Original Research Article

RELATIONSHIP BETWEEN INFRASTRUCTURE AND HUMAN RESOURCES WITH MINIMUM SERVICE STANDARDS IN EMERGENCY INSTALLATION

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Article Info:
Received: December 9, 2020
Revised: December 22, 2021
Accepted: December 27, 2021
DOI: https://doi.org/10.36720/nhjk.v10i2.243

Abstract

Background: Hospital Minimum Service Standards (SPM) are provisions for hospitals issued by the Minister of Health of the Republic of Indonesia in the context of government efforts to ensure the quality of hospital services. This Minimum Service Standard can be used as a guideline for the quality of service for every hospital in Indonesia. The Minimum Service Standard (SPM) is a quality guideline issued by the Minister of Health regarding the minimum service that must be provided by the hospital, where each hospital is required to assess and provide services by the Minimum Service Standards (SPM).

Objectives: The purpose of this study was to determine the relationship between infrastructure and human resources with minimum service standards in the emergency department of the general hospital area I Lagaligo, East Luwu.

Methods: The type of research used in this research is descriptive-analytic with a cross-sectional approach. This research was conducted from June to August 2020 in the Emergency Room I Lagaligo East Luwu General Hospital. Sample selection with total sampling technique. The research subjects were 33 respondents. The instrument used is a questionnaire. analysis used the chi-square test.

Results: Based on the results of this study, it showed that there is a relationship between infrastructure and minimum service standards with a value of p-value = .008, there is a relationship between human resources and minimum service standards with a value of p-value = .000.

Conclusion: There are infrastructure facilities that can be used directly by health workers for the benefit of patients in the form of tools, materials, comfortable rooms, and others. The human resources in the emergency department of Lagaligo Wotu Hospital are of good quality.

Keywords: Infrastructure, human resources, service standards.

INTRODUCTION

Health is a human right, therefore, every activity and effort to improve the degree of public health is carried out as high as possible based on the principles of non-discrimination, participation, protection, and sustainability...
which are very important for the formation of Indonesia's human resources (Wawan, 2016).

The hospital organizes individual health services including promotive, preventive, curative, and rehabilitative services that provide inpatient, outpatient, and emergency services so that in carrying out its functions the hospital must have a standard of service (Juanita, 2017).

Government Regulation No. 65 of 2005 concerning Minimum Service Standards (article 1 point 6) states that "Minimum Service Standards, hereinafter abbreviated as SPM, are provisions concerning the types and quality of basic services which are mandatory regional affairs that are entitled to a minimum of every citizen. Basic services are a type of public service that is fundamental and absolute to meet the needs of the community in social, economic, and government life. "SPM is a basic need of citizens, namely physiological needs which if not met will result in citizens living unworthy or even dying, in vain (Harimat, 2015).

Hospital Emergency Departments have a major role in emergency response to conduct triage, resuscitation, and stabilization (Supriyantoro, 2017).

Hospitals in Indonesia consist of public hospitals and private hospitals with a total number of 2,773. The growth of public hospitals during the last 6 years is not as fast as the growth of private hospitals. The average growth of public hospitals is 0.4%, due to a decrease in the number of non-profit private hospitals, while private hospitals are 15.3% (Laksono, 2018).

There are more private hospitals compared to government hospitals, with an average growth of 7%. Meanwhile, the growth of government hospitals was only 3%. Based on ownership, private hospital profit growth is more aggressive than other types of hospitals. The average growth was 17.3%. Public hospitals owned by the Pemprov are only 7.7% and other hospitals whose growth is not too significant. The thing to note is the significant decrease in the number of non-profit private hospitals at the end of 2017 (Laksono, 2018).

Efforts to improve the quality of hospital services refer to Kepmenkes No. 129 / Menkes / SK / II / 2008 concerning Hospital Minimum Service Standards (SPM) stipulated by the Kerinci Regent Regulation Number 36 of 2012. The indicators in the IGD are the ability to handle life-saving children and adults, opening hours of emergency services, certified emergency services that are still valid TL S / ACLS / BCTLS / PPGD, availability of disaster management team, response time for doctor services in IGD.

Currently, the image of health services in Indonesia is decreasing, especially the general hospital in the East Ilagaligo Luwu area. This is indicated by the high interest of the community for treatment at other hospitals of better quality. The tendency of people to seek treatment, in general, is due to the completeness of the facilities and the quality of services provided that have met patient expectations. On average, patients who seek treatment elsewhere are from East Luwu.

Based on interviews with the Head of the Emergency Department at Ilagaligo Luwu Timur Hospital there were various complaints because the services provided were not by the minimum service standards that had been set, such as there were still some delays in handling patients, the lack of emergency service providers who had ATLS training certificates/ BTLS/ ACLS/ PPGD moreover some of them have been transferred to other units and there is still a lack of facilities or rooms. These conditions indicate that the services provided by the I Lagaligo Luwu Timur Hospital are not by the minimum service standards that have been set. Based on the above, the researchers are interested in conducting research

METHODS

Study Design

This research method uses quantitative research with analytic descriptive design with a cross-sectional approach regarding the Implementation of Minimum Service
Standards. Where throughout the observed variables were measured simultaneously when the research took place.

Setting
This research was conducted at the Emergency Installation of the Regional General Hospital I Lagaligo Luwu Timur from June to August 2020.

Research Subject
The population in this study were all doctors and nurses at the Emergency Installation of the Regional General Hospital I Lagaligo Luwu Timur. The sampling technique used in this study was a total sampling technique, with a total of 33 respondents.

Instruments
In this research, data collection techniques will be carried out by interview using a questionnaire. A questionnaire is a tool for measuring the ability of socialization in the form of a question sheet that is guided by social studies (Sugiyono, 2017).

In this study, the data used is primary data. Primary data is data obtained directly from research subjects using measuring instruments or data collection tools, directly on the subject as a source of information sought and data in form of an observation sheet and questionnaire. The researcher followed the observation sheet that was already available at the hospital. and this questionnaire has been tested for validity and reliability by Sukmawati. The questionnaire used consists of 3 types, namely: List of Questionnaires Assessment, In-depth Interview Questionnaire, and checklist. related to the implementation of minimum service standards.

Data Analysis
The data analysis technique in this study used Chi-Square Test with significant level of 5% ($\alpha = 0.05$).

Ethical Consideration
As for the research permit from the Investment and One-Stop Integrated Service Office of East Luwu Regency with the number 067/DPMTSP/VI/2020 and the research permit from the Lagaligo Regional General Hospital with the number 070/1567/RSUD-ILG.

RESULTS

Univariate Analysis

Characteristics of Research Variables
The variables in this study consisted of three types, the independent variable namely infrastructure, and human resources, while the dependent variable was the minimum service standard.

Infrastructure, Human Resources, Minimum Service Standard
Based on the research results, it can be seen that the characteristics of respondents according to infrastructure, human resources, and minimum service standard can be seen in the table as follows:

| TABLE 1. Distribution of Nurses according to Infrastructure, Human Resources, and Minimum Service Standard in the Emergency Installation of the Regional General Hospital I Lagaligo Luwu Timur from June to August 2020. |
|-----------------|----------|----------|
|                  | Frequency | Percentage |
| **Infrastructure** |          |          |
| Corresponding    | 26       | 78.8     |
| Not quite right  | 7        | 21.2     |
| Total            | 33       | 100.0    |
| **Human Resources** |        |          |
| Corresponding    | 24       | 72.7     |
| Not quite right  | 9        | 27.3     |
| Total            | 33       | 100.0    |
| **Minimum Service Standard** | | |
| Corresponding    | 23       | 69.7     |
| Not quite right  | 10       | 30.3     |
| Total            | 33       | 100.0    |

Sources: Primary Data of Questionnaire, 2020.
The table above shows that the respondents have the appropriate infrastructure, namely 26 (78.8%). And the infrastructure facilities are not suitable as many as 7 (21.2%). This shows that the emergency department of the Lagaligo Wotu I Hospital is very adequate.

The table above shows that the appropriate human resources in the ER are 24 people (72.7%). Meanwhile, 9 people (27.3%) were not suitable. This shows that the human resources in the emergency department of RSUD I Lagaligo Wotu are of good quality.

The table above shows that the minimum service standard in Emergency Installations is 23 people (69.7%). Meanwhile, 10 people (30.3%) were not suitable. This shows that the minimum service standards in the emergency department of Lagaligo Wotu Hospital are by the applicable SOPs and regulations.

### Table 2 Relationship between Infrastructure and Human Resource with Minimum Service Standards in the Emergency Installation of the Regional General Hospital I Lagaligo Luwu Timur from June to August 2020.

<table>
<thead>
<tr>
<th>Minimum Service Standards</th>
<th>Not Quite Right</th>
<th>Corresponding</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
<td>.008</td>
</tr>
<tr>
<td>Not Quite Right</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Corresponding</td>
<td>5</td>
<td>21</td>
<td>6.06</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>30.30</td>
<td>69.70</td>
</tr>
<tr>
<td><strong>Human Resources</strong></td>
<td></td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Not Quite Right</td>
<td>7</td>
<td>2</td>
<td>6.06</td>
</tr>
<tr>
<td>Corresponding</td>
<td>3</td>
<td>21</td>
<td>63.64</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>30.30</td>
<td>69.70</td>
</tr>
</tbody>
</table>

Sources: Primary Data of Questionnaire, 2020.

Based on the results of the *chi-square* analysis, shows that there is a significant relationship between infrastructure and minimum service standards in the emergency room.

Based on the results of statistical tests, shows that there is a significant relationship between human resources and *minimum service standards* in the emergency room.

### DISCUSSION

**Analysis of the Relationship between Infrastructure and Minimum Service Standards**

Based on the results of the study, it showed that the respondents had the appropriate infrastructure, namely 26 (78.8%). And the infrastructure facilities are not suitable as many as 7 (21.2%). This shows that there are infrastructure facilities that can be used directly by health workers for the benefit of patients, 

**Bivariate Analysis**

Bivariate analysis was performed to determine the relationship between the independent variable and the dependent variable in this study. The analysis will be explained as follows.
both in the form of tools, materials, comfortable rooms, and others. The availability of facilities and infrastructure in the IGD has met existing standards. However, on the physical side, it needs to improve its spatial layout and in terms of medical devices, there are still none, for existing medical devices it is necessary to increase the number of equipment again.

The results of the chi-square analysis show that there is a significant relationship between infrastructure and minimum service standards in the emergency room. The results of interviews and observations made on informants, the facilities and infrastructure needed for the implementation of Emergency Installations Lagaligo Wotu Hospital have met service standards, infrastructure including completeness of medical equipment to support services in the ER have also been fulfilled by the hospital, as by the results of the checklist Standard of facilities and infrastructure is based on Kepmenkes number 856 of 2009. Apart from health workers, another factor that also plays a role is the availability of supporting facilities. The IGD building has been built to be more spacious, clean, and comfortable, the bathroom toilet is clean. This is because the leadership in the hospital is very concerned about the construction of infrastructure to provide comfort to health workers and patients.

This is not in line with the results of research conducted by Supriyanto et al (2014) at Muhammadiyah Hospital Ahmad Dahlan Kediri which states that the available facilities and infrastructure are not optimal. Likewise, Astuti et al (2017) stated that some of the problems that arise in the implementation of Minimum Service Standards in Emergency Installations are the lack of facilities and infrastructure because the proposed improvement or request for facilities and infrastructure is constrained by a convoluted bureaucracy, as well as passive feedback provided by the board of directors and management. in response to the evaluation of the service unit.

Human Resources Relations with Minimum Service Standards in the Emergency Room

The results showed that the appropriate human resources in the ER were 24 people (72.7%). Meanwhile, 9 people (27.3%) were not suitable. This shows that the human resources in the emergency department of RSUD I Lagaligo Wotu are of good quality.

Health / medical personnel are the main key in the achievement of health development goals. According to the Law of the Republic of Indonesia Number 36 of 2009 concerning health, it is stated in Article 1 that a health / medical worker is any person who is devoted to the health sector and has the knowledge and/or skills through education in the health sector which for certain types requires the authority to make health efforts.

The Emergency Room at Ilagaligo Wotu Hospital has human resources who are passionate about work and can be accounted for. This can be proven by the Emergency Installations Minimum Service Indicator that the emergency response time is 4 minutes and the patient satisfaction level is 78% according to the installation head version, which means it is up to standard. There are regular meetings between hospital policymakers and the government so that in the forum the hospital can submit suggestions directly to the government. This is a form of good communication between the hospital management and the government as the owner of the hospital (Indriono, 2020).

Based on the results of statistical tests, it showed that there is a significant relationship between human resources and minimum service standards in the emergency room of RSUD I Lagaligo Wotu.

The human resources in the emergency department of RSUD I Lagaligo Wotu have been fulfilled, namely specialist doctors, general practitioners, nurses with S1 Nurse and DIII education, and non-medical human resources such as support, administration, and finance are also fulfilled.

This is not in line with the results of research conducted by Kuzairi et al (2017) at
dr. H. Koesnadi Bondowoso, that there is a shortage of trained human resources, which is caused by a lack of budget funds for training and the limited quota of training participants by training providers. The MSS implementation mechanism in the hospital aims to provide a better understanding of the quality/quality standardization of health services, in other aspects, it is also hoped that it can form medical personnel, nurses, midwives, other professional staff, or administrative personnel who have personality, skills, and expertise as well as devoted to God Almighty by national health goals (Ridwan, 2017).

From the results of interviews conducted, almost all informants said that on average all officers in the Emergency Installations Lagaligo Wotu Regional Hospital had a valid emergency certificate. The PMK 129 of 2008 requires that all emergency service providers must have a valid emergency certificate (BLS / PPGD / GELS / ALS).

They immediately apply it in the emergency room installation. Based on document analysis, 90% of emergency room officers have emergency certificates. With this certificate, it indicates that they have attended the training, the abilities that officers get from direct training can be put into practice properly because they are supported by the enthusiasm or the existing environment.

This is in line with the results of research conducted by Lontoh (2013) on the effect of basic life support theory training on cardiopulmonary resuscitation knowledge, which states that there is a relationship between training and knowledge.

According to Djarojad (2015), the more competent an employee is, the higher the employee's performance. To improve skills, it is necessary to conduct training which is one of the factors needed to improve the quality of employees. So that human resources can contribute to improving the quality of hospitals, especially emergency room installations so that organizational goals can be achieved.

CONCLUSION
There are infrastructure facilities that can be used directly by health workers for the benefit of the patient in the form of tools, materials, comfortable rooms, and others. Human resources in the emergency department of RSUD I Lagaligo Wotu are of good quality.

SUGGESTIONS
With this research, it is hoped that services in Lagaligo Wotu Regional Hospital, especially emergency installations, can be of good quality services.

ACKNOWLEDGMENT
Thank you to the Director of Stikes Bataraguru Soroako who has provided facilities to researchers for the realization of this research. Thank you also to the research funder, namely the Directorate General of Higher Education (Dikti).

DECLARATION OF CONFLICTING INTEREST
We strictly certify that there is no conflict of interest between the authors of this article.

FUNDING
This research received financial support from the Directorate General of Higher Education (Dikti).

AUTHOR CONTRIBUTION
Desak Nyoman Suartini: Conduct initial problem analysis, collect primary data, and analyze primary data, examine and agree on the contents of the article.

Andi Syamsul Bachri Jamal: Collecting secondary data, analyzing secondary data, and examining and agreeing on the content of the article.

Anas Budi: Collecting secondary data, analyzing secondary data, and reviewing and agreeing on the content of the article.
REFERENCES


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**Cite this article as:** Suartini, D. N., Jamal, A. S. B., Budi, A. (2021). Relationship between infrastructure and human resources with minimum service standards in emergency installation. *Nurse and Health: Jurnal Keperawatan*, 10 (2), 313-320. [https://doi.org/10.36720/nhjk.v10i2.243](https://doi.org/10.36720/nhjk.v10i2.243)