



## Analysis of the Effect of Health Service Quality on Patient Satisfaction in Internal Medicine Inpatient Room of Hospital Level II Military Area Health Medan

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### Abstract

The purpose of this study was to determine the effect of quality on patient satisfaction in the hospital room for the Level II Military area health Medan in 2020. The research design used in this study was an analytic survey with a cross sectional design. The population in this study were all patients in the Internal Medicine Room of hospital Level II Military area health Medan as many as 167 people. The number of samples that will be studied is 118 people. Data analysis was performed using univariate, bivariate and multivariate analyzes. The statistical test used was the chi square test and logistic regression. The results of the chi square test showed that the technical competence variable obtained  $p$ -value = 0,000, efficiency  $p$ -value = 0,000, and patient safety  $p$ -value = 0,000  $< \alpha$  0.05, meaning that there was an influence between technical competence, efficiency and Patient safety on patient satisfaction, from the results of the multivariate analysis, it was found that the most influential variable in this study was the patient safety variable. The conclusion is that there is an influence between technical competence, efficiency and patient safety, while multivariate analysis shows that the most dominant factor is the variable of patient safety on family satisfaction. It is recommended that the hospital be able to improve the technical competence of nurses in the inpatient room of the Public Health Service in Medan by holding training and workshops both internal and external training.

## Introduction

According to Law No. 44 of 2009, a hospital is described as a health care facility that offers comprehensive individual health services, including inpatient, outpatient, and emergency care. The hospital is an integral member of social and media organisations, serving the city by providing integrated clinical care, both curative and rehabilitative, where hospital services extend to family and environmental services. Indonesia would open opportunities for international doctors to practice in Indonesia in accordance with the World Trade Organization's (WTO) policy, however the Association of Southeast Asian Nations (ASEAN) decided to open opportunities for foreign health staff in 2008.

Customer loyalty is inextricably linked to quality. Quality encourages the patient to develop a close bond with the hospital. In the long term, this type of bonding enables the business to have a thorough understanding of the desires and wishes of its clients. Thus, the business may improve consumer loyalty by maximizing the customer experience.

Patient happiness is "a person's feeling of pleasure or disappointment as a result of comparing a product's received output (or outcome) to the person's expectation." It is "a person's feeling of pleasure or disappointment as a result of comparing a product's received performance (or outcome) in relation to the person's expectation." It is "a person's feeling of pleasure or disappointment as a result of comparing a product's perceived performance (or outcome) in relation to the person's expectation." Patient satisfaction is a proxy for the level of health care received (Dunsch et al., 2018; Susanti et al., 2020; Nurfitriani et al., 2021). The consistency of clinical care has an impact on the degree to which health services are perfect in terms of instilling a sense of satisfaction in and patient (Mummalaneni & Gopalakrishna, 1995). The higher the level of happiness, the higher the standard of health care. However, patients will not always be satisfied with the comparatively high level of clinical care.

To ascertain patient happiness, it is possible to assess the level of clinical care provided at the hospital. There are ten dimensions of health care quality: technological excellence, reliability, efficacy, performance, sustainability, protection, intelligence, timeliness, and human relations. According to the Ministry of Health 2006 in Umaternate (2015), additional dimensions of quality include therapeutic aspects, effectiveness, patient protection, patient happiness, and sociocultural aspects.

Of hospital Level II Military area health Medan serves as the Kodam I / Bukit Barisan health installation. It is the highest referral hospital in the Kodam I / Bukit Barisan district, which encompasses North Sumatra, West Sumatra, Riau, and the Riau islands, and is tasked with the responsibility of providing health facilities and assistance to TNI staff - AD, civil servants, and their families. Over time, Of hospital Level II Military area health Medan encountered strategic challenges, including substandard clinical care, customer concerns regarding existing programs, a shortage of health care facilities and resources, and rivalry from neighboring hospitals, resulting in heavy competition. quite competitive among established hospitals, whereas the research sample was drawn from 12 patients receiving treatment in the inpatient room for the disease at Of hospital Level II Military area health Medan, who continued to express disappointment with care. It has also declined in terms of patient admissions to the internal medicine room at Of hospital Level II Military area health Medan. The amount of visits in 2017, 988, fell to 579 in 2018 and 491 in 2019. Patient complaint information is gathered via proof of patient grievances sent through suggestion box, SMS, mobile, or directly to on-duty room officers.

According to the data study on the measurement of patient satisfaction at Of hospital Level II Military area health Medan in 2019, the patient satisfaction score was 60 percent; nevertheless, this rating is well below the benchmark for patient satisfaction, which is 90 percent. According to preliminary findings made by researchers in the Internal Medicine Room Of hospital Level II Military area health Medan on 12 patients, eight patients expressed dissatisfaction with the services offered by health staff, while four patients expressed satisfaction. The patient said that while health staff exhibited an unfriendly demeanor, there were still expertise lacking in dealing with patient problems and illnesses. Any patient fundamentally desires to be treated well by a hospital administrator who can provide assurance to the patient, thus increasing the patient's personal stability. This can be accomplished through instilling confidence in patients by the attitude of polite officers and their ability to answer every question from the patient, as well as the individual feeling of empathy provided by the hospital administrator. Additionally, the patient stated that the doctor's service time is sometimes late, and the patient complains about meal delays that go unnoticed by the hospital, resulting in patient frustration while in the internal medicine space.

## Methods

This method of analytic survey analysis employs a cross-sectional sample design to examine the impact on patients of technological expertise, performance, and patient protection. The population for this analysis was all 167 patients at Of hospital Level II Military area health Medan's Internal Medicine Space, and the sample size was calculated using the Slovin formula to be as many as 118 participants.

A questionnaire is used to gather data. The collected data were analyzed using univariate, bivariate, and multivariate regression. The aim of univariate analysis is to obtain a snapshot of the frequency distributions of all variables measured, both dependent and independent variables. Bivariate analysis is used to determine the association between the dependent and independent variables, while multivariate analysis is used to determine the influence of the independent variable on the dependent variable using multiple logistic regression analysis in order to determine the independent variable that has the greatest effect on the dependent variable.

## Result and Discussion

### Univariate Analysis

Based on the distribution of respondent attributes, technological skill, performance, patient protection, and happiness, it is clear that the majority of respondents are between the ages of 56 and 65, that the majority of respondents are female (52.5 percent), and that the majority of respondents are trained. There were as many as 86 respondents with just a high school diploma (72.9 percent). According to the technological competency variable, the majority of respondents fall into the inept technical competency group, with 99 people (83.9 percent) falling into this category. According to the performance variable, the majority of respondents fall into the ineffective efficiency category, with 96 people falling into this category (81.4 percent), According to the patient protection variable, the majority of respondents, 107 people (90.7 percent), fall into the unsecured patient safety group, and according to the patient satisfaction variable, the majority of respondents, 79 people, fall into the unsatisfied category (66.9 percent).

Table 1. Distribution of Respondent Characteristics, Technical Competence, Efficiency, Patient Safety and Satisfaction

Variable	N	Percentage
<b>Age group</b>		
Late adolescence (17-25 years)	13	11.0
Early adulthood (26-35 years)	20	16.9
Late Adult (36-45 years)	12	10.2
Early elderly (46-55 years)	26	22.0
Late elderly (56-65 years)	28	23.7
Seniors (> 65 years)	19	16.1
<b>Sex</b>		
Male	56	47.5
Female	62	52.5
<b>Education</b>		
Elementary School	10	8.5
Junior High	2	1.7
High school	86	72.9
Higher Education	20	16.9
Housewife	17	14.4
Private employees	28	23.7

Entrepreneur	60	50.8
Civil servants	13	11.0
<b>Technical Competence</b>		
Incompetent	99	83.9
Competent	19	16.1
<b>Efficiency</b>		
Uneficiency	96	81.4
Efeciency	22	18.6
<b>Patient safety</b>		
Not guaranteed	107	90.7
Guaranteed	11	9.3
<b>Patient satisfaction</b>		
Unsatisfy	79	66.9
Satisfy	39	33.1

### Bivariate Analysis

According to Table 2, the relationship between technical competence, performance, and patient safety and patient satisfaction in the Internal Medicine Room Of hospital Level II Military area health reveals that out of 118 respondents, the majority stated that incompetent technical competence will result in as many as 77 people (72.0 percent) falling into the dissatisfied category; out of 118 respondents, the majority stated that incompetent technical competence will result in as many as 77 people (72.0 percent) falling into the dissatisfied category satisfied up to 73 individuals (75.3 percent).

Table 2. The Relationship between Technical Competence, Efficiency and Patient Safety with Patient Satisfaction in the Internal Medicine Room Of hospital Level II Military area health Medan

Variable	Patient Satisfaction				Total		P-Value
	Not satisfied		satisfy		f	%	
	f	%	f	%			
<b>Technical Competence</b>							0,000
Competent	9	81.8	2	28.6	11	100	
Incompetent	30	28.0	77	75.3	107	100	
<b>Efficiency</b>							0,000
Efficient	14	60.9	9	39.1	23	100	
Not efficient	25	26.3	70	73.7	95	100	
<b>Patient Safety</b>							0,000
Guaranteed	9	81.8	2	18.2	11	100	
Not guaranteed	30	28.0	77	72.0	107	100	

### Multivariate Analysis

Table 3 Based on the table above shows that of the 3 variables tested multiple logistic regression in the first stage, it can be seen that the variables that have a p-value > 0.05, all variables have an influence on patient satisfaction.

Based on table 4, the results of the multiple logistic regression test show that the significant value of the model is collectively obtained at  $0.000 < 0.05$ , which means that the three variables used as the model in this study have a significant relationship with the use of Medical Check Up at the Level II Public Health Hospital in Medan. . So it can be concluded that the factor that has the biggest / most dominant influence on Patient Satisfaction is Patient Safety. Where the variable is indicated by the OR value of 14.082 means that the respondent with the facility has

a 14 times chance of patient satisfaction in the inpatient room in the Hospital Level II Military area health Medan.

Table 3. The Relationship between Patient Satisfaction and Technical Competence, Efficiency, Patient Safety at the Level II Public Health Hospital, Medan.

First Stage Multiple Logistic Regression Test

Variabel	B	Sig.	Exp(B)
Technical Competence	1.803	0,048	6.066
Efficiency	1.403	0,012	4.067
Patient Safety	2.645	0,000	14.082

Table 4. The Relationship between Patient Satisfaction and Technical Competence, Efficiency, Patient Safety at the Level II Public Health Hospital in Medan.

Second Stage Multiple Logistic Regression Test

Variabel	B	Sig.	Exp(B)
Technical Competence	1.803	0,048	6.066
Efficiency	1.403	0,012	4.067
Patient Safety	2.645	0,000	14.082

### Technical Competence with Patient Satisfaction

Nursing providers are the single greatest feature of the health care system. As a result, the nursing profession must be capable of providing comprehensive care, both qualitatively and quantitatively. The expanded workload causes a pressure that contributes to the rise of tension, which has a variety of negative consequences, including reduced workplace satisfaction and a rise in psychological and physical problems. In general, this situation refers to an ongoing and systemic requirement for the highest level of operation.

A p-value of 0.0000.05 was obtained using the Chi Square statistical test, indicating that there was a link / effect between Technical Competence and Patient Satisfaction in the Inpatient Room of the Level II Military area health Medan Hospital in 2020. Inadequate technical expertise was a result of the hospital's nursing shortage. Additionally, respondents believe that health care staff, especially nurses, are not often available as needed; during work hours, nurses are often in the canteen. The findings of this study corroborate Gopal and Bedi's (2014) research that there is a consistency association between service professional competence and outpatient satisfaction.

### Efficiency with Patient Satisfaction

Efficiency is one part of the efficiency of clinical services; it entails the safe and productive utilization of all hospital capital, both economically and medically (Navarro-Espigares & Torres, 2004). (2011). According to the findings of a study on the partnership between productivity and patient satisfaction in the disease room at Level II Military area health Medan, it is understood that out of 118 respondents, 14 respondents (60.9 percent) were pleased, while 9 respondents (39.1 percent) were dissatisfied. Of the 95 respondents who responded inefficiently, 25 (26.3%) were delighted, while 70 (73.7%) were disappointed.

A p-value of 0.0020.05 was obtained using the Chi Square statistical test, indicating that there was a connection / effect of efficiency on patient satisfaction in the inpatient room at Of hospital Level II Military area health Medan in 2020.

## **Patient Safety with Patient Satisfaction**

Hospital care in this context refers to the protection and welfare of patients. Convenience for the client decreases the likelihood of harm, poisoning, adverse symptoms, or other service-related risks. Officers and patients are also responsible for service protection (Ellenbecker et al., 2008). According to the findings of a study on the partnership between patient protection and happiness in the disease room on Level II of the Military area health Medan, out of 118 respondents, 15 (71.4 percent) were pleased and 6 (28.6 percent) were unhappy patients. Of the 97 respondents who indicated that they were not guaranteed, 24 (24.7 percent) were pleased, while 73 (75.3 percent) were dissatisfied.

A p-value of 0.0000.05 was achieved using the Chi Square statistical test, indicating that there was an association / effect between Patient Safety and Patient Satisfaction in the Internal Medicine Room Of hospital Level II Military area health Medan in 2020.

Patient Satisfaction with Patient Safety Practices in Hospitals. The findings indicated that there was a significant association between nurses' protection implementation and patient satisfaction. Patient satisfaction is significantly affected by the conduct and approach of hospital nurses toward patients, as well as the level of nursing care obtained by patients. In this situation, the nurse's activities are consistent with patient care guidelines. As a part of the implementation of patient care, nurses performed up to 80.5 percent of the tasks. Patient retention affected patient visits by up to 66.4 percent.

## **The Influence of Technical Competence, Efficiency and Patient Safety with Patient Satisfaction**

Patient satisfaction is influenced by a variety of variables, including the standard of nursing care, the quality of clinical services, and also the reputation of a health sector institution in the minds of the population. Patient happiness is one measure of the standard of nursing care. Patient loyalty must still be ensured if a patient wishes to remain in the health care industry. The table contains the outcomes of multivariate regression. If the p-value for the Technical Competence variable is 0,000, the p-value for the Efficiency variable is 0,000, and the p-value for the patient protection variable is 0,000, and the p-value for the Technical Competence variable is 0.05, so  $H_0$  is acknowledged, indicating that the Technical Competence variable has a major impact on the patient satisfaction variable. Although a p-value of  $0.000 > 0.05$  was observed for the patient safety variable,  $H_0$  was approved, indicating that the patient safety variable has a major impact on the patient satisfaction variable.

This is consistent with the philosophy, which states that professional expertise encompasses all aspects of a service provider's talents, ability, appearance, and efficiency. Professional competency refers to how health care services adhere to agreed-upon health care guidelines, which require enforcement, accuracy, correctness, and continuity. If this dimension of professional excellence is not met, a multitude of consequences may occur, ranging from mild variations from health service expectations to fatal accidents that impair the consistency of health care and threaten the life of patients. For the quality factor, it is the component of affordable, reliable facilities, as well as the absence of overdiagnosis and therapy. The quality of health care funding will have an effect on health outcomes. Effective service would prioritize patient and community care above optimizing patient and community resources. According to the researcher's theory, customers who believe their needs have been met are less likely to return for subsequent visits, which may result in a decline in the amount of consumers in a business / hospital, and thus, hospital revenue. Patient anxiety is one of the factors that contribute to patients returning home prior to recovery, and it is directly linked to patient welfare, since patients who feel secure and happy receive nursing treatment that is compliant with expectations and free of fear of harm.

## Conclusion

There is an influence between technical competence, efficiency and patient safety with patient satisfaction in the Internal Medicine Inpatient Room of the Level II Military area health Medan in 2020.

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