

# Availability of Health Personnel in Achievements of Community Health Center Performance Indicators in Lamongan District in 2022

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**Abstract:** Minimum Service Standards (MSS) in the health sector are provisions regarding the type and quality of basic services that every citizen can obtain at a minimum. Regional governments need to carry out performance assessments based on MMS indicator achievements to monitor institutions' performance. The performance assessment results can then be used for training and evaluation in the health development efforts carried out. This study aimed to identification availability of health personnel in achievement of community health center performance indicators in 2022. Secondary data was obtained from the Lamongan Regency Health Profile in 2022. Data on the number and type of health workers in community health centers and MMS achievements in the health sector were subjected to statistical tests using Chi-Square. Results: Chi-Square test of the relationship between the type of health workers in the community health center and the MMS performance achievement indicators in the health sector ( $p = 0.009$ ), and the relationship between the number of health workers based on the minimum standards for community health workers in the health center and the achievement of the MMS performance indicators in the health sector ( $p = 0.002$ ). There is a significant relationship between the number and type of health workers at the community health center and performance indicators for the Minimum Service Standards for the Health Sector at the Lamongan Regency community health center.

**Keywords:** health workers, performance indicators, community health center

## INTRODUCTION

Health is one of the main components besides education and income in measuring the Human Development Index (HDI). Law Number 36 of 2009 stipulates that health is a healthy condition both physically, mentally, spiritually, and socially, which enables everyone to live a productive life socially and economically. National health development is directed at increasing awareness, willingness, and ability to live healthily for everyone to achieve the highest level of public health (Sekertariat Jendral Kementrian Kesehatan RI, 2022).

Puskesmas is a health service facility that carries out public and first-level individual health efforts, prioritizing promotive and preventive efforts in its working area. Regulation of the Minister of Health of the Republic of Indonesia Number 43 of 2019 concerning Community Health Centers states that community health centers implement health policies to achieve health development goals in their working areas. Puskesmas organizes first-level community and individual health in its working area

(Peraturan Menteri Kesehatan Republik Indonesia Nomor 43 Tahun 2019 Tentang Pusat Kesehatan Masyarakat, 2019). Therefore, the government has provided guidelines and technical instructions for community health centers to maintain the quality of their services. One of them is through measuring the performance of community health centers, some of which use the variable of achieving minimum service standards.

Minimum Service Standards in the health sector based on Minister of Health Regulation Number 4 of 2019 concerning Technical Standards for Fulfilling the Quality of Basic Services. Minimum Service Standards in the Health Sector are provisions regarding the type and quality of basic services every citizen has a minimum right to receive. The types of basic services in Minimum Service Standards at the community health center level consist of health services for pregnant women, health services for mothers giving birth, health services for newborns, health services for toddlers, health services at primary education age, health services at productive age, health services at old age, health services for people with hypertension, health services for people with diabetes mellitus, health services for people with serious mental disorders, health services for people suspected of having tuberculosis, and health services for people at risk of being infected with a virus that weakens the human immune system (Human Immunodeficiency Virus) (Permenkes Nomor 4 Tahun 2019 Tentang Standar Teknis Pemenuhan Mutu Pelayanan Dasar Pada Standar Pelayanan Minima Bidang Kesehatan, 2019). Local governments need to carry out performance assessments based on the achievement of minimum service standard indicators to monitor institutions' performance. The performance assessment results can then be used for guidance and evaluation in health development efforts.

Health workers are an important element that ensures the functioning of the health system, as well as continued progress towards national health coverage. The distribution of health workers affects the availability and accessibility of health services to the community (Bai et al., 2022). Based on the results of research on health facilities in 2019 at community health centers, it can be seen that from the assessment indicators, the average Minimum Service Standards achievement is 92.4%. There are 9,831 health centers in Indonesia with a minimum proportion of human resources in health centers based on the Regulation of the Minister of Health of the Republic of Indonesia Number 43 of 2019 concerning Community Health Centers with details: 22.345 general practitioners, 8.329 dentists, 105.724 nurses, 105.298 midwives, health promotion and behavioral science workers 18,685, environmental sanitation personnel 12.355, nutritionists 13.210, pharmacists or pharmaceutical technical personnel 14.611, and medical laboratory technology experts 7.664 (Peraturan Menteri Kesehatan Republik Indonesia Nomor 43 Tahun 2019 Tentang Pusat Kesehatan Masyarakat, 2019)(Kesehatan, 2019).

The minimum service standards that the government has set are a reference for Regional Governments in preparing planning, budgeting and administering Regional Governments. The

government monitors and evaluates the implementation of minimum service standards by Regional Governments to guarantee access and quality of basic services to the community. Another form of guidance from the government regarding implementing minimum service standards is in the form of assessing work performance in achieving minimum service standards.

## METHODS

Data was obtained from the health profile of Lamongan Regency in 2022. The analyzed health workers at Lamongan district health centers were general practitioners, dentists, nurses, midwives, health promotion and behavioral science workers, environmental sanitation workers, nutritionists, pharmacists/pharmaceutical technical workers, and medical laboratory technologists. If all types of health workers are met in 1 health center, they will be categorized accordingly. However, if a type of health worker is not yet available at the puskesmas, it will be categorized as unsuitable.

Based on Minister of Health Regulation Number 4 of 2019 concerning Technical Standards for Fulfilling Basic Service Quality in Minimum Service Standards in the Health Sector, the research is K1 and K4 coverage, delivery assistance coverage by health workers in health facilities, complications handling coverage, active contraceptive coverage, complete KN1 and KN achievements. , recruitment of new students, Universal Child Immunization (UCI) village coverage, coverage of giving Fe to pregnant women, coverage of TB and HIV case discovery, achievement of diarrhea sufferers, services for hypertension sufferers, service achievements for People with Serious Mental Disorders, service coverage for diabetes sufferers mellitus.

The variable type of health worker is categorized into complete and incomplete based on the nine types of health workers that must be in the health center. The variable number of health workers is categorized into appropriate and inappropriate based on the number of workers in each type based on minimum health center staffing standards. Data processing was carried out with the help of a computer program. The analysis carried out was in the form of univariable analysis by presenting the frequency distribution of each variable and bivariable analysis to determine the relationship between variables. This research variable is categorical, so the statistical test used is the crosstabulation test with Chi-Square.

## RESULTS

Lamongan Regency has 32 health centers consisting of 31 inpatient health centers and 1 non-inpatient health center.

**Table 1.** Completeness, Adequacy and Achievement of MMS Indicators in the Health Sector Types of Health Personnel in Lamongan District Health Centers

Variabel		N	%	Total
Equipment types of health workers	Appropriate	6	18.75	32
	Not appropriate	26	81.25	
Sufficient quantity	Appropriate	5	15.625	32
	Not appropriate	27	84.375	
Achievement of Minimum Service Standards	Achieved	8	25	32
	Not achieved	24	75	

Source: Lamongan District Health Profile, 2022 (Lamongan, 2023)

Based on Table 1, the distribution of community health centers according to the type of health personnel is complete. It can be seen that the majority of community health centers do not have complete health personnel. The distribution of health centers according to the number of health workers based on the minimum health center staff standards shows that the majority of health centers do not yet have the minimum number of health workers according to the minimum health center staff standards. The distribution of community health centers based on the achievement of the Minimum Service Standard Performance Indicators shows that only a small number of community health centers have achieved the Minimum Service Standard Performance Indicators in the health sector.

**Table 2.** Relationship between Types of Health Workers and Achievements of MMS Performance Indicators in the Health Sector

Variabel		Achievement of Minimum Service Standards		Total	p-value
		Achieved	Not achieved		
Equipment types of health workers	Appropriate	4	2	6	0.009
	Not appropriate	4	22	26	
Sufficient quantity	Appropriate	4	1	5	0.002
	Not appropriate	4	23	27	

Source: Lamongan District Health Profile, 2022 (Lamongan, 2023)

Description: Level of significance ( $\alpha = 0,05$ )

Table 2 shows the results of the Chi-Square test, with a value of  $p = 0.009$ ; this value shows that there is a relationship between the types of health workers in the health center and the achievement of the Minimum Service Standard performance indicators in the health sector. The relationship between the number of health workers and the achievement of the Minimum Service Standards performance indicators in the health sector shows that the results of the Chi-Square test obtained a value of  $p = 0.002$ ; this value shows that there is a relationship between the number of health workers based on the minimum health center staff standards found in the health centers and the achievement of the Minimum Service Standards performance indicators in health.

## DISCUSSION

The level of achievement of the Minimum Service Standards performance indicators in the health sector is greatly influenced by the commitment of the regional government to implement them. There are regional governments that have high commitment. However, some regions still have difficulty translating Minimum Service Standards for the Health Sector into the form of programs and activities as well as implementation in the field. According to research results, it is stated that the implementation of Minimum Service Standards in the Regency/Municipal Health Sector in each district/city shows differences in achievement, both in terms of coverage and in understanding the operational definition and understanding contained in each indicator of the Minimum Service Standards. Health. Differences also occur at the operational level, where some districts/cities have implemented it within a certain legal umbrella at the regional level, carried out advocacy, and prepared budget plans based on Minimum Service Standards. However, some districts/cities have not taken much action regarding the implementation of Service Standards, at least in the Health Sector.

The results of the study found that the adequacy of the types and number of health workers in Lamongan Regency is still low. This may be due to the geographical location and socio-economic conditions of Lamongan Regency so that health workers working in Lamongan Regency still depend on residents. Regions with better socio-economic environments and career prospects will attract more health workers. For rural areas, recruitment and retention of health workers is a major obstacle. After graduating, many students want to work in urban areas because there are more and more large hospitals, which have higher salaries, more opportunities to learn advanced technology and career promotion. (Yang et al., 2019; Dong et al., 2023; Thammatacharee et al., 2023). Apart from that, the recruitment process also influences the adequacy of the type and number of health workers. According to a study, health workers who enter through internal health facilities have a 10% higher tendency to choose jobs in the regions than those recruited through national entrance exams (Mabunda et al., 2020; Chen et al., 2019).

Addressing the problem of maldistribution of health workers, we can take points from research conducted in Thailand. In a study in Thailand regarding the equal distribution of health workers, it was found that the distribution of all health professionals, especially doctors, in provincial and regional hospitals was slightly greater in provinces that were more economically developed. From a macro perspective, the distribution of all health professionals in Thailand is relatively even across all provincial economic statuses. This may be due to extensive health infrastructure development and rural retention policies over the last four decades (Witthayapipopsakul et al., 2019). Equalization of health infrastructure must be carried out for the sake of equal distribution of health workers and better health outcomes.

The results of the bivariable analysis show that there is a relationship between the type of health worker and the achievement of the Minimum Service Standard performance indicators in the health sector. This is in accordance with the results of research conducted by Mustara in 2018, which shows

that there is a significant relationship between the variables of the type of midwife, doctor and pharmacist and the average achievement of the Minimum Service Standard performance indicators in the health sector (Mustara & Purwaningrum, 2018).

Achieving Minimum Service Standards in the health sector cannot be separated from health personnel factors, both in terms of the number and type of health personnel. The availability of health workers greatly determines the condition and prospects of public health and plays an important role in sustainable human development. It is known that the number of health workers is significantly related to health outcomes in certain areas. A study found that the number of health workers is significantly related to the mortality rate for infants and children under five years of age, as well as the maternal mortality rate (Zhu, 2018). Areas with low health workforce density are also often areas with the worst health outcomes. For example, states in north central India with the lowest density of health workers have the highest infant mortality rates in the country (Robyn et al., 2015; (Walton-roberts et al., 2017). This shows that there is a relationship between the number of health workers and health outcomes in an area.

A study found that populations with lower mortality rates tended to have slightly larger numbers of health workers; the overall distribution of health workers based on need is more even in Fiji compared to many developing and developing countries. The overall shortage of health workers can be addressed by creating a new cadre of health workers, employing an increasing number of foreign doctors, including specialist doctors, and increasing funding for health worker training, as the Fiji government has indicated (Wiseman et al., 2017).

Maldistribution of health workers can arise due to the low number of health workers who are residents of an area. In addition, the choice of health workers' workplace to private health facilities or to city center areas that have higher incomes causes maldistribution of these health workers. Maldistribution and shortage of health workers result in poor service functioning and inequality in access to health services (Mabunda et al., 2020; Id et al., 2023). When stakeholders provide support for the management system for moving health workers out of the region and provide the rights that health workers obtain, it is hoped that there will be policies that increase the strengthening of the health system (Yakubu et al., 2023). Policies that can be implemented to overcome the maldistribution of health workers in improving the quality and equality of health include increasing the budget allocation for recruiting health workers, implementing redistribution strategies, carrying out training and improvements to optimize the quality of health workers, and maximizing the division of duties and authority for health workers (Asamani et al., 2021).

## CONCLUSION

There is a significant relationship between the number and type of health workers at the health center and the achievement of the Minimum Service Standards for Health Services performance indicators at the Lamongan Regency Health Center.

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