



Analysis of Competitiveness of The Health Field of Subang District

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Abstract - Regional competitiveness is an important factor in driving economic growth. Subang Regency has great potential to increase its competitiveness, especially in the health sector. However, there are several weaknesses in Subang Regency's health competitiveness, such as limited health personnel, uneven accessibility of health facilities, and inadequate infrastructure. This research aims to analyze the factors that influence Subang Regency's competitiveness in the health sector and identify appropriate strategies to increase competitiveness through its potential. The research method used is a qualitative approach with data collection through interviews and documentation. Data were analyzed using thematic qualitative data analysis techniques. The research results show that the factors that influence health competitiveness in Subang Regency include the quality and quantity of human resources (HR), availability of facilities and infrastructure, budget, technology, regulations and management. Efforts and strategies that have been made to increase competitiveness include increasing human resource capacity, procuring medical equipment, developing information technology, and improving the quality and accessibility of health services. However, there are still several obstacles that need to be overcome, such as budget limitations, unequal distribution of human resources, and complex regulations. Increasing competitiveness is expected to have a positive impact on people's quality of life and regional economic growth.

Keywords : Competitiveness, health sector, Strategy, Subang Regency.

I. INTRODUCTION

The Indonesian government, in order to realize good, clean and dignified governance, is faced with very broad and complex tasks. One important effort is to increase regional competitiveness through decentralization, as mandated in Law Number 23 of 2014 concerning Regional Government.

The era of globalization requires each region to optimize its resources to increase competitiveness. This is in line with Porter's theory and the Cluster theory of regional competitiveness which emphasizes the importance of industrial clusters and innovation to increase competitive advantage. Development of facilities and infrastructure, investment, access to financial resources, environmental policies, basic services (education and health), and human resource development must be based on efforts to overcome competitiveness gaps between regions (Fauzi and Raharja 2017).

Regional competitiveness is also closely related to economic and health development, as mandated in Law Number 17 of 2007 concerning the 2005-2025 National Long Term Development Plan that development in the health sector is a key factor in increasing the competitiveness of the nation and regions. Health development increases the competitiveness of nations and regions by increasing productivity, reducing work absenteeism, and attracting investment. Thus, health development not only improves people's welfare, but also plays an important role in increasing the competitiveness of nations and regions in the context of competitive globalization.

Law Number 17 of 2023 concerning Health emphasizes that health development must be carried out in a sustainable manner to improve the level of public health, reduce disparities, strengthen quality health services, and increase health resilience.

Even though it has great potential, Subang Regency's competitiveness in the health sector is still lagging behind compared to other regions in West Java. This can be seen from the Regional Competitiveness Index (IDSD) which shows that the IDSD score of Subang Regency is still lower than that of Sumedang, Bandung and Kuningan Regencies.

The development of competitiveness in fulfilling basic services in the health sector and the potential possessed by Subang Regency is a very important basic capital for realizing development progress in Subang Regency. However, this needs to be accompanied by hard efforts from the regional government and its staff, considering that Regency-City competition is getting tighter. According to data from the National Research and Innovation Agency (BRIN) in 2023 regarding the Regional Competitiveness Index (IDSD) in West Java Province, it shows that the competitiveness of Subang Regency with an IDSD score of 3.31, is still inferior to Sumedang Regency which received an IDSD score of 3.48, Bandung Regency with an IDSD score of 3.50, and Kuningan Regency with an IDSD score of 3.41. This research will discuss further how to increase the regional competitiveness of Subang Regency through the potential of Subang Regency, especially in the health sector?

II. RESEARCH METHODS

PeThis research was carried out using a qualitative descriptive approach in accordance with the research objectives. The conceptual framework that will be used in this research is related to the competitiveness of Subang Regency in the health sector based on Michael E. Porter's (1990) model which consists of 5 (five) dimensions:

1. Factor Conditions (Factor Conditions)

Workforce/Health Personnel Competency: This dimension shows the quality and quantity of health personnel in Subang Regency. The indicator is the availability of competent health workers, such as doctors, nurses, midwives and other health workers.

2. Demand Conditions

Health Services in Health Facilities: This dimension shows the quality and accessibility of health services in Subang Regency. The indicator is the coverage of health services in various health facilities (fasyankes), such as community health centers, hospitals and clinics.

Availability of medicines/medical equipment has been functionally tested regularly: This dimension shows the availability of quality and well-maintained medicines and health equipment in health facilities. The indicator is the availability of medicines and medical equipment that are complete and whose function is tested regularly.

3. Related and Supporting Industries

Availability of health facilities or closest network: This dimension shows the availability of health facilities that are adequate and easy to reach by the community. The indicators are the distance of health facilities to where people live and the availability of an integrated health facility network.

Infrastructure and support services: This dimension shows the quality of infrastructure and support services that support health services. The indicators are the availability of infrastructure such as roads, electricity and clean water, as well as supporting services such as ambulances and laboratories.

4. Company Strategy, Structure, and Rivalry (Firm Strategy, Structure, and Rivalry)

Strategy/management of basic health service innovation: This dimension shows the strategies and efforts made by health facilities to improve the quality of health services. The indicator is the implementation of health service innovation, such as the use of information and communication technology, and the development of new services.

Structure/quality management of basic health services: This dimension shows the organizational structure and quality management of health services in health facilities. The indicator is the implementation of health service quality standards, such as JKN-KIS and health facility accreditation.

Competition/improving the quality of basic health services: This dimension shows the level of competition between health facilities in improving the quality of health services. The indicators are community satisfaction with health services and the awards received by health facilities.

5. Government Roles and Opportunities (Government Roles and Chance)

Regional government policies regarding basic health services: This dimension shows the

commitment and policies of local governments in supporting health services. The indicators are health budget allocations, regulations related to health services, and health programs run by local governments.

Health Technology/preparedness in dealing with extraordinary events (KLB): This dimension shows the role of local governments in providing health technology and preparedness in dealing with KLB. The indicators are the availability of sophisticated health technology, an integrated health information system, and preparedness in facing outbreaks.

Based on the required data, the data collection techniques used in this research are:

Wowinterviews conducted with respondents to obtain an overview of competitiveness and basic health services. The informants who were successfully captured in this research were 10 (ten) people consisting of officials within the Subang District Health Service.

Documentation; carried out on documents relevant to research such as: regulations, as well as writings in media that are relevant and related to the research topic.

III. RESULTS AND DISCUSSION

Porter's Five Forces Model can be used to analyze the competitiveness of Subang Regency in basic health services. The following is the analysis based on the interview results:

1. Factor Conditions:

Manpower/Competency of Health Workers: Subang Regency has quite a lot of health workers, but their distribution is not evenly distributed. Some health centers still lack health personnel, especially doctors, dentists, male nurses, health promotion and behavioral sciences, epidemiological surveillance and medical laboratory personnel. The competency of health workers also needs to be improved through training and capacity development. According to 2023 data, Subang Regency has a total of 109 doctors, 26 dentists, 683 nurses, 714 midwives and 52 medical technicians spread across various sub-districts (BPS, 2024).

2. Demand Conditions:

Health Services at Health Facilities: Health services in Subang Regency are considered quite good, but still need to be improved, especially in terms of speed, professionalism and quality of service. The average waiting time for health services at Subang Regency Health Facilities is around 30 minutes. which is still below the recommended national standard of 15 minutes. (West Java Health Office)

Availability of Medicines/Medical Equipment: The availability of medicines and medical devices in several health centers is still limited and not evenly distributed. Maintenance of medical equipment is also not optimal. In 2023, Subang Regency will have 10 general hospitals, 1 special hospital, 40 community health centers, 74 supporting community health centers, and 1926 posyandu spread across various sub-districts (BPS, 2024).

Table 1. Analysis of Subang Regency's Competitiveness in Basic Health Services

Dimensions	Indicator	Mark
Condition Factors	Workforce/Competency of Health Personnel	109 doctors, 26 dentists, 683 nurses, 714 midwives, and 52 medical technicians
	Infrastructure Availability	10 general hospitals, 1 special hospital, 40 community health centers, 74 supporting community health centers, and 1926 posyandu
Request Conditions	Health Services at Health Facilities	The average waiting time for health services at Subang Regency Health Facilities is around 30 minutes
	Availability of Medicines/Health Equipment	The availability of medicines and medical equipment in several health centers is still limited and not evenly distributed
Related and Supporting Industries	Availability of Nearest Health Facilities/Networks	Subang Regency's location is strategic and accessibility is good
Corporate Strategy, Structure, and Competition	Innovation Management of Basic Health Services	Implementation of health service innovation, such as the use of information and communication technology, and the development of new services
	Structure/Quality Management of Basic Health Services	Implementation of health service quality standards, such as JKN-KIS and health facility accreditation
	Competition/Improving the Quality of Basic Health Services	Community satisfaction with health services and awards received by health facilities

Source: Primary Data (processed)

3. Related and Supporting Industries:

Availability of Nearest Health Facilities/Networks: Subang Regency's location is strategic and accessibility is good. However, health facilities are still inadequate and not evenly distributed throughout the region, namely 10 general hospitals, 1 special hospital. The number of community health centers remains at 40 from 2019 to 2023. Posyandu has increased from 1881 units in 2019 to 1926 units in 2023. Pratama Clinics increased from 91 in 2019 to 113 in 2023. (BPS, 2024).

Infrastructure and Supporting Services: Infrastructure such as roads, electricity and clean water are quite good, but supporting services such as ambulances and laboratories still need to be improved. Good road conditions cover 60.09% of the total road length. Medium conditions cover 16.34% of the total road length. Light damage covers 9.08% and heavy damage covers 14.49% of the total road length. Subang Regency has a total of 60 ambulances and 47 medical laboratory technologists (BPS, 2024).

4. Company Strategy, Structure and Rivalry (Firm Strategy, Structure and Rivalry):

Strategy/Management of Basic Health Service Innovations: Puskesmas has carried out several service innovations, such as developing digital health services, improving consultation services and routine examinations. However, innovation in the health sector needs to continue to be improved.

Structure/Quality Management of Basic Health Services: Puskesmas has attempted to improve the quality of services by training health workers, providing health education to the community, and implementing health service quality standards. However, quality management needs to continue to be improved, especially related to mapping and distribution of health workers.

Competition/Improving the Quality of Basic Health Services: Competition in the health sector is quite tight, especially with private health facilities which are larger and have more complete facilities. To increase competitiveness, community health centers need to continue to innovate and improve service quality.

5. Government Roles and Chance:

Regional Government Policy Regarding Basic Health Services: The Subang Regency regional government has demonstrated significant commitment in supporting basic health services through various policies and budget allocations. This support is realized in the form of budgets and health programs aimed at improving the quality and accessibility of health services for the community. One form of this support is budget allocation for the construction and improvement of health facilities such as community health centers and primary clinics. Although the number of community health centers remained at 40 from 2019 to 2023, the number of primary clinics increased from 91 in 2019 to 113 in 2023. This increase in health facilities reflects the regional government's efforts to provide better and more equitable health services throughout the Subang Regency area.

Table 2. Obstacles in Increasing the Competitiveness of Subang Regency in the Health Sector

Constraint	Description
Budget Limitations	Subang Regency experiences budget limitations in increasing competitiveness in the health sector
Unequal Distribution of Human Resources	Unequal distribution of health workers in various areas of Subang Regency
Complex Regulations	Regulations are complex and difficult for local governments to implement

Source: Primary Data (processed)

However, current support needs to be improved, especially in terms of budget allocation for community health centers. An increase in the budget is needed to ensure the availability of adequate medicines and health equipment at each health center. Apart from that, regulatory complexity is also an obstacle that needs to be simplified to increase the efficiency and effectiveness of health services. Simpler regulations will speed up the procurement and distribution process of medicines and medical devices, so that health services can be more responsive to community needs.

Health Technology and Preparedness in Handling Extraordinary Events (KLB): On the other hand, Subang Regency has begun to utilize health technology to improve health services and preparedness in dealing with extraordinary events (KLB). The local government has developed digital health services which aim to facilitate access and health services for the community. This development includes an integrated health information system, which is essential to facilitate coordination and rapid response to health cases.

Preparedness in facing the KLB is also a main focus. Subang Regency has recorded several cases of extraordinary events, such as natural disasters and disease outbreaks. In 2023, Subang Regency experienced 77 cases of landslides, which increased from 55 cases in 2022 and 38 cases in 2021. In addition, the Dengue Hemorrhagic Fever (DHF) outbreak is now a major concern for the Subang District Health Service, considering that as of January 2024 132 cases of dengue fever have been found in nine sub-districts. This shows that although there are efforts that have been made, improvements are still needed in terms of preparedness and handling of outbreaks.

To increase the effectiveness of government support in basic health services and outbreak preparedness, several recommended steps can be taken. First, local governments need to increase budget allocations for community health centers and other health facilities. Second, complex regulations must be simplified to speed up the procurement and distribution process of medicines and medical devices. Third, the use of health technology must continue to be improved, especially in terms of developing an integrated health information system. Fourth, the focus on KLB must be strengthened with better prevention and handling efforts through collaboration with various parties, including the community. With these steps, it is hoped

that health services in Subang Regency can be more optimal and ready to face various health challenges that may arise in the future. The regional government must continue to be committed to improving the quality of health services and preparedness in dealing with outbreaks for the welfare of the people of Subang Regency.

The steps that the Subang Regency Regional Government can take to encourage increased regional competitiveness, especially in the health sector, are as follows:

In an effort to improve the quality and quantity of human resources (HR) in the health sector, the first step taken is to recruit more health workers. By increasing the number of doctors, dentists, nurses, health promotion and behavioral science workers, medical laboratory experts, epidemiological surveillance and other health workers, it is hoped that we can meet the increasing need for health services. In addition, increasing the competency of health workers through training and capacity development is a priority. Continuous training programs are designed to update the knowledge and skills of health workers so that they are always ready to face new challenges. No less important is mapping and distributing health workers more evenly. This aims to ensure that no area has a shortage of health workers, so that health services can be enjoyed equally by the entire community.

Table 3. Steps to Increase Competitiveness in the Health Sector

Step	Description
Increased Budget Allocation	Increased budget allocation for community health centers and other health facilities
Regulatory Simplification	Simplification of complex regulations to speed up the procurement and distribution process of medicines and medical devices
Utilization of Health Technology	Utilization of health technology to improve health services and preparedness in handling cases of extraordinary events

Source: Primary Data (processed)

Improving facilities and infrastructure is an important next step. The budget for procurement of medical equipment and improvement of health facilities was increased. With adequate medical equipment and good facilities, the quality of health services is expected to increase. In addition, medical equipment maintenance is carried out regularly to ensure that the equipment is always in good condition and ready to use. The use of information technology in health services is also optimized, such as an integrated health information system to facilitate access and management of health data.

To improve accessibility and quality of services, construction or renovation of inadequate health facilities continues to be carried out. Adequate health facilities are very important to provide optimal services to the community. Apart from that, health services outside the building, such as posyandu and mobile health centers, have also been improved to reach people living in remote areas. Innovation in health services continues to be developed to

provide new solutions that can improve the quality and efficiency of services.

Strengthening partnerships with various parties is also a main focus. Collaboration between local government, the private sector and the community is strengthened to support health programs. Collaboration with private hospitals was established to increase health service capacity, especially in emergency situations. Community organizations/health professional organizations are involved in implementing health programs, because community participation is very important in the success of these programs.

In the policy and regulatory aspects, efforts are made to simplify complex regulations. It is hoped that the simplification of these regulations will speed up the administrative process and facilitate the implementation of health programs. Incentives are given to health institutions that excel as a form of appreciation and motivation to continue to improve service quality. In addition, new policies that support improving the quality and accessibility of health services continue to be developed, so that people can enjoy better and more equitable health services.

By implementing these recommendations, it is hoped that Subang Regency's competitiveness in the health sector can increase, basic health services can be fulfilled, and economic growth can be accelerated.

Table 4. Strategy to Increase Competitiveness of Subang Regency in the Health Sector

Strategy	Description
Increasing HR Capacity	Increasing the capacity of health workers through training and capacity development
Procurement of Medical Equipment	Procurement of quality and well-maintained medical equipment
Information Technology Development	Development of information and communication technology to improve the quality of health services
Improving the Quality and Accessibility of Health Services	Improving the quality and accessibility of health services through developing infrastructure and supporting services

Source: Primary Data (processed)

Based on the results of the interview, several efforts, strategies and policies that have been and can be implemented by the Regional Government of Subang Regency to encourage increased competitiveness and fulfillment of basic health services in accelerating economic growth include:

1. Increasing the quality and quantity of Human Resources (HR):

Training and development: Regional governments can provide training and capacity development for health workers, including doctors, nurses, midwives and other health workers. This training aims to improve their competence and skills in providing quality health services.

Additional health workers: Regional governments can increase the number of health workers, especially in areas where there is still a shortage. This can be done through

recruiting new health workers or placing health workers from other places.

Improving the welfare of health workers: Regional governments can provide adequate incentives and allowances for health workers so that they are more motivated to work and provide the best service.

2. Improvement of health facilities and infrastructure:

Construction and renovation of health facilities: Local governments can build or renovate community health centers, hospitals and other health facilities to make them more appropriate and adequate. This will increase public access to quality health services.

Procurement of medical equipment: Regional governments can allocate a budget for the procurement of modern and sophisticated medical equipment. This will help health workers provide more accurate and effective diagnosis and treatment.

Information technology development: Local governments can utilize information technology to increase the efficiency and effectiveness of health services. For example, by implementing a hospital management information system (SIMRS) or developing health applications for the community.

3. Increased accessibility of health services:

Construction of supporting community health centers (pustu) and village health posts (poskesdes): Regional governments can build pustu and polindes/poskesdes in remote or hard-to-reach areas to increase community access to basic health services.

Providing health transportation: Local governments can provide health transportation, such as ambulances or mobile health center cars, to make it easier for people to access health services.

Improving health services outside buildings: Local governments can improve health services outside buildings, such as posyandu, youth posyandu, and mobile health education. This will bring health services closer to the community and increase their awareness of the importance of health.

4. Strengthening the health service management system:

Improving service quality: Local governments can improve the quality of health services by implementing minimum service standards (SPM) and accrediting health facilities.

Increasing service efficiency: Local governments can increase the efficiency of health services by implementing online queuing systems, hospital management information systems (SIMRS), and other information technology.

Increased service transparency: Local governments can increase the transparency of health services by providing clear and easily accessible information about service procedures, costs and patient rights.

5. Increased collaboration with the private sector and the community:

Collaboration with private hospitals: The local government can collaborate with private hospitals to increase the capacity of health services in Subang Regency. For example, by making patient referrals or holding joint training.

Collaboration with community organizations or with health professional organizations: Regional governments can collaborate with community organizations, such as the

PKK, Karang Taruna, and community leaders, in implementing health programs. This will increase community participation in health development.

Increasing community participation: Local governments can encourage community participation in health development by providing education and information about health, as well as involving them in health-related decision making.

By implementing these efforts, strategies and policies, it is hoped that Subang Regency's competitiveness in the health sector can increase, basic health services can be met, and economic growth can be accelerated.

IV. CONCLUSION

Based on the results of interviews with several sources involved in the health sector in Subang Regency, it can be concluded that Subang Regency's competitiveness in the health sector is influenced by several main factors. Factors such as the quality of human resources, availability of facilities and infrastructure, budget, technology, regulations and management influence Subang Regency's competitiveness in the health sector. To increase competitiveness and fulfillment of basic health services, collaborative efforts are needed between local governments, the private sector and the community. Simplifying regulations, utilizing health technology and improving the quality of human resources are the keys to accelerating economic growth through the health sector. Recommendations for further research are to explore the impact of innovation in health services and strengthen cross-sector collaboration to improve the accessibility and quality of health services in Subang Regency.

V. Recommendations

To increase competitiveness and fulfillment of basic health services in Subang Regency, several recommendations that can be given are as follows:

- Improving the quality and quantity of human resources (HR) in the health sector by holding regular training and capacity development. Recruitment of new health workers and increasing competency through training, seminars, workshops and on-the-job training needs to be a priority.
- Strengthen cooperation between local governments, the private sector, health professional organizations and the community in the provision of basic health services. Close collaboration can improve efficiency, accessibility and quality of health services in Subang Regency.
- Simplify complex regulations to speed up the procurement and distribution process of medicines and medical devices. This step will help increase the availability and accessibility of necessary medicines and medical devices.
- Encourage the use of health technology by developing an integrated health information system. Technology can be an effective tool in improving the efficiency and quality of health services in Subang Regency.
- Focus on preventing and handling outbreaks by strengthening collaborative efforts between various parties, including the community. This step will increase preparedness in facing health challenges that may arise in the future.

By implementing these recommendations, it is hoped that Subang Regency's competitiveness in the health sector can increase significantly so that it can meet the needs of basic public health services and encourage accelerated regional economic growth.

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