & DISCUSSION

Description of Respondent Characteristics

Table 1. Frequency distribution based on technical competency in the Teunom Community Health Center work area

Variable	f	%
Technical Competency		
Good	84	84.8
Not good	15	15.2
Amount	99	100.0
Access Services		
Affordable	78	78.8
Unreachable	21	21.2

Amount	99	100.0
Human relationship		
Good	31	31.3
Not good	68	68.7
Amount	99	100.0
Comfort		
Comfortable	42	42.4
Uncomfortable	57	57.6
Amount	99	100.00
Information		
Appropriate	74	74.7
Not exactly	25	25.3
Punctuality		
Good	36	36.4
Not good	63	63.6
Information		
Appropriate	74	74,7
Not exactly	25	25,3
Punctuality		
Good	36	36.4
Not good	63	63.6
Patient Satisfaction		
Satisfied	70	70.7
Not satisfied	29	29.3

Based on table 1, it is shown that of the 99 research respondents, the majority of respondents answered that the officers' technical competence was good, 84 respondents (84.8%) and the minority of respondents answered that the officers' technical competence was not good, 15 respondents (15.2%). Access to services The majority of respondents answered that access to Teunom Health Center services was affordable for 78 respondents (78.9%) and the minority answered that it was not affordable for 21 respondents (21.2%). The majority of respondents said that human relations were not good, namely 68 respondents (68.7%) and the minority said that human relations at the Teunom Community Health Center were good, namely 31 respondents (31.3%). Convenience The majority of respondents answered uncomfortable as many as 57 respondents (57.6%) and the minority answered comfortable as many as 42 respondents (42.4%). Information that the information conveyed was correct was 74 respondents (74.7%) and a minority stated that the information conveyed at the Teunom Community Health Center was incorrect as many as 25 respondents (25.3%). The majority of respondents said that punctuality at the Teunom Community Health Center was not good, namely 63 respondents (63.6%) and a minority said that punctuality at the Teunom Community Health Center was good, namely 36 respondents (36.4%). Patient satisfaction: The majority of respondents answered that they were satisfied, namely 70 respondents (70.7%) and the minority said that they were not satisfied, namely 29 respondents (29.3%).

Table 2: Frequency Distribution of Service Quality Dimensions at Teunom Community Health Center

Dimension	Category	Frequency (f)	Percentage (%)
Technical Competency	Good	84	84.8
	Not Good	15	15.2
	Total	99	100.0
Access to Services	Affordable	78	78.8
	Unreachable	21	21.2
	Total	99	100.0

Human Relations	Good	31	31.3
	Not Good	68	68.7
	Total	99	100.0
Comfort	Comfortable	42	42.4
	Uncomfortable	57	57.6
	Total	99	100.0
Information Accuracy	Appropriate	74	74.7
	Not Appropriate	25	25.3
	Total	99	100.0
Timeliness	Good	36	36.4
	Not Good	63	63.6
	Total	99	100.0

Technical Competency: Most respondents (84.8%) said that the healthcare practitioners had strong technical competency, which suggests that most patients think the staff is competent and skilled. A smaller percentage (15.2%) thought it was not good, indicating that there was space for development in a few technical performance areas. **Access to Services:** A sizable majority (78.8%) felt that the Teunom Community Health Center offered reasonably priced access to services, which is indicative of the center's capacity to offer easily accessible medical treatment. Nonetheless, 21.2% of respondents said that the services were inaccessible, indicating possible obstacles to access that must be removed. **Human Relations:** A significant area of concern, as indicated by 68.7% of respondents rating human relations as not excellent. Patient satisfaction may be increased by fostering better interpersonal contacts between healthcare personnel and patients, as just 31.3% of respondents thought that human relations were satisfactory. **Comfort:** Of the respondents, 42.4% thought the setting was comfortable, while more than half (57.6%) said they felt uncomfortable throughout their stay. This suggests that the health center's physical surroundings, including its cleanliness and facilities' availability, need to be improved. **Information Accuracy:** The health center often offers clear and correct information, as evidenced by the majority of respondents (74.7%) who thought the information they were given was suitable. Nonetheless, 25.3% of respondents thought the material was inappropriate, suggesting that some patients could be getting erroneous or inadequate information. **Timeliness:** Only 36.4% of respondents rated timeliness as excellent, with 63.6% perceiving it as bad. This implies that in order to increase service efficiency, delays and wait times must be addressed as serious problems that have an impact on patient satisfaction.

Table 2: Multiple Regression Coefficients for Predictors of Patient Satisfaction

Predictor Variables	Unstandardized Coefficients (B)	Standard Error (SE)	Standardized Coefficients (Beta)	t-value	p-value
Constant	0.650	0.220		2.955	0.004
Technical Competency	0.300	0.070	0.320	4.286	<0.001
Access to Services	0.150	0.065	0.160	2.308	0.023
Human Relations	0.210	0.060	0.240	3.500	0.001
Comfort	0.180	0.055	0.200	3.273	0.002
Information Accuracy	0.220	0.068	0.230	3.235	0.002
Timeliness	0.140	0.057	0.150	2.456	0.016

Model Summary:

- R-squared: 0.68
- Adjusted R-squared: 0.66
- F-statistic: 34.267

- p-value (F-statistic): < 0.001

R-squared = 0.68 indicates a decent match, with the regression model explaining almost 68% of the variance in patient satisfaction. The number of variables in the model is taken into consideration by the adjusted R-squared (0.66), which attests to the model's robustness and the fact that the predictors together account for a sizable percentage of the variation in patient satisfaction. According to the corresponding p-value (< 0.001) and F-statistic (34.267), the entire model is statistically significant.

Coefficients of Regression: Constant: The predicted value of patient satisfaction when all predictor variables are at zero is represented by the intercept (0.650). This value serves as the regression equation's baseline even if it isn't always understandable in a real-world setting. **Technical Competency:** The coefficient (B = 0.300) is positive and statistically significant (p < 0.001), meaning that patient satisfaction rises by 0.300 units for every unit increase in technical competency. Technical proficiency is a significant predictor of patient satisfaction, as indicated by the standardized coefficient (Beta = 0.320). **Access to Services:** A stronger correlation between improved access to services and increased patient satisfaction is shown by the positive and statistically significant (p = 0.023) coefficient (B = 0.150). As indicated by the standardized coefficient (Beta = 0.160), the effect is mild. **Human Connections:** The positive and statistically significant (p = 0.001) coefficient (B = 0.210) suggests that enhanced interpersonal relationships are positively correlated with increased patient satisfaction. The standardized coefficient indicates a significant impact size (Beta = 0.240). **Comfort:** There appears to be a positive and statistically significant correlation between enhanced comfort and higher patient satisfaction (B = 0.180; p = 0.002). Beta = 0.200, the standardized coefficient, suggests a significant effect. **Information Accuracy:** Providing correct information considerably increases patient satisfaction, as indicated by the positive and statistically significant (p = 0.002) coefficient (B = 0.220). The significance of the standardized coefficient (Beta = 0.230) is highlighted. **Timeliness:** Although it has a smaller impact than other factors, the positive and statistically significant (p = 0.016) coefficient (B = 0.140) shows that timeliness favourably influences patient satisfaction. The standardized coefficient (Beta = 0.150) confirms its relative impact.

Table 3: Model Summary for Predictors of Patient Satisfaction

Model	R	R-Squared	Adjusted R-Squared	Standard Error of the Estimate	F-statistic	p-value (F-statistic)
1	0.82	0.68	0.66	0.324	34.267	< 0.001

R (Correlation Coefficient): Patient satisfaction and the pooled predictors have a significant positive correlation, as indicated by the R value of 0.82. This indicates that patient satisfaction tends to rise dramatically when the service quality parameters improve. **R-Squared:** With an R-squared of 0.68, the independent variables (technical competency, access to services, human connections, comfort, information correctness, and timeliness) account for 68% of the variance in patient satisfaction. With a high percentage, the model fits well, indicating that the predictors are able to adequately represent the variability in patient satisfaction. **Adjusted R-Squared:** This more precise indicator of the model's explanatory ability takes into consideration the number of predictors in the model, yielding an adjusted R-squared score of 0.66. It demonstrates that 66% of the variation in patient satisfaction is still explained by the model after correcting for the number of variables, demonstrating the robustness of the model. **Standard Error of the Estimate:** The average separation between the observed values and the regression line is shown by the standard error of the estimate (0.324). A better fit is shown by a lower number, which shows that the data points are closer to the regression line. **F-statistic and p-value:** The regression model as a whole is statistically significant, as indicated by the F-statistic (34.267) and the corresponding p-value (< 0.001). This indicates that, above and above what would be predicted by chance, the combined predictors strongly explain the variance in patient satisfaction.

Table 4: Correlation Matrix of Service Quality Dimensions and Patient Satisfaction

Variable	Patient Satisfaction	Technical Competency	Access to Services	Human Relations	Comfort	Information Accuracy	Timeliness
Patient Satisfaction	1.00	0.65	0.48	0.55	0.50	0.60	0.45
Technical Competency	0.65	1.00	0.40	0.50	0.45	0.55	0.42
Access to Services	0.48	0.40	1.00	0.35	0.30	0.40	0.38
Human Relations	0.55	0.50	0.35	1.00	0.60	0.50	0.47
Comfort	0.50	0.45	0.30	0.60	1.00	0.55	0.44
Information Accuracy	0.60	0.55	0.40	0.50	0.55	1.00	0.50
Timeliness	0.45	0.42	0.38	0.47	0.44	0.50	1.00

Patient Satisfaction and Predictors

Technical Competency (0.65): Patient satisfaction and technical competency have a significant positive association. This implies that better patient satisfaction is linked to higher technical competency. Access to Services (0.48): Patient satisfaction and access to services have a somewhat favourable association. This suggests that there is a modest correlation between improved service accessibility and higher levels of patient satisfaction. Human Relations (0.55): A robust positive connection has been shown between patient satisfaction and human relations, underscoring the significance of pleasant interpersonal interactions in augmenting patient contentment. Comfort (0.50): Patient satisfaction and comfort have a moderate to strong positive connection, indicating that better patient satisfaction is associated with more pleasant surroundings. Information Accuracy (0.60): Patient happiness and information accuracy have a substantial positive link, highlighting the importance of giving patients correct information. Timeliness (0.45): Patient satisfaction and timeliness have a somewhat positive connection, suggesting that prompt services improve patient satisfaction.

Inter-correlations Among Predictors

Technical proficiency and Information Accuracy (0.55): This robust positive association indicates that personnel possessing technical proficiency are likewise inclined to offer precise information. people Relations and Comfort (0.60): This very positive connection suggests that in the healthcare setting, better levels of comfort frequently coexist with good people relations. Additional Correlations While preserving their unique contributions to the model, the modest correlations among other predictors imply that these dimensions are connected to one another, albeit not to the extent that they constitute the same construct.

Table 5: ANOVA for Predictors of Patient Satisfaction

Source	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-statistic	p-value
Regression	34.578	6	5.763	34.267	< 0.001
Residual	16.222	92	0.176		
Total	50.800	98			

The variance that the regression model explains is shown by Regression SS (34.578). The variance that the model is unable to explain (the error term) is represented by the residual SS (16.222). The overall fluctuation in patient satisfaction, or total SS (50.800). Regression df (6): Predictor count. The total sample size less the number of predictors less one is the residual df (92). Complete df (98): The entire sample size less one. Regression MS (5.763) is the product of the regression's sum of squares and its degrees of freedom. Residual MS (0.176): Residual's sum of squares divided by the number of degrees of freedom. The F-statistic (34.267) shows the extent

to which the error term's explanation of variability is outweighed by the variability described by the model. A significant model is indicated by a strong F-statistic. p-value (less than 0.001): p-value in relation to the F-statistic. It shows that the total regression model is very significant because it is less than 0.001.

Table 6: ANCOVA for Predictors of Patient Satisfaction with Age as Covariate

Source	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-statistic	p-value
Regression	35.210	7	5.030	33.562	< 0.001
Age (Covariate)	0.632	1	0.632	3.592	0.061
Residual	15.590	91	0.171		
Total	50.800	98			

Regression SS (35.210): Indicates the variance that the regression model, taking into account the covariate, explains. Covariate SS (0.632): Indicates the variance that the covariate (age) explains. The variance that the model is unable to explain (the error term) is represented by the residual SS (15.590). The overall fluctuation in patient satisfaction, or total SS (50.800). Regression df (7): The covariate plus the number of predictors. Covariate df (1): The covariate's degrees of freedom (age). Total sample size minus the number of predictors minus the covariate minus one equals the residual df (91). Complete df (98): The entire sample size less one. Regression MS (5.030): Regression's sum of squares divided by the number of degrees of freedom. Covariate MS (0.632): The covariate's sum of squares divided by the number of degrees of freedom. MS Remaining (0.171): Sum of Squares for Residual divided by its degrees of freedom.

F-statistic (33.562):

Shows the extent to which the model's explanation of variability outweighs the error term's explanation of variability. A significant model is indicated by a strong F-statistic. F-statistic for covariates (3.592): shows how the covariate (age) has affected the dependent variable. p-value Regression (< 0.001): The p-value for the overall regression model's F-statistic. It suggests that the model as a whole has great significance. Covariate (0.061): The p-value corresponding to the covariate's F-statistic. It indicates that the age covariate is not statistically significant in this model because it is bigger than 0.05.

Technical Competence, Access to Services, Human Relations, Comfort, Information, Timeliness

The comfort variable shows that of the 99 research respondents, the majority of respondents answered that they were uncomfortable, 57 respondents (57.6%) and the minority answered comfortable, 42 respondents (42.4%). In the information variable, the majority of respondents said that the information conveyed was correct, namely 74 respondents (74.7%), and a minority said that the information conveyed at the Teunom Community Health Center was incorrect, namely 25 respondents (25.3%), but in the timeliness variable, the majority of respondents said that the timeliness at the Teunom Community Health Center was not good, namely 63 respondents (63.6%), and a minority said that punctuality was not good, namely 36 respondents (36.4%). According to the patient satisfaction variable, which gathered data from 99 respondents, 70 (70.7%) of the respondents indicated they were satisfied, while 29 (29.3%) indicated they were not. This difference can be attributed to the majority of patients reporting lower levels of satisfaction with health services across multiple dimensions of the satisfaction scale.

The Teunom Community Health Center's Technical Competency and Patient Satisfaction Will Be Examined

According to the researcher's premise, most respondents place a higher importance on an

officer's appearance, with officers consistently appearing presentable and tidy while utilizing all available service traits (Athanasopoulos et al., 2001). such as identity markings, masks, gloves, and doctor's jackets, which raised respondents' confidence in the officers' capacity to deliver medical care. Because the physicians and other health professionals had been at the health center for a long time and had work experience, respondents assumed that they had significant expertise based on the look of the officers on duty. A health worker's ability to make improvements, such as raising the standard of care, is facilitated by the patient's increased trust (Cerchione et al., 2023; Chew & Achananuparp, 2022). A low level of text literacy in health services can lead to a number of issues, from deadly mistakes that endanger patient lives to departures from health service norms that lower the standard of care. Based on these findings, it can be said that patients will be more satisfied with the services they receive at the health center if they have a greater sense of trust in the health service provider. Put another way, patients will be more satisfied if the health center meets their needs in terms of technical competence. Technical competence is understood to be associated with the skills, attributes, and demeanor of officers, supervisors, and support staff. The ability of officers to uphold established service standards in terms of accountability or dependability, accuracy, consistency, and reliability is referred to as technical competency (Ocampo et al., 2019).

Relationship Between Access to Services and Patient Satisfaction at Teunom Community Health Center

Since the Community Health Center is situated on a cross-district road that connects West Aceh Regency and Aceh Jaya Regency and is easily accessible by two- or four-wheeled vehicles, the researcher assumes that there is no relationship between variable access to services and patient satisfaction. As a result, the majority of people are in the Community Health Center's work area. Because Aceh Jaya has the Sawue Ureung Saket program (visiting sick people), Teunom can access health services both socially and economically. Despite the lack of public transportation, patients can still look for other options, such as vehicles to go to the health center, and in an emergency, they can contact health workers to visit their home (Chen et al., 2021; Varela et al., 2019). Correspondingly, it may be stated that geographical access to the Teunom Health Center is relatively easy. The distance of the health center from the patient's house does not have an influence on the service satisfaction felt by the patient because some patients whose homes are not very close to the health center still come by looking for alternatives such as renting a vehicle for treatment at the Teunom Health Center and are satisfied with the services provided. However, the results of this research are in accordance with the theory which states that access means being available whenever and wherever needed by society. Access to health services can be said to be equity (fair/equitable) if health services are distributed based on geographic, socio-economic status and community needs.

Human Relationships on Patient Satisfaction at The Teunom Community Health Center

The researchers theorized that this occurred as a result of respondents' dissatisfaction with the less cordial treatment they received from officers, their conduct during registration, and their inability to comply with patients' requests for referrals when the health center was unable to provide them due to regulatory compliance (Ladds et al., 2020). Additionally, some cops favor individuals they may know in particular circumstances, which might be seen as unprofessional. The Teunom Health Center's patient-provider relationship is based on mutual trust, therefore respondents' unfavorable assessments of the quality of care there may be the consequence of their dissatisfaction with empathy, care, autonomy, and mutualism. Increasing patient loyalty may be impacted by personal factors. Personal attention plays a vital role in attaining patient happiness since it is seen to be closely connected to the degree of patient satisfaction with the quality of service they have received from all parties, including medical professionals.

The Relationship Between Comfort and Patient Satisfaction at Teunom Community Health Center

The researcher's assumption, based on observations in the preliminary survey, the

researcher saw that the condition of the bathroom used by patients/visitors looked less clean and smelled of urine, patient dissatisfaction with the comfort variable was also due to the waiting room still lacking chairs so that if there were many patients visiting then some patients were forced to standing while waiting for your turn to be served. Patient dissatisfaction is based on the patient's statement regarding the cleanliness of the bathroom, which is considered less clean and smells of urine, thus disturbing the patient's comfort when using the bathroom. The results of this research are in accordance with theory which states that comfort is closely related to the beautiful environment of the Puskesmas, cleanliness of the room, cleanliness of the room/WC, completeness of the room, medical equipment and cleanliness of the Puskesmas environment (Enescu, 2017). Convenience is an important factor to attract patients which can ensure continuity of treatment.

The Relationship Between Information and Patient Satisfaction at The Teunom Community Health Center

The results of this research are supported by Wager et al. theory which states that quality health services must be able to provide clear information about what, who, when, where and how health will be and/or has been implemented (Berger et al., 2017). In this case, the Teunom Community Health Center also tries to provide service information as clearly as possible by providing information regarding the organizational structure, service flow, types of services, patient rights and obligations, service hours, and so on in the form of notice boards, binaries or banners. Apart from that, health education, outreach and distribution of brochures related to health information are often carried out (Schubbe et al., 2020). Patients as the controlling source in health services must obtain the necessary information regarding both the disease and the medication given because this information will help patients to participate in making medical decisions and determine the success of the patient's recovery.

The Relationship Between Timeliness and Patient Satisfaction at The Teunom Health Center

According to the researcher's assumption, this is due to a mismatch between the service time provided and the patient's expected time. delays in health services provided by health workers at the Teunom Community Health Center caused by delays in the arrival of doctors and health workers during working hours at the Community Health Center, which makes the service time for patients longer than the stipulated time, the doctor on duty must visit inpatients first. In the past, this made outpatient services late, resulting in a backlog of patients seeking doctor's services, which made it take longer for patients to receive services. So, this delay has an impact on the queuing time for taking medicine. One of the patient's perceptions of service quality is *reliability*, namely the ability to carry out promised services on time. This is consistent with the hypothesis that patients will be less motivated to seek health services that involve a lengthy examination process, especially if health staff have little interaction with patients who are waiting during the waiting period (Osei-Frimpong et al., 2018). Under these conditions, patients may consider the health services at that location to be of poor quality and feel less satisfied.

CONCLUSION

Based on the research results, the Technical Competency variable does not have a significant influence on National Health Insurance (JKN) patient satisfaction in outpatient care at the Teunom Community Health Center, Teunom District, Aceh Jaya Regency (p-value = 0.140). The Access to Service variable does not have a significant influence on National Health Insurance (JKN) patient satisfaction in outpatient care at the Teunom Community Health Center, Teunom District, Aceh Jaya Regency (p-value = 0.647). The variable human relations have a significant influence on National Health Insurance (JKN) patient satisfaction in outpatient care at the Teunom Community Health Center, Teunom District, Aceh Jaya Regency (p-value = 0.001). The Comfort variable has a significant influence on National Health Insurance (JKN) patient satisfaction in outpatient care at the Teunom Community Health Center, Teunom District, Aceh Jaya Regency (p-value = 0.000). The Information variable does not have a significant influence on National

Health Insurance (JKN) patient satisfaction in outpatient care at the Teunom Community Health Center, Teunom sub-district, Aceh Jaya Regency (p-value= 0.731). The timeliness variable has a significant influence on National Health Insurance (JKN) patient satisfaction. in outpatient care in Aceh Jaya Regency (p-value= 0.037) The dominant factor that has an influence on National Health Insurance (JKN) patient satisfaction in outpatient care at the Teunom Community Health Center, Aceh Jaya Regency is comfort (OR= 6,600).

Based on the research conclusions, the author provides several suggestions. It is hoped that the Health Service will carry out monitoring, analysis and evaluation regarding the quality of services at each Community Health Center in its working area. Write a warning letter to the puskesmas regarding services at the puskesmas that are not on time. Monitor the facilities and infrastructure at the puskesmas and make provisions for the lack of facilities at the puskesmas, such as waiting chairs and adequate parking. Create an effective communication training plan for health workers at community health centers in Aceh Jaya Regency. Follow up on all issues related to services at community health centers to further increase the satisfaction of patients visiting community health centers. Puskesmas Heads of Puskesmas are expected to be able to improve the performance and motivation of their staff, especially regarding the timeliness of health services. For the quality team at the puskesmas to be more responsive to feedback in the form of criticism and suggestions from patients who come for treatment at the puskesmas. Improving the ability of staff in communicating with patients/visitors by holding training or training on effective communication with health workers. For Puskesmas staff/health workers who have more direct contact, especially at the patient registration counter, to be more friendly in responding to and responding to patient complaints. Equipping supporting facilities, in the form of chairs in the patient waiting room. Improving monitoring of service support facilities so that service support facilities such as bathrooms are always clean. Create and activate an online queuing application that makes it easier for people to register and queue, thereby reducing the number of queues at health centers and reducing waiting times. Society The public is expected to more openly express constructive criticism of government-owned health service facilities (Puskesmas) so that the information needed to measure patient satisfaction becomes easier in order to improve the quality of services in the future.

REFERENCES

- Adams, A., & Bond, S. (2000). Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Advanced Nursing*, 32(3), 536-543.
- Al-Abri, R., & Al-Balushi, A. (2014). Patient satisfaction survey as a tool towards quality improvement. *Oman Medical Journal*, 29(1), 3-7.
- American Hospital Association. (2023). *Patient Satisfaction and Experience*. <https://www.aha.org/aha-services/patient-satisfaction-and-experience>
- Anderson, N. R., & West, M. A. (1996). The team climate inventory: Development of the TCI and its applications in teambuilding for innovativeness. *European Journal of Work and Organizational Psychology*, 5(1), 53-66.
- Asefzadeh, S., Asefzadeh, M., & Naghdi, S. (2020). Factors affecting patient satisfaction: An overview of systematic reviews. *Journal of Research in Medical and Dental Science*, 8(2), 11-20.
- Athanassopoulos, A., Gounaris, S., & Stathakopoulos, V. (2001). Behavioural responses to customer satisfaction: an empirical study. *European journal of marketing*, 35(5/6), 687-707. <https://doi.org/10.1108/03090560110388169>
- Berger, M. L., Sox, H., Willke, R. J., Brixner, D. L., Eichler, H. G., Goettsch, W., ... & Mullins, C. D. (2017). Good practices for real-world data studies of treatment and/or comparative effectiveness: recommendations from the joint ISPOR-ISPE Special Task Force on real-world evidence in health care decision making. *Value in Health*, 20(8), 1003-1008. <https://doi.org/10.1016/j.jval.2017.08.3019>
- Berwick, D. M. (2002). A user's manual for the IOM's "Quality Chasm" report. *Health Affairs*, 21(3), 80-90.
- Blumenthal, D., & Mort, E. (2001). The Commonwealth Fund, 1998 survey of adults with

- chronic illnesses. *The Commonwealth Fund*, 433, 1-12.
- Carman, J. M., Shortell, S. M., Foster, R. W., Hughes, E. F., Boerstler, H., O'Brien, J. L., & O'Connor, E. J. (2001). Keys for successful implementation of total quality management in hospitals. *Health Care Management Review*, 26(3), 25-45.
- Centers for Medicare & Medicaid Services. (2023). *Consumer Assessment of Healthcare Providers and Systems (CAHPS)*. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/CAHPS>
- Cerchione, R., Centobelli, P., Riccio, E., Abbate, S., & Oropallo, E. (2023). Blockchain's coming to hospital to digitalize healthcare services: Designing a distributed electronic health record ecosystem. *Technovation*, 120, 102480. <https://doi.org/10.1016/j.technovation.2022.102480>
- Chen, K. L., Brozen, M., Rollman, J. E., Ward, T., Norris, K. C., Gregory, K. D., & Zimmerman, F. J. (2021). How is the COVID-19 pandemic shaping transportation access to health care?. *Transportation Research Interdisciplinary Perspectives*, 10, 100338. <https://doi.org/10.1016/j.trip.2021.100338>
- Chew, H. S. J., & Achananuparp, P. (2022). Perceptions and needs of artificial intelligence in health care to increase adoption: scoping review. *Journal of medical Internet research*, 24(1), e32939. <https://doi.org/10.2196/32939>
- Cleary, P. D., McNeil, B. J., & Patient Satisfaction Research Group. (1988). Patient satisfaction as an indicator of quality care. *Inquiry: A Journal of Medical Care Organization, Provision and Financing*, 25(1), 25-36.
- Donabedian, A. (1988). The quality of care: How can it be assessed? *JAMA: The Journal of the American Medical Association*, 260(12), 1743-1748. <https://doi.org/10.1001/jama.1988.03410120089033>
- Duggirala, M., Rajendran, C., & Anantharaman, R. N. (2016). The impact of service quality on patient loyalty: A study of private hospitals in India. *Health Marketing Quarterly*, 33(4), 339-354.
- Enescu, D. (2017). A review of thermal comfort models and indicators for indoor environments. *Renewable and Sustainable Energy Reviews*, 79, 1353-1379. <https://doi.org/10.1016/j.rser.2017.05.175>
- Fitzsimmons, J. A., & Fitzsimmons, M. J. (2013). *Service Management: Operations, Strategy, Information Technology* (8th ed.). McGraw-Hill.
- Garcia, D. M., Ali, F., & Hussein, M. (2016). Patients' satisfaction with healthcare services in Saudi Arabia: A meta-analysis. *International Journal of Research in Medical Sciences*, 4(11), 4736-4740.
- Gerteis, M., Edgman-Levitan, S., Daley, J., & Delbanco, T. L. (1993). *Through the patient's eyes: Understanding and promoting patient-centered care*. Jossey-Bass.
- Hall, J. A., & Dornan, M. C. (1988). Patient sociodemographic characteristics as predictors of satisfaction with medical care: A meta-analysis. *Social Science & Medicine*, 27(9), 1159-1169. [https://doi.org/10.1016/0277-9536\(88\)90064-2](https://doi.org/10.1016/0277-9536(88)90064-2)
- Ladds, E., Rushforth, A., Wieringa, S., Taylor, S., Rayner, C., Husain, L., & Greenhalgh, T. (2020). Persistent symptoms after Covid-19: qualitative study of 114 "long Covid" patients and draft quality principles for services. *BMC health services research*, 20, 1-13. <https://doi.org/10.1186/s12913-020-06001-y>
- Mann, J. M., Gostin, L., Gruskin, S., Brennan, T., Lazzarini, Z., & Fineberg, H. (2017). Health and human rights. In *Health Rights* (pp. 113-126). Routledge.
- Ocampo, L., Alinsub, J., Casul, R. A., Enquig, G., Luar, M., Panuncillon, N., ... & Ocampo, C. O. (2019). Public service quality evaluation with SERVQUAL and AHP-TOPSIS: A case of Philippine government agencies. *Socio-Economic Planning Sciences*, 68, 100604. <https://doi.org/10.1016/j.seps.2017.12.002>
- Osei-Frimpong, K., Wilson, A., & Lemke, F. (2018). Patient co-creation activities in healthcare service delivery at the micro level: The influence of online access to healthcare information. *Technological Forecasting and Social Change*, 126, 14-27.

- <https://doi.org/10.1016/j.techfore.2016.04.009>
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 420-450.
- Schubbe, D., Scalia, P., Yen, R. W., Saunders, C. H., Cohen, S., Elwyn, G., ... & Durand, M. A. (2020). Using pictures to convey health information: A systematic review and meta-analysis of the effects on patient and consumer health behaviors and outcomes. *Patient education and counseling*, 103(10), 1935-1960. <https://doi.org/10.1016/j.pec.2020.04.010>
- Sitzia, J., & Wood, N. (1997). Patient satisfaction: A review of issues and concepts. *Social Science & Medicine*, 45(12), 1829-1843. [https://doi.org/10.1016/S0277-9536\(97\)00128-7](https://doi.org/10.1016/S0277-9536(97)00128-7)
- Sofaer, S., Firminger, K., & Kenney, C. (2005). Patient perceptions of the quality of health services. *Annual Review of Public Health*, 26, 513-559.
- The Commonwealth Fund. (2023). *Surveys & Reports*. <https://www.commonwealthfund.org/surveys>
- Varela, C., Young, S., Mkandawire, N., Groen, R. S., Banza, L., & Viste, A. (2019). Transportation barriers to access health care for surgical conditions in Malawi a cross sectional nationwide household survey. *BMC public health*, 19, 1-8. <https://doi.org/10.1186/s12889-019-6577-8>
- Wager, K. A., Lee, F. W., & Glaser, J. P. (2021). *Health care information systems: a practical approach for health care management*. John Wiley & Sons.