


# Analysis of the performance of access and quality of the public safety center (PSC) 119 on patient satisfaction at the North Tapanuli District Health Office

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ARTICLE INFO	ABSTRACT
<p><i>Article history:</i></p> <p>Received Mar 10, 2025 Revised Mar 13, 2025 Accepted Mar 19, 2025</p> <hr/> <p><i>Keywords:</i></p> <p>Access Performance Satisfaction and PSC 119 Service</p>	<p>Public Safety Center (PSC) 119 is an integrated emergency service based on a call center. Patient satisfaction in health services is very important to note because it can describe the quality of service at a health service location. The purpose of this study was to analyze the Influence, Performance, service quality, and access to patient satisfaction of the Public Safety Center (PSC) 119 of the North Tapanuli Health Office in 2024. This research method is descriptive analytic with a correlational design. A total of 150 patients who had used the PSC 119 service at 5 Health Centers in the North Tapanuli Health Office became respondents in this study and were selected using a simple random sampling technique. The research instrument used a questionnaire sheet. Data analysis included univariate analysis, bivariate analysis and multivariate analysis using multiple logistic regression tests. The results of this study indicate that using the Pearson Correlation test and found a significance value (2-tailed) of 0.000 (<math>p &lt; 0.05</math>) which means H1 is accepted so that there is a significant influence between the influence of Officer Performance and Satisfaction of PSC 119 ambulance patients, there is an Influence between Service and Satisfaction of PSC 119 Ambulance Patients in North Tapanuli Regency with the results that (2-tailed) is 0.000 (<math>p &lt; 0.05</math>), the Influence of Access to Patient Satisfaction by PSC 119 Ambulance Nurses in North Tapanuli Regency with the results that all variables are strongly and positively correlated with patient satisfaction (Coeff. correlation <math>&gt; 0.6</math>) The most dominant variable that influences Service to satisfaction is empathy with a value of <math>p = 0.006</math>. It is expected that the health service can improve facilities and training regularly to all officers in order to provide better services.</p> <p><i>This is an open access article under the <a href="https://creativecommons.org/licenses/by-nc/4.0/">CC BY-NC</a> license.</i></p> 

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## INTRODUCTION

Health services are a form of action taken towards a person with the aim of improving, maintaining, monitoring or restoring health (October, 2024)(Wulur, Fitriyani, & Paramarta, 2023). Emergency medical services or pre-hospital services are one of the main areas of health services,

which provide emergency services for patients who experience acute, critical illness or injury outside the hospital (Suwardianto, 2020)(Ifadah et al., 2024). Pre-hospital services are more often carried out by the Emergency Medical Services (EMS) team, as one of the health service providers who arrive at the scene more quickly, both in everyday emergency conditions and in disaster events (TARUSDA, 2020)(Meilando & Ners, 2024).

Pre-hospital services in Indonesia were first established by the Indonesian Surgeons Association in 1969, then a similar service was re-established in the early 1990s, called the 118 ambulance. However, the central government provided little support and attention, so that this service did not develop (Pusponegoro & Sujudi, 2016). The government then formed a prehospital service by building an Integrated Emergency Response System (SPGDT) known as the 119 medical emergency service which was authorized based on the Regulation of the Minister of Health (Permenkes) number 19 of 2016 (HARTONO, 2020)(SUANDI, nd). The concept of SPGDT is fast service in emergency conditions using ambulance transportation which is implemented by each district and city (Suryaningtyas, n.d.).

The central government is responsible for managing the pre-hospital service control system or what is known as the National Command Center (NCC) single control system, while the regional government is given responsibility for implementing and operating the Public Safety Center (PSC) as a provider of health and emergency services at the district/city level (Rizkita & Meirinawati, 2020)(Yustina & Zainuri, 2022).

WHO data in 2019, various countries in the world have had emergency services for humanity in Israel in the form of Emergency Medical Service (EMS) which has operated more than 1,000 ambulances and mobile Intensive Care Units (MICU). distributed in 177 medical stations throughout the country and managed by 2,400 employees and more than 24,000, EMS is expected to adjust response resources based on patient needs, and If adjusted to service needs, EMS resources can be utilized optimally (Lestari et al., 2021).

The quality and access of pre-hospital services by the community is one of the problems that must be immediately fixed by several countries with lower middle incomes. According to data from the World Health Organization (WHO), there are around 90% of trauma incidents that cause 5.8 million deaths in developing countries (Dewi, Sos, & Kom, 2012).

The results of the study (Amad Mochamad1, Septo Pawelas Arso2 & 1, 2, 2019) show that the implementation of SPGDT 119 did not go well in the expected efforts to improve access and quality of emergency services, the response time in handling is still slow, which should be less than 10 minutes, the implementation can be more than 30 minutes, this is very inconsistent with the expected goals which are to provide fast and appropriate handling to the community (Mochamad, Arso, & Setyaningsih, 2019). Another obstacle is that services are difficult to access due to busy networks and lack of socialization to the community (Nopitasari et al., 2021)(Tobing & Weya, 2022).

Based on a brief interview with the Head of the North Tapanuli Health Service during the preliminary study, it was found that there were still many problems that arose from the PSC 119 service, namely the lack of communication between the community and health workers, which had a major impact on community satisfaction with the PSC 119 service (Bandiyono, 2020). The results of interviews with patients during the preliminary survey showed that patient complaints about the PSC 119 service were because the health service was less friendly and always took a long time if the patient wanted to use the PSC 119 service, they could wait sometimes almost 1-2 hours to arrive at the patient's location (Pramudya, 2022)(Vanchapo et al., 2024).

Based on the survey data that was conducted, the facilities available so far in an effort to run the Public Safety Center 119 program, especially at the North Tapanuli Health Office, are 19 people, including 5 doctors, 10 nurses and 4 drivers (Tamboto & Manongko, 2019). So far, the Public Safety Center service in North Tapanuli has only been intended for emergency situations (traffic accidents), but now, due to the ongoing pandemic, the Public Safety Center program is more functional for responding to Covid-19 (Aris, 2024)(Muchlis, 2020). Public Safety Center services in North Tapanuli are less than optimal due to the small number of people using the service. There are factors that influence the Public Safety Center program, namely the lack of public

knowledge about the program and also the public's attitude towards the program created (Sari, 2023)(Fitriani & Andriyani, 2015).

## RESEARCH METHOD

### Definition of Performance

Performance comes from the word job performance or actual performance which means work achievement or actual achievement achieved by someone. The definition of performance (work achievement) is the work results in terms of quality and quantity achieved by an employee in carrying out his functions in accordance with the responsibilities given to him. Cardy (James and Nelson, 2017: 195) said, performance management is the process of defining, measuring, appraising, providing feedback on, and improving performance. From this understanding it can be explained that managing performance should be done collaboratively and cooperatively between employees, leaders, and organizations, through understanding and explaining performance within a framework of planned goals, standards and competencies that are mutually agreed upon.

### Understanding Access

The definition of ease of use or ease of access (perceived ease of use) can be defined as someone believes that using a technology will be free from effort. Ease (perceived ease of use) is a person's belief that using a technology can be easily used and understood. Ease is defined as the extent to which a person believes that using a technology will be free from effort. Ease of use is easy to learn, easy to understand, simple and easy to operate. Ease of use as a level where a person believes that technology can be easily understood and easy to use. Ease is defined as an individual's belief that if they use a particular technology, it will be free from effort. Based on the definition above, it can be concluded that ease is the level at which a person can believe that using a system is not difficult to understand. While the definition of the concept of ease is that if a technology is easy to use, users tend to repeat using the technology.

### Research Design

This research is a quantitative research using a cross-sectional research design, with a correlation analytical research design. Correlational research is used to examine the influence between variables. Correlation research is also used to explain the strength and direction of the influence between two variables. Cross-sectional research design is a research design used for the measurement time of independent and dependent variable data only once at a time.

## RESULTS AND DISCUSSIONS

### Univariate Analysis

Univariate analysis was conducted to describe the characteristics of respondents consisting of age, gender, education level, type of training attended, nurse employment status, length of service of nurses at PSC and number of nurses in each PSC unit as well as data on each research variable, namely teamwork, safety climate, management perception and support, job satisfaction, work environment, stress recognition and safety implementation.

### Univariate Analysis of Each Variable

**Table 1.** Frequency distribution of each variable

Variables	N	Mean	Median	Min	Max	St. Deviation
Service	150	20.44	21	9	25	3,072
Performance	150	38.93	40	17	50	6,793
Access	150	26.88	27	15	35	3,7150
Job satisfaction	150	21.85	22.5	11	25	23,277

Source: Primary Data (2024)

The frequency distribution of the teamwork variable in table 4.7 shows that all 150 respondents filled out the questionnaire. The variable has an average of 20.44 with a minimum

value of 9 while the maximum value is 25 while the standard deviation of the variable is 3.072. The frequency distribution of the safety climate variable in table 4.7 shows that all 150 respondents filled out the questionnaire. The variable has an average of 38.93 with a minimum value of 17 while the maximum value is 50 while the standard deviation of the variable is 6.793.

Frequency distribution of perception and management support table 4.7 shows all 150 respondents filled out the questionnaire. The variable has an average of 26.88 with a minimum value of 15 while the maximum value is 35 and the standard deviation of the variable is 3.7150.

Frequency distribution of job satisfaction variable table 4.7 shows all 150 respondents filled out the questionnaire. The variable has an average of 21.85 with a minimum value of 11 while the maximum value is 25 while the standard deviation of the variable is 3.277.

Frequency distribution of work environment variables table 4.7 shows all 150 respondents filled out the questionnaire. The variable has an average of 89.35 with a minimum value of 48 while the maximum value is 120 while the standard deviation of the variable is 12.127.

Frequency distribution of nurse stress recognition variable table 4.7 shows all 150 respondents filled out the questionnaire. The variable has an average of 19.46 with a minimum value of 10 while the maximum value is 30 and the standard deviation of the variable is 4.592.

Frequency distribution of patient safety implementation variables in table 4.7 shows that all 150 respondents filled out the questionnaire. The variable has an average of 55.60 with a minimum value of 30 and a maximum value of 150, while the standard deviation of the variable is 8.048.

#### **The Influence of Access on Patient Satisfaction by Public Safety Center (PSC) 119 Ambulance Nurses in North Tapanuli Regency.**

The data obtained from respondents were tested using the Pearson Correlation test and a significance value (2-tailed) of 0.000 ( $p < 0.05$ ) was found, which means H1 is accepted so that there is a significant influence between the Influence of Access and Patient Satisfaction by PSC 119 Ambulance Nurses in North Tapanuli Regency. The correlation coefficient is 0.548, which means moderate and positive. Based on the results of the bivariate test conducted to determine the Influence of Access and Patient Satisfaction by Public Safety Center (PSC) 119 ambulance nurses in North Tapanuli Regency, it has a significant influence with a moderate and positive correlation coefficient value. The coefficient value is positive, thus both variables have a unidirectional influence, the meaning of a unidirectional influence according to the researcher is that if the perception and management support variables increase, the implementation of patient safety will also increase. The results of the study above are supported by research conducted by Kaya & Hocaoglu (2020), regarding management commitment to patient safety, that ensuring patient safety is the goal and priority and attention in health services.

## CONCLUSION

Performance has a moderate positive influence on patient satisfaction by ambulance nurses of Public Safety Center (PSC) 119, North Tapanuli Regency. Service has a moderate positive influence on patient satisfaction by ambulance nurses of Public Safety Center (PSC) 119, North Tapanuli Regency. Access has a moderate positive influence on patient satisfaction by ambulance nurses of Public Safety Center (PSC) 119, North Tapanuli Regency.

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