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Equal Distribution of Needs for Health Workers in Southeast Sulawesi Province

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ABSTRACT

Introduction: The uneven distribution of health workers in Southeast Sulawesi Province can cause gaps in access and quality of health services. This study aims to analyze the distribution of health worker needs in the island and mainland areas of Southeast Sulawesi Province.

Method: This type of research uses a Qualitative method with a descriptive approach. The respondents in this study were the Head of the Health Service and the Head of the Health Center as many as 20 people. Data analysis used Content Analysis.

Result: The equal distribution of health workers needs in the island and mainland areas of Southeast Sulawesi Province still faces several problems in input factors. One of the main problems in the equal distribution of health workers is the uneven number of health workers in various regions, especially in the island and mainland areas. Some regions may experience a shortage of health workers, while other regions have excess or unbalanced concentration. This shortage of health workers can cause a heavy workload for existing health workers, reduce the quality of health services, and increase the risk of fatigue in health workers.

Conclusion: It is necessary to address the uneven distribution of health workers with a strategic placement policy for health workers in island and mainland areas. The government must strengthen health infrastructure in remote and isolated areas.

Introduction

Health Human Resources are one of the main elements in increasing the competitiveness of health services, as well as the backbone of health service efforts in facing the increasing number and proportion of the productive and elderly

population in the future.^[1] Health Human Resources (HRH) are people who work actively in the health sector, whether they have formal health education or not, which for certain types requires authority in carrying out health efforts.^[2]

Health Human Resources is an important part of efforts to improve public welfare and health in Indonesia. Health Human Resources is the spearhead of health services in the field, both preventively, promotively, curatively, and rehabilitative.^[1] According to Law Number 36 of 2014 concerning health workers, it states that health workers are part of HRD. These workers consist of medical personnel, clinical psychology personnel, nursing personnel, midwifery personnel, pharmaceutical personnel, public health personnel, environmental health personnel, nutrition personnel, physical therapy personnel, medical technician personnel, biomedical personnel, traditional health personnel and other health personnel.^[3]

Presidential Regulation Number 72 of 2012 on the Implementation of the National Health System states that the Health Human Resources (HR) subsystem as the implementer in health efforts needs to have sufficient quantity, type, and quality, as well as fair and even distribution according to the needs of health development.^[4]

Health human resources are important, therefore professional and qualified human resources are needed in the implementation of a health system, so that health development goals can be achieved. The national health system is implemented in stages by the Central Government and Regional Governments in accordance with the authority of the Region and the authority of the health sector.^[4] However, the reality of human resource issues is still a problem that must be considered, a change in mindset is needed that human resources are an important thing in health development and management of the national health system.^[5]

Equal distribution of health workers is an effort to create an even distribution of health workers, such as doctors, nurses, midwives, nutritionists, and other health workers, throughout a country or region.^[6] The goal of equity is to ensure fair and equal access to health services for the entire population, regardless of geographic location or socio-economic conditions. Equity in health workers is important because uneven distribution can lead to disparities in access to and quality of health services. Some areas, such as rural areas, border areas, or island areas, often have difficulty in attracting and retaining adequate health workers. This can result in low availability

of health services, high mortality rates, and health disparities between well-served and underserved areas.^[7]

Efforts to equalize health workers involve policies, strategies, and interventions aimed at reducing inequality in the distribution of health workers. Some steps that can be taken include Placing health workers in areas in need through adequate incentives and facilities, Developing education and training programs to increase the number and competence of health workers in underserved areas, Improving health infrastructure in remote, border, or island areas and developing telemedicine systems or digital technology to improve access and quality of health services in remote areas as well as developing financial policies that support accessibility of health services for people in underprivileged areas.^[8]

Island and inland areas often face geographical challenges such as limited access, poor transport infrastructure and different living conditions.^[9] These factors can affect the availability and accessibility of health services, as well as the willingness of health workers to work in the area. Therefore, equalizing the need for health workers in areas with geographic and social challenges is important.^[10]

The 2020-2024 National Medium-Term Development Plan outlines that human resource development is prioritized through strategies to improve basic services and social protection (including health), increase productivity, and build character. In the health sector, several highlights of the 2024 targets include the fulfillment of basic health services and reducing the Maternal Mortality Rate (MMR) to 183 per 100,000 live births and In 2030, the world is pushing for a target to reduce maternal mortality to below 70 per 100,000 live births. Meanwhile, the proportion of infant and toddler mortality is targeted to decrease to 12 per 1000 live births.

The existence of health infrastructure and the provision of adequate human resources are very important in supporting the provision of quality health services. Health infrastructure includes various health facilities in the province. The provision of adequate human resources, such as doctors, nurses, midwives, nutritionists, and other health workers, is very important in providing quality health services. Adequate human resources and good health infrastructure are crucial

factors in providing optimal health services and answering the health needs of the community in the region.^[11]

Several studies have shown that the condition of health workers utilized in Indonesian Community Health Centers is currently still experiencing inequality in number and distribution. Based on the ratio, the number of health workers in Indonesian Community Health Centers has not met the needs of the large Indonesian population. Based on the distribution of health workers in Indonesian Community Health Centers, they are more concentrated in the western part of Indonesia compared to the central and eastern regions, this is because the population is larger and health facilities in the western part of Indonesia are more complete than the central and eastern parts of Indonesia, so that this can hinder health development which aims to provide fair and equitable quality services for all Indonesian people (Romadhona & Siregar, 2018).^[5]

The results of other studies show that there is an imbalance in the distribution of health workers between health centers located in areas with high and low household economic levels, geographical locations based on urban/rural and remoteness, even provinces. Health centers in Eastern Indonesia experience more shortages of personnel, especially doctors and midwives, and the low number of community health workers proves that primary health services that are oriented towards promotion and prevention are neglected.^[12]

The health workforce crisis is increasingly felt in underdeveloped areas, which has hampered Indonesia's overall development. This condition is

Increasing maternal mortality rates, and high disease prevalence in several remote or underserved areas. Therefore, it is important to analyze and address the problem of equalizing the need for health workers by conducting strategic placements, increasing accessibility to health services, developing adequate health infrastructure, and policies that support the improvement of health human resources in the Southeast Sulawesi region.

The condition of health workers utilized in Indonesian Health Centers is currently still experiencing inequality in number and distribution. Based on the ratio, the number of health workers in Indonesian Health Centers has

also exacerbated by the low retention of health workers to serve in these areas. As research has been conducted. Based on the analysis conducted, the policy of recruiting health workers from underdeveloped areas is highly recommended. In addition, work contracts through educational scholarship mechanisms also show good retention. Compulsory work with adequate infrastructure support also needs to be considered as an effort to increase access to health workers in underdeveloped areas. Providing both financial and non-financial incentives to health workers in underdeveloped areas contributes to their comfort. This recommendation can be used by the central and regional governments to accelerate health development in underdeveloped areas through policies to increase health worker retention.^[13]

Most of the health center areas fall into the criteria of remote and very remote. The shortage of dentists and pharmacists is common in remote or very remote health centers, while nurses and midwives are the health workers that are widely available in health centers.^[14] Availability of health workers The district/city health service is still a problem. The lack of several health workers in health service facilities is still common. Such as research conducted by Sugiharti et al., found that the problem of health services in most hospitals in ten districts/cities is the inadequacy of health workers because the number of health workers is limited with concurrent tasks or jobs.^[15]

The impact of the imbalance in the distribution of health workers can be seen in public health indicators, such as high infant mortality rates

not met the needs of the large Indonesian population. Based on the distribution of health workers in Indonesian Health Centers, they are more concentrated in the western part of Indonesia compared to the central and eastern regions, this is because the population is larger and health facilities in the western part of Indonesia are more complete than in the central and eastern parts of Indonesia.

There is an imbalance in the distribution of health workers between health centers located in areas with high and low household economic levels, geographical locations based on urban/rural and remoteness, even provinces. Health centers in the Eastern Indonesia region experience more

shortages of personnel, especially doctors and midwives, and the low number of community health workers proves that primary health services that are oriented towards promotion and prevention are neglected.

The uneven availability of health facilities, health workers and highly varied geographical conditions, give rise to the potential for widening injustice in the use of health in communities in several regions in Indonesia, including in Southeast Sulawesi Province.

Method

This type of research uses a qualitative method with a descriptive approach. This type of research is qualitative described in a descriptive form according to the research with the aim of analyzing the problem of health worker needs in areas with mainland categories and in areas with island categories in Southeast Sulawesi Province. The selection of research locations in Kendari City, North Konawe Regency, Bau-Bau City and Wakatobi Regency as island and mainland areas in Southeast Sulawesi is based on several considerations of researchers by mentioning several considerations including the area is a representative picture of the area of equal distribution of health worker needs between island and mainland areas in Southeast Sulawesi. The location was chosen because there are special problems or challenges that are relevant to the equal distribution of health workers in island and mainland areas based on the Regency and City Renbut Document. The respondents in this study were the Head of the Health Service and the Head of the Health Center as many as 20 people. Data analysis used Content Analysis.

Results

Health Infrastructure (Nvivo Visualization Source Version 12)

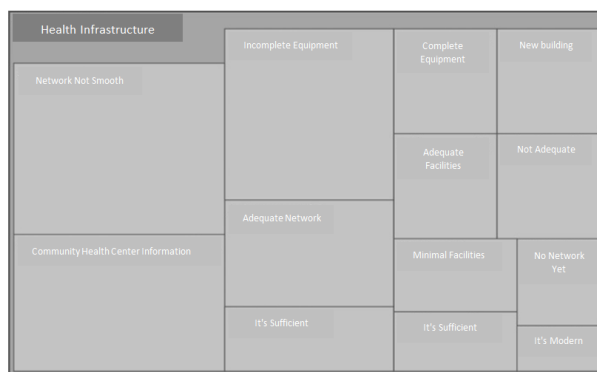


Figure 1. Hierarchy Diagram of Input Indicators on Health Infrastructure

Accessibility (Nvivo Visualization Version 12)

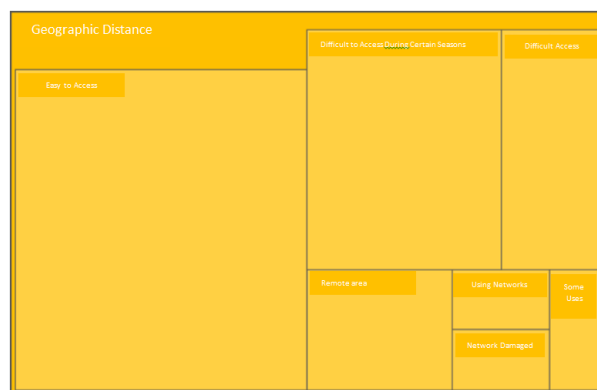


Figure 2. Input Indicator Hierarchy Diagram of Accessibility

Access Fee



Figure 3. Input Indicator Hierarchy Diagram of Access Costs

Placement of Health Workers



Figure 4. Hierarchy Diagram of Process Indicators on Health Workforce Placement

Facility Support

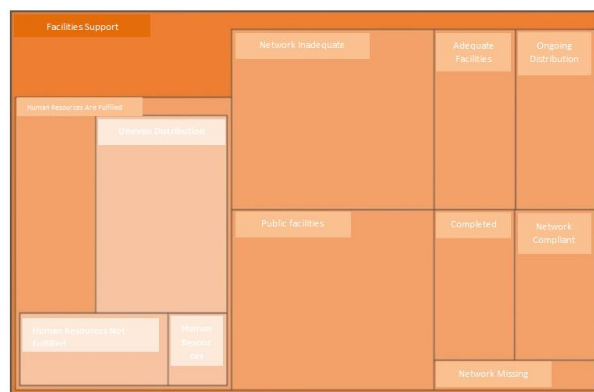


Figure 5. Process Indicator Hierarchy Diagram on Facility Support

Discussion

In the context of equalizing the need for health workers, input, process, and output indicators are interrelated to achieve the goal of equalizing health services in a region. Input indicators include the number of health workers, health infrastructure, and accessibility to health facilities in a region. Process indicators provide an overview of the extent of health worker placement and support. The equalization process can be seen in actions such as the even distribution of health workers in various locations, the implementation of inclusive health programs, and success in providing equal and quality health services to the

entire population, including in remote or isolated areas.

Output indicators assess the results or achievements of efforts to equalize the need for health workers. This can be a public health indicator by referring to the Regulation of the Minister of Health Number 4 of 2019 concerning Minimum Service Standards in Health Facilities which include Health services for pregnant women, Health services for mothers giving birth, Health services for newborns, Health services for toddlers, Health services for elementary school age, Health services for productive age, Health services for the elderly, Health services for people with hypertension, Health services for people with diabetes mellitus, Health services for people with severe mental disorders, Health services for people suspected of having tuberculosis, Health services for people at risk of infection.

These three indicators are interrelated and influence each other. With adequate and even input, effective and inclusive health service processes, and outputs that show improving and even health indicators, it can be considered that efforts to equalize the need for health workers have been successful. It is important to continue to monitor and evaluate these three indicators periodically, so that efforts to equalize health workers can continue to be improved and have a positive impact on the entire population in a region.

Problems of Equalizing Health Workforce Needs Reviewed from Input Indicators

Health workforce equity refers to efforts to ensure that adequate and qualified health workers are evenly distributed throughout a country or region. An adequate and equitable number of health workers is essential to ensure public access to quality health services, especially in remote, isolated areas or areas with difficult transportation access.

When compared to islands and mainland, urban and district categories have different problems, although there are some aspects that are

similar. The overall lack of health workers is also a problem. This is especially true in areas with low population density such as urban areas or in remote areas in the district. As a result, people in these areas may face difficulties in obtaining adequate health services.

Effective distribution of health workers cannot be separated from the importance of equal distribution of health infrastructure. Health infrastructure includes physical facilities and infrastructure that support the provision of health services in a region. In North Konawe and Wakatobi Regencies, there is still limited infrastructure, such as the availability of networks, health center health equipment, human resources and other needs that must be there. Efforts to equalize health infrastructure aim to provide equal and equitable access for the community to obtain quality health services in various regions, including remote, isolated areas, or areas with limited access to transportation.^[16]

Several studies have found that several problems that often arise related to the distribution of health infrastructure include: Some areas may have limited or even no availability of health facilities. The lack of health facilities makes it difficult for people in the area to obtain adequate and timely health services.^[17]

The problem of equality in terms of the number of health workers can arise from several aspects. First, uneven distribution causes some areas to experience a shortage of health workers, while other areas may experience a surplus or disproportionate excess. This can cause disparities in access and health services in various areas.^[16]

Not only the availability, but the quality of health facilities is also an important concern in the distribution of health services. Some areas may have health facilities, but the quality of services and medical equipment available does not meet the expected standards, resulting in suboptimal services. Remote, isolated areas, or areas with limited access to transportation often face challenges in reaching health facilities. Poor road infrastructure and transportation facilities can

hinder people from accessing appropriate health services.^[14]

Geographical distance is an important factor in determining the accessibility of health services in a region, especially in areas with difficult topography, such as islands. Areas located far from urban centers or large health service centers often have difficult access to health facilities. Long distances and poor infrastructure conditions can cause people in these areas to face difficulties in obtaining timely and quality health services.

In island areas, access to health facilities can be more complicated because they have to use sea transportation which may not always be readily available. This can make it difficult for people to reach health services, especially when there is an urgent need. Some areas may have limited or no health facilities, so people have to travel long distances to reach adequate health services.^[5]

The problem of equal distribution of health worker needs can be seen from various input indicators that affect the availability of human resources and health facilities in a region. One of the main problems is the limited number of adequate health workers, especially in remote or isolated areas. Many health workers tend to live in urban areas or large health centers, so that rural or island areas often face limitations in the number of available health workers. In addition, the uneven distribution of health workers is also a serious problem. Some areas may have a high concentration of health workers, while other areas are lacking or even have no health workers at all.

This can lead to gaps in accessibility and unfair health services between one region and another. Another problem is related to the quality of education and training of health workers, which can affect the competence and skills of health workers in providing health services. Health facilities, such as hospitals, health centers, clinics, and other medical facilities, are also an important part of the input indicators. In some areas, especially in remote or island areas, the availability of health facilities and infrastructure can be limited, resulting in difficulties in providing

optimal health services. Limited health budgets at the regional or national level can also affect the distribution of health workers.^[17]

If the budget allocated to the health sector is limited, then efforts to increase the number of health workers and improve accessibility of health services in areas in need may be hampered. Therefore, there needs to be an integrated and continuous effort to overcome the problems in this input indicator in order to achieve better and more equitable distribution of health worker needs across all regions.^[18]

Problems of Equalizing Health Workforce Needs Reviewed from Process Indicators

Equalization of health workers through strategic placement is an effort to allocate health workers evenly in various regions, including remote, isolated areas, or those with limited access to health services. Strategic placement of health workers aims to improve accessibility and quality of health services for the entire community, regardless of geographic location or socio-economic status.

Both Island Regions and mainland areas, Urban and District areas still experience a shortage of health workers, especially in remote or isolated areas with very difficult access. This can cause a heavy workload for existing health workers and have a negative impact on the quality of health services. Some areas may have an excess of health workers that do not match the needs, while other areas experience a shortage. This inequality in placement can lead to inequalities in access and quality of health services. Some health workers may not be interested in working in remote or isolated areas for various reasons, such as lack of facilities and support, difficulty in accessing transportation, or lack of career development opportunities.

Equal distribution of health workers also includes aspects of supporting health facilities that are evenly distributed across regions. Support for health facilities plays an important role in improving the quality of health services and

providing adequate services to communities throughout the region, including remote, isolated areas, or those with limited access to transportation. Several problems that often arise related to support for health facilities in equal distribution are the limited availability of medical facilities and equipment in remote areas, which results in less than optimal health services. In addition, the lack of funds for maintenance and development of facilities can also be an obstacle in ensuring adequate and quality health facilities throughout the region. To achieve equal distribution of health workers through facility support, steps are needed such as improving and developing existing health facility infrastructure, increasing the procurement and maintenance of modern and standard medical equipment, and allocating sufficient funds to ensure the sustainability and progress of health facilities throughout the region. By paying attention to equal support for health facilities, it is hoped that health services can be improved and communities in various regions can obtain equal and quality access to health services.^[19]

The problem of equal distribution of health worker needs can also be seen from various process indicators that affect accessibility and equality of health services in a region. One of the main problems is limited accessibility of health services, especially in remote, isolated areas, or in mountainous or island areas. Limited infrastructure and transportation often make it difficult for people to reach adequate health facilities, so that health services are less evenly distributed and less available to people in the region.

In addition, problems can also arise from the unequal quality of health services in various regions. This factor can be influenced by the limited number of unqualified health workers, the lack of adequate medical facilities and equipment, and the lack of support and supervision from the authorities. Irregularity in health programs and the discontinuity of health services can also be obstacles in achieving optimal distribution of health workers. Therefore, efforts are needed to

improve accessibility, quality, and equality of health services throughout the region, especially in underserved areas.^[16]

Problems of Equalizing Health Workforce Needs Reviewed from Output Indicators

The problem of equalizing the need for health workers can also be reflected in various output indicators that describe the results or achievements of the equalization efforts. One of the problems that arises is the uneven distribution of public health indicators in various regions. Such as the low achievement of mandatory health service coverage in Kendari City, Bau-Bau City, North Konawe Regency and Wakatobi Regency, which provides an illustration of the many problematic factors that occur.

Equal distribution of health workers through output indicators is very important in increasing the coverage of health services in the island and mainland regions. However, the low achievement of health service coverage in various age groups and health conditions is a challenge that needs to be overcome.^[20]

Maternal health services, maternal health services, and newborn health services are important indicators in efforts to reduce maternal and infant mortality rates. However, in island and mainland areas, the low coverage of these services can be caused by limited health facilities and a lack of trained health workers to provide these services. This can make it difficult for pregnant women and babies to get the right and quality services.

Health services for toddlers and those at primary school age are also important to maintain children's health and improve the health of future generations. However, in island and mainland areas, the coverage of health services for these groups may be low due to limited health facilities and lack of health workers who focus on children's services.

Health services for productive and elderly people, including services for people with hypertension, diabetes mellitus, severe mental

disorders, suspected tuberculosis, and risk of HIV infection are also important concerns in the distribution of health workers. However, in the islands and mainland, the low coverage of these services can be caused by lack of accessibility and limited health facilities that are able to provide specialist services.

To overcome the low achievement of health service coverage in the island and mainland regions, efforts are needed to increase the strategic placement of health workers in remote areas, improve health facilities in these areas, and provide special training for health workers in providing services that are in accordance with community needs. In addition, there also needs to be support from the government and related stakeholders in allocating funds and programs that support the distribution of health workers and more equitable health service coverage throughout Indonesia.

Better distribution of health workers requires concrete steps to address the problems in input, process, and output indicators together. These efforts can include the allocation of appropriate resources for education and training of health workers, implementation of policies that encourage equitable distribution of health workers, improvement of health infrastructure and facilities in areas in need, and development of inclusive and integrated health programs.

Conclusion

The problem of equal distribution of health worker needs can be seen from the review of input indicators, which include the number of health workers that is not evenly distributed based on the district/city planning documents. In the review of the process, the placement of health workers is also not evenly distributed, which is seen in the distribution of manpower where some health facilities have excess and some are still experiencing shortages. The low achievement of health service coverage is an output indicator that is apparent in the equal distribution of health

workers. This can be seen from the comparison of differences in the achievement of health service coverage in urban areas between islands and mainland and districts in the island and mainland categories.

It is necessary to address the uneven distribution of health workers with a strategic placement policy for health workers in island and mainland areas. The government must strengthen health infrastructure in remote and isolated areas.

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