

Conference Paper

Fiscal Capacity, Geographical Conditions, and Demography as Contributing Factors to the Availability of Medical Specialist in Public Hospitals in a Remote Area of Banten Province

Indriya Purnamasari, Dumilah Ayuningtyas, and Ni Nyoman Dwi Sutrisnawati

Hospital Administration Studies, Faculty of Public Health, University of Indonesia

Abstract

Meeting the shortage of medical specialist in remote areas is a challenge for local governments in the era of decentralization. Many factors such as the socio-economic, geographic, and demographic conditions contribute to this challenge. This research analyzes the various factors that influence the availability of medical specialist in the Malingping District Hospital in a remote area of Banten Province. A qualitative approach was taken, employing in-depth interviews and research observations in Malingping District Hospital.

Malingping is a remote and underdeveloped area in Banten Province. The research revealed that the availability of medical specialist in Malingping District Hospital was inadequate, both in terms of number and type. Difficult geographical conditions and inadequate infrastructure cause there are limited means of transportation for reaching Malingping, which greatly affects the flow of people and goods. Remote location and heavy terrain with curving, uphill and downhill contours makes access to Malingping so difficult. The size and growth of the population is relatively stagnant. Moreover, development tends to be slow, and the economy of the region is still underdeveloped. Many medical specialist do not want to visit, work, and settle in Malingping.

Based on this study, it can be concluded that the motivation of medical specialist to work in a region, particularly a remote area, is greatly influenced by the location, geographical condition, economic development, population number, and significant growth. Concrete efforts are needed to provide access to remote areas, as are efforts that strive toward regional development that directly affects the regional economy, attracting professionals including medical specialist to work in these regions.

Keywords: medical specialist, availability, external factors, remote areas.

Corresponding Author:
Dumilah Ayuningtyas
Indriya Purnamasari
indriya_rahmadi@yahoo.co.id

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1. INTRODUCTION

According to the Indonesian Medical Council, the number of registered specialists in 2015 was 23,025. Studies conducted by Ilyas (2006) suggested that, in major cities, the average ration of medical specialist reaches 8.4 for every 100,000 people; meanwhile, in remote areas, the average ration of medical specialist is 0.8.

Indonesia is not the only country with inadequate medical specialist. According to a study by Nojima et al. (2014), Oki Hospital—a hospital located on Oki Island, one of the remote areas in Japan—has difficulties in providing specialists because of their reluctance to work there.

Banten Province is located close to the city of Indonesia, but there are numerous remote areas in Banten. One is Lebak Regency which is the furthest regency from Serang City, the provincial capital. One of the remote areas in Lebak is Malingping in the southernmost part of Banten Province.

It is difficult for Malingping residents to access a good health service. The Banten government established a district hospital in Malingping in 2005, which aimed to provide Malingping residents with access to the health care system. Nevertheless, the number and types of medical specialist at Malingping Hospital are still very poor to serve the community in the Malingping, as presented in table 1.

TABLE 1: The Number and Type of Medical Specialist in Malingping District Hospital, 2016.

Types of medical specialist	Number
Internal Medicine Physician	2
Pediatrician	1
Surgeon	2
Obstetrician Gynecologist	0
Anesthesiologist	2
Pathologist	1
Otorinolaringologi	1
Total	9

Many medical specialists are reluctant to work in Malingping. This study focuses on exploring the influence of the location and geographical condition of the region with the availability of medical specialist in Malingping District Hospital.

2. METHODS

This research used a qualitative approach and a case study design. The data was obtained through in-depth interviews with all research participants and through direct observation of the targeted research setting. The data used in this research are primary data, with secondary data from a literature review. The participants were from different institutions at the provincial or regency level as well as from Malingping District Hospital. This research was conducted in Serang, Rangkasbitung, and Malingping, with in-depth interview as an instrument. The supporting instruments, other than stationary, were a voice recorder and digital camera.

2.1. Conceptual Framework

This research employs a systematic approach based on classical theory from Donabedian concerning health care quality. This is combined with the imbalanced health care framework by Zurn and Pascal *et al.* (2004). There is an imbalance in the distribution between health workforce supply and demand, which is influenced by factors that are internal and external. The internal determinants are policy for health care and non-health care services; health care systems affected by failure of market, stakeholder, regulation, tardiness, and potential market power; budgeting or finances and knowledge, the usage of health care facilities; training and workshop for the health workforce; and the participation of the health workforce, and the migration of the health workforce. External determinants are economy, socio-demography, culture, and geography.

3. RESULTS AND DISCUSSIONS

3.1. Location and Geographical Condition

Malingping district is located in the southernmost part of Banten Province and juxtaposes the Indian Ocean. Banten Provincial Government Representative Office is not available in Malingping district. There is only one type of public vehicle that passes through the area, and even then it is very rare because the terrain is quite heavy. Every vehicle has to go through a narrow and winding road, on a land with uneven contours, uphill and downhill. The severe damage on some roads makes more difficult

to access the Malingping area. The distance from Jakarta is 300 km and the journey takes 8–10 hours.

Malingping is varied in topography. It is close to the sea and surrounded by mountains. There are different types of terrain or types of land use such as dense forest, plantation, and rice fields. This geographical variety affects Malingping's weather.

"Malingping is very far. The road is very rugged. We have the coastline road, mountain, then going through the dense forest...This geographical condition affects the weather, really warm in the afternoon, rather cool at night."

The isolation of the Malingping area is one of the contributing factors that influence the availability of medical specialist in Malingping District Hospital.

"It is really difficult to get around...The road is terrible...I never have imagined to actually get hired in this place."

Malingping has abundant natural resources. However, the lack of good infrastructure is one of the major obstacles for outsiders who wish to visit Malingping, or to work and live there. This situation causes development in Malingping to stagnate. The public health sector is also affected because of a health workforce shortage. When coupled with a regional government policy that demonstrates reluctance, the development of Malingping is significantly hindered.

3.2. The Population Size and Growth

The Malingping population is quite large, this is related to Malingping's status as the second largest sub-district from all sub-districts in Lebak District, after the sub-district of Rangkasbitung. Based on data from Central Bureau of Statistics of Lebak Regency (2016), the population of Malingping is about 63.721 with less significant population growth.

"The increase is not significant, Malingping is very far. Not only that it is very far but also very quiet...Coupled with slow business, it makes the purchasing power of the people low..."

The slow rate of population growth in Malingping is due to stagnant economic development. This has resulted in a lack of interest amongst people to stay in Malingping.

"...People are living in the outskirts...The population size has no direct consequences to the hospital. They have no idea about the specialists...they rarely come to the village center..."

“Medical specialist would think twice for coming...I already offered and asked medical specialist to come and work here but there was no interest...”

Population migration from Malingping is rare. This obstructs the flow of information out of the region regarding the health care of the local residents and compounds the lack of interest in health care quality. It also means they are uneducated regarding the significance of the available health care facilities.

3.3. Regional Economic Development

The majority of the Malingping population are fishermen, farmers, civil servants, traders, entrepreneurs, and clerks. The revenue of Malingping residents is around Rp. 3,000,000.

“Fisherman...there are others who work in palm oil plantations and also you know civil servants...The revenue? I would imagine 1.5-3 million...The effect towards medical specialist? The amount of revenue affects their perception on how to treat illness...if they have money they will choose a specialist...”

The economic disparity between the local residents is based on the type of work and income. This determines the number of people who understand the importance of a good quality health care service and who utilize the hospital service.

“I feel sorry for those who have indecent income...How difficult it is for them not having health insurance. This affects the medical specialist working here. Other specialists usually choose to work in an established city where the society already has the awareness to utilize the hospital’s health care service.”

In 2007, the Board of Health Manpower for Health Empowerment and Development (BPPSDM Kesehatan) of the Ministry of Health identified the factors influencing the interests of the health workforce, including medical specialist; among these is the average purchasing power of the members of society.

Development in the health sector cannot happen without the support of other factors; as such the development of health services. The development of health services here means the availability of quality and affordable health services for all communities. The effort requires a strong financial commitment from the regional government budget as well as from the central government. Most of the regional budget of Lebak Regency, particularly in Malingping, is from the plantation, mining, and fishery sectors.

"This region contributes significantly to the regional budget for Lebak Regency. The plantation product, especially palm oil, is a major contributor to the regional budget of Lebak...We also have timber product, mining operation even though they are not major contributor. This area should be well off financially, but there are many inadequate facilities..."

"...Around 80% of the Lebak Regency revenue stream comes from Malingping...and Malingping also contributes 60% of the total Banten Provincial budget...Our major contributor comes from plantation and farming. For the mining operations and fisheries, we have those, but what becomes the major revenue is tourism industry."

If the Malingping regional budget becomes part of the Lebak Regency, then it will be utilized for the development of Lebak. Thus, Malingping District Hospital will automatically fall under the Banten provincial budget, which will be used to help the development in Banten.

According to the Regional Government Act Number 23 [11], the provincial government is considered as an extension of central government policy. This is shown in the efforts of Banten's provincial government to establish Malingping District Hospital in the Lebak Regency in order to realize the central government's policy for providing access to health care services.

"If the government does not care very much, it's difficult...The hospital also depends on the region condition. If the region is good, then the people's economy will be good, and will have positive effect to the hospital...Medical specialist would want to come here. The hospital will also get the benefit, more patients because of better economy and knowledge..."

The Banten government has taken efforts to optimize Malingping District Hospital, but must be supported by concrete efforts from the Lebak government to build supporting infrastructure.

"...The priority of the Governor and Regent is not always the same. Well, I think they have to find some kind of solution to work together...That's how they make the commitment"

The health care service in Malingping District Hospital is inefficient because of the limitations in human resources and hospital equipment. The ineffectiveness of communication and coordination in the regional government is considered to be the root of the problem.

In the health sector, the policy for managing the regional budget of Banten Province needs to be in line with the management of the regional budget of Lebak. Both governments need to cooperate and coordinate more effectively to prioritise the development Malingping.

“Malingping’s budget goes to Lebak, not to the province. If the coordination between governments goes well, it should not be like this...Medical specialist will be reluctant to come, patients will be neglected...What is important is the commitment for Malingping to progress...”

The large regional budget does not translate into good development in the area; only a few areas in Tangerang are developed. At least there is a serious commitment to prioritizing development in remote areas.

The development process is not entirely absent, but the development efforts, which are not well planned and coordinated, fail to address needs. They also do not use an order of priority or involve all stakeholders.

Conditions and financial capacity of the region have an impact on the influence of regional development on the health sector. Local fiscal capacity is determined by the amount of revenue that influences the region’s ability to optimize the health service, which includes the availability of infrastructure and health care facilities, the availability of medical equipment and medicines, the availability of health human resources, and the compensation—both material and non-material—for health professionals, including medical specialist.

If the areas are able to manage their budget and to serve the needs of the public, then community needs in the region will be fulfilled. If the local government has a serious commitment to public health services, there must be a real effort to recruit health professionals, accompanied by adequate financial compensation and convenient facilities.

The revenue of Banten Province provides large incentives, which are enough for specialists; this includes medical specialist working in Malingping District Hospital, who would receive Rp. 30,000,000. But the incentive does not necessarily improve motivation and retention; Dieleman and Harnmeijer (2006) proposed that the retention of the health workforce is influenced by four health system determinants: macro health systems, micro health systems, individuals, and environmental factors.

In general, this study or research in Malingping seeks to explore the factors such as geographic location and geographic conditions ; the number and growth of population

; the economic condition ; and also its effects of the availability of specialists in the Malingping region, as illustrated in Table 2.

TABLE 2: Factors and Their Effects on the Availability of Medical Specialist in Malingping.

Variables	Findings	Effects
Location and Geographical Condition	Too far, isolated, varied topography, lack of infrastructure e.g., transportation.	Access is difficult.
Population Size and Growth	Rather large and slow growth, migration is rare.	Obstruction of outside information flow.
Regional Economic Development due to Fiscal Capacity	Should have adequate regional budget; Malingping District Hospital managed by Banten Government and depends on Banten Provincial budget, but Malingping District managed by Lebak Regency.	Lebak Regency and Banten Province had their own budget management, different priorities, lack of coordination, and inadequate commitment to utilize their fiscal capacity in the health sector.

4. CONCLUSION

The availability of medical specialist in the region—particularly in remote areas such as Lebak in Banten Province where Malingping District Hospital is located—is influenced by factors such as location and geographical conditions, the size and rate of growth of the population, and local economic conditions. These factors evidently have a strong correlation in causing impact among other factors. It means that each factor affects other factors. However, it can also be concluded that shortages in the number, type, and distribution of medical specialist in the province of Banten, particularly in Malingping are predominantly caused by the long distances and long travel times from the Lebak or the Banten capitals.

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