

## Research Article

# Analysis of Infrastructural Challenges in Efforts to Improve Healthcare Quality in Curug Village, Pandeglang Regency

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**Abstract.**

This research aims to analyze the strategies that can be implemented to address infrastructure challenges in efforts to improve health quality in Curug Village. The method used is qualitative, with data collected through interviews and documentation to gain in-depth insights into the situation. The results of the study indicate that Curug Village in Cibaliung District, Pandeglang Regency, faces significant challenges in infrastructural development and healthcare services due to limited accessibility and poor infrastructure. The poor road conditions severely restrict access to the village, affecting various aspects of community life, including health. Health-related challenges include the community's limited knowledge, a preference for alternative medicine, and the lack of adherence to Clean and Healthy Living Behavior (PHBS). Healthcare services at the Cibaliung Community Health Center (Puskesmas) are also inadequate, with the number of healthcare workers being far below the ideal standard contributing to the high maternal and infant mortality rates. Various health programs have been initiated, including the Mobile Health Center (Puskesmas Keliling) program, but their effectiveness remains hindered by infrastructure issues and social resistance. To address these issues, the planning, organizing, actuating, and controlling (POAC) method is recommended, involving infrastructure improvements, capacity building for healthcare workers, continuous health education, and enhanced coordination among stakeholders, with a focus on optimizing the use of village funds to improve access and quality of healthcare services.

**Keywords:** underdeveloped villages, healthcare, infrastructure

## 1. INTRODUCTION

As a result of its separation from West Java Province in 2000, Banten Province has consistently strived to improve the welfare of its people by reducing poverty. According to Table 1, data from the Central Statistics Agency (BPS) indicates that Banten's Poverty Severity Index (P2) stands at 0.24, just 0.01 below the national average of Indonesia,

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which is 0.25. This index measures the distribution of expenditure among the poor population; the higher the index, the greater the inequality in spending among the poor. This is notable considering that Banten is the youngest province on the island of Java, yet its poverty severity index is not the lowest compared to other provinces in Java. On the other hand, using the Village Development Index (IDM) from the Ministry of Villages, Disadvantaged Regions, and Transmigration, Banten scores the lowest among provinces on the island of Java.

TABLE 1: Banten's Poverty Severity Index (P2).

Provinsi	Indeks Keparahkan Kemiskinan (P2) Menurut Provinsi dan Daerah (Persen)					
	Perkotaan		Perdesaan		Perkotaan+Perdesaan	
	2024		2024		2024	
	Semester 1 (Maret)	Semester 2 (September)	Semester 1 (Maret)	Semester 2 (September)	Semester 1 (Maret)	Semester 2 (September)
DKI JAKARTA	0.13	-	-	-	0.13	-
JAWA BARAT	0.28	-	0.33	-	0.29	-
JAWA TENGAH	0.35	-	0.4	-	0.37	-
DI YOGYAKARTA	0.42	-	0.54	-	0.45	-
JAWA TIMUR	0.2	-	0.46	-	0.31	-
BANTEN	0.24	-	0.26	-	0.25	-
INDONESIA	0.25	-	0.48	-	0.35	-

Source: (BPS 2024)

TABLE 2: Village Development Index (IDM) Status in 2023.

Nama Provinsi	Nilai Rata-rata IDM	Status IDM
DI Yogyakarta	0.8322	Mandiri
Jawa Timur	0.7807	Maju
Jawa Barat	0.7798	Maju
Jawa Tengah	0.7300	Maju
Nasional	0.6935	Berkembang
Banten	0.6803	Berkembang

Source: (PDTT, 2023)

According to the Central Statistics Agency (2020), poverty is defined as the inability to meet the minimum standard of basic needs, which includes both food and non-food necessities. The poor are individuals who live below a certain threshold, commonly referred to as the poverty line. The poverty line represents the amount of money required to cover basic living expenses, including both minimum food and non-food needs. A

group of individuals is considered to be below the poverty line when their income is insufficient to meet essential needs such as food, clothing, and shelter.

Banten Province, located at the western tip of Java Island, is the youngest province on the island, having separated from West Java Province. The poverty rate in Banten is relatively high, as highlighted by statistical data from the Banten Provincial Statistics Agency (BPS). The data indicate that the poverty rate varies significantly across different regencies and cities in Banten each year, reflecting disparities in the distribution of the poor population. This variation indicates instability in the poverty trends within the province [1]

According to the Central Statistics Agency in 2023, the poverty rate in Banten Province as of March 2023 reached 826.13 thousand people out of a total population of 13.62 million, representing 6.17 percent of Banten's population and contributing to 9.21 percent of the poor population on Java Island. This figure is relatively high, making Banten one of the provinces with the highest poverty rates on Java. In 2023, Pandeglang Regency still had one underdeveloped village, Curug Village in Cibaliung District. The lack of adequate road infrastructure in this village has hindered all aspects of community life, contributing to the persistence of poverty [2].

Using the index presented in Table 2, the researchers identified common issues faced by Banten Province in the health sector, particularly in regencies within the province, including Pandeglang Regency. Interviews conducted by the research team with the Pandeglang Regency Health Department revealed that healthcare development remains a challenge due to infrastructure access barriers to health facilities and services provided by the local government. Furthermore, the researchers identified infrastructure access constraints extending to rural areas Curug Village, as part of the administrative region of Pandeglang Regency, exemplifies these challenges.

Poverty in underdeveloped villages has a significant impact on the community's limited access to healthcare services [3]. In Curug Village, low income levels and difficult transportation access severely restrict residents' ability to access basic healthcare services such as doctor consultations, vaccinations, and maternal and child health services (posyandu). Public health is a key indicator in measuring the level of welfare and poverty in a region. According to Health Law No. 36 of 2009, health is defined as a state of physical, mental, spiritual, and social well-being that enables individuals to lead productive social and economic lives. However, underdeveloped villages generally face limited access to basic healthcare facilities and services, resulting in poor health

outcomes for rural populations. The scarcity of healthcare facilities, such as community health centers (puskesmas), clinics, and hospitals, further exacerbates this situation. The problem is compounded by the reluctance of healthcare workers to serve in underdeveloped villages due to the lack of adequate infrastructure and facilities.

TABLE 3: Number of Healthcare Workers in Pandeglang Regency.

Tenaga Kesehatan	Jumlah Tenaga Kesehatan
Dokter	99
Bidan	640
Tenaga Kesehatan Selain Dokter dan Bidan	731

Source: (DPMPD, 2024)

From Table 3, it is evident that the total number of healthcare workers, which stands at 1,470, is not evenly distributed, resulting in Curug Village experiencing a shortage of healthcare facilities and human resources in the health sector. The limited number of healthcare workers significantly impacts the overall health status of the rural community. Due to the shortage of medical personnel, many health cases go unaddressed in rural areas. This situation highlights the disparity in the distribution of healthcare facilities.

TABLE 4: Percentage of the Population with Health Insurance by Regency/City.

Kota/Kabupaten	Persentase
Pandeglang	47,87%
Lebak	61,47%
Tangerang	74,21%
Serang	49,94%
Kota Tangerang	89,22%
Kota Cilegon	94,71%
Kota Serang	67,52%
Kota Tangerang Selatan	87,15%
Banten	72,46%

Source: (BPS, 2023)

Another health issue in Pandeglang Regency is the limited access of its residents to health insurance. As noted above, Pandeglang has the lowest percentage of health insurance coverage, with only 47.87% of the population having health insurance compared to other regions in Banten. The low rate of health insurance coverage in Pandeglang raises significant concerns. Health insurance is a fundamental right for every citizen and plays a crucial role in maintaining the welfare of the community.

The infrastructure challenges faced by Curug Village, particularly poor road access, directly impact the low quality of public health. The community's inability to reach health-care facilities such as community health centers (puskesmas) or hospitals results in limited access to basic health services, including doctor consultations and immunizations. This situation is exacerbated by the scarcity of healthcare workers in underdeveloped villages and the low health insurance coverage in Pandeglang, which stands at only 47.87%. Adequate infrastructure, such as road improvements, would facilitate easier access to healthcare facilities and has the potential to enhance the health status of the village's population, ultimately leading to an overall improvement in the quality of life [2].

Healthcare development requires adequate infrastructure access. In simple terms, infrastructure refers to the construction of facilities and networks, both above and below ground, that support health, safety, and welfare. This includes the provision of both public and private ownership, such as utilities, public works, community facilities, and telecommunications [4]. Several studies indicate a relationship between infrastructure and health, suggesting that effective poverty alleviation strategies require simultaneous attention to health and infrastructure to break the cycle of poverty and promote sustainable development [5].

## 2. Theoretical Study

According to Presidential Regulation of the Republic of Indonesia No. 38 of 2015 [6], infrastructure refers to the technical, physical, and systemic means, as well as the hardware and software necessary to provide services to the community and support networks for effective economic and social development. Gregg [5] defines infrastructure as a physical system that provides transportation, irrigation, drainage, buildings, and other public facilities needed to meet the basic needs of humans, both social and economic. Additionally, Dimasyahputra [6] defines infrastructure as physical assets designed within a system to provide vital public services. Thus, infrastructure encompasses a range of interconnected facilities and networks that are inseparable and integrated into a single system. Therefore, infrastructure is both a physical asset and a system designed to provide public services, such as transportation, irrigation, drainage, and other public facilities, which function to support basic human needs as well as social and economic growth. All these elements are interconnected and integrated into an inseparable system.

Harris et al. [7] explain that resilient infrastructure plays a crucial role in improving urban public health, particularly for marginalized communities. In the context of strategic planning and health development, well-designed infrastructure can help create more equitable access to healthcare services. For instance, the construction of hospitals, clinics, and health service centers that are fairly distributed throughout urban areas allows residents in remote or marginalized regions to access quality care. Additionally, access to clean water, sanitation, and effective waste management is essential for preventing the spread of diseases. Through resilient infrastructure, communities that have previously been underserved can be better protected from health risks that are often higher in areas with inadequate infrastructure. Furthermore, effective strategic planning in healthcare infrastructure development supports the achievement of the Sustainable Development Goals (SDGs), particularly in the areas of public health (SDG 3), clean water and sanitation (SDG 6), and reduction of inequalities (SDG 10). Innovations in health technology, such as telemedicine systems or digital medical records, can be integrated into healthcare infrastructure to enhance service efficiency and accessibility, especially for vulnerable groups. This focus on sustainable development and long-term resilience allows cities to address future challenges, such as climate change and population growth, while ensuring that public health remains a top priority. Ultimately, robust and well-planned infrastructure development not only supports the physical health of the community but also lays the foundation for social justice and community resilience in the future.

Batool and Kumar [8], in their research, emphasize the focus on healthcare infrastructure. Healthcare infrastructure is a key element in supporting the success of strategic planning and health development. Infrastructure that includes hospitals, community health centers (puskesmas), and other health facilities enables community access to quality medical services. In the context of strategic planning, the development of this infrastructure aims not only to meet the basic health needs of the population but also plays a vital role in creating a sustainable health system that is responsive to future health challenges.

Through investments in adequate infrastructure, such as upgrading facilities, medical equipment, and health technologies, governments can support the implementation of more effective health policies, accelerate disease management, and improve the overall quality of life for communities. Additionally, focusing on healthcare infrastructure development can strengthen the health sector as a key pillar of economic development. A healthy workforce is an essential asset in supporting productivity and economic growth.

In health development strategies, careful planning to enhance access to healthcare services can lead to a healthier workforce, reduce absenteeism, and improve the overall quality of life for the community. Thus, strong healthcare infrastructure serves not only to address health needs but also as a long-term investment that can yield economic, social, and sustainable welfare benefits.

According to WHO [9], strategic planning in health development is crucial for creating policies and infrastructure that are not only efficient but also aligned with the social values of the community. In the health context, effective infrastructure strategies must be designed with consideration of both direct and indirect impacts on public health. Effective infrastructure strategies should be efficient, respect community values, and enhance the capacity of decision-makers to manage the complexities within the health system. In this regard, strategic planning must encompass a comprehensive evaluation of community needs, accessibility to healthcare services, and the capability of the infrastructure to support the achievement of long-term health objectives.

Building underdeveloped villages in the health sector is a complex task that requires well-thought-out strategies. This research analyzes strategies using the POAC, which stands for Planning, Organizing, Actuating, and Controlling. POAC serves as an effective framework for formulating and implementing these strategies.

### 1. Planning

In the planning stage, a comprehensive analysis is conducted regarding the health conditions in underdeveloped villages, including infrastructure, healthcare personnel, information access, and community awareness. Subsequently, SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) objectives are established for health development in the village, accompanied by a comprehensive strategy formulation. A detailed and measurable action plan is then created, specifying responsibilities, timelines, and success indicators for each activity.

### 2. Organizing

During the organizing phase, a working team is formed involving various stakeholders, such as village government officials, healthcare personnel, community leaders, and local organizations. Responsible individuals are appointed for each activity and program outlined in the action plan, with clear assignments of tasks and responsibilities distributed among team members according to their competencies and expertise. Training and capacity-building initiatives are conducted to enhance the knowledge and skills of team members in village health matters.

### 3. Actuating

The implementation of the action plan is carried out diligently and in accordance with the established timeline. Monitoring and evaluation are conducted periodically to ensure that the programs are progressing as planned and meeting the established targets. Problems are identified and addressed promptly and effectively, while strategies are adapted and adjusted as needed based on the results of monitoring and evaluation.

### 4. Controlling

In the controlling stage, progress reports are regularly prepared for stakeholders, including local government, village communities, and donors. Accountability is ensured in all program activities, and program funds are utilized efficiently and effectively to achieve optimal outcomes. An effective information system is developed to monitor and evaluate program progress more effectively. Thus, through this POAC approach, health development in underdeveloped villages can be carried out systematically and successfully.

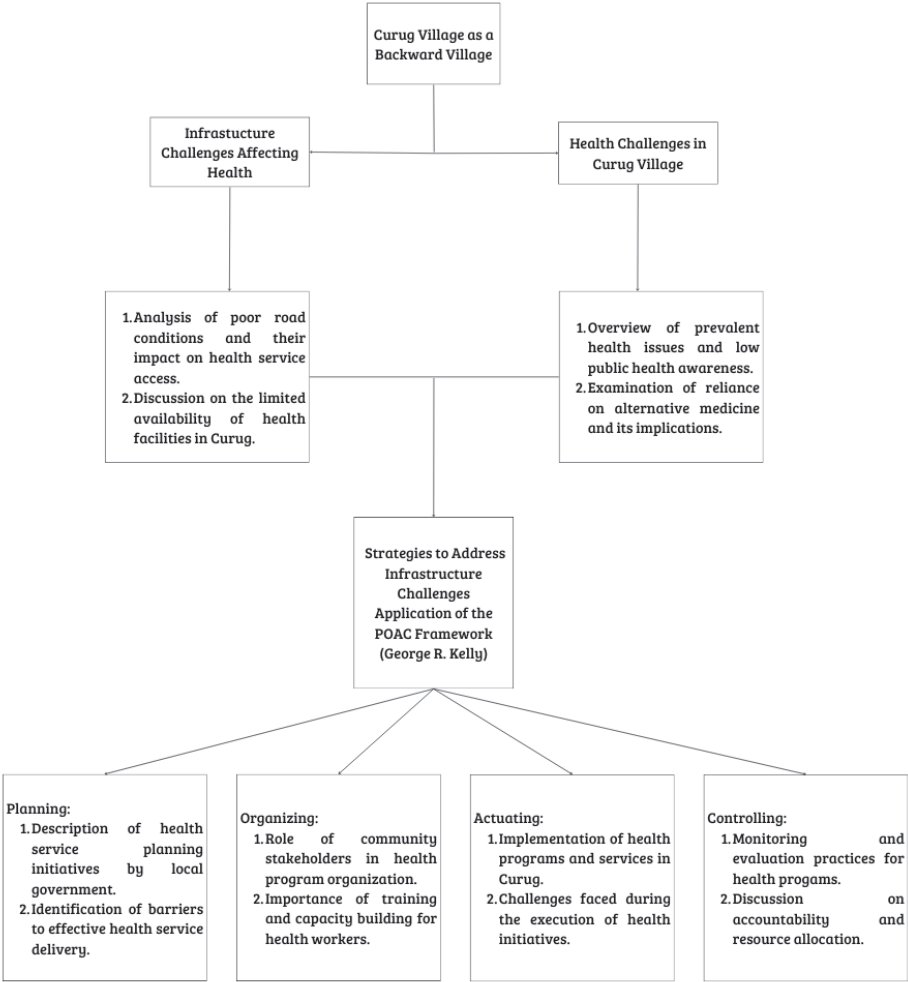
## 3. METHODS

The research method employed in this study is qualitative. According to Williams as cited in the book *Qualitative and Quantitative Research Methods* by Hardani et al. [10], qualitative research is an effort to understand a social phenomenon from the perspective of participants. This study utilizes a case study approach. The qualitative method is chosen because the aim of this research is to gain a deep and holistic understanding of a social phenomenon based on participants' perspectives. The case study approach is used to conduct a careful and in-depth exploration of a program, activity, process, or group of individuals. In this research, the case study focuses on the availability of infrastructure to meet health needs, how this issue relates to the field of study, and the identification of challenges faced in the health sector in Curug Village.

Data collection techniques are methods used to obtain the necessary data for research. Data is a crucial component of research, and therefore, data collection must be conducted meticulously and accurately. Commonly used data collection techniques include document studies, interviews, questionnaires, and observations [11].

Data analysis, according to Sugiyono [11], is the process of systematically searching for and organizing data to identify themes and patterns, leading to a clearer understanding. Bogdan and Biklen as cited in Sugiyono [11] state that data analysis in qualitative research





**Figure 1:** Theoretical Framework.

is the process of systematically searching for and organizing interview results, notes, and materials collected to enhance understanding of all gathered information and to present findings effectively. The data analysis technique employed in this study utilizes the interactive model proposed by Miles and Huberman.

4. RESULT AND DISCUSSIONS

4.1. Challenges of Infrastructure on Community Health in Curug Village, Pandeglang Regency

Pandeglang Regency faces significant challenges in the equitable distribution of development and health services. One area of particular concern is Curug Village in the Cibaliung sub-district. Existing infrastructure issues severely limit access to the village,

particularly during the rainy season, when approximately 50% of access routes become impassable. This situation has widespread impacts on various aspects of community life. Despite efforts made through the allocation of village funds since 2015, the development in Curug Village has yet to yield significant results. Recently, the village's status improved from "very underdeveloped" to "underdeveloped," but this change does not reflect substantial improvements in the quality of life for its residents. Inadequate infrastructure, particularly the poor condition of roads, remains a major barrier to the village's development and the optimal provision of public services, including health care.

In the context of health, Curug Village faces various interrelated challenges. Low health literacy among community members, coupled with a tendency to seek alternative treatments, creates obstacles to improving public health. The implementation of Clean and Healthy Living Behavior (PHBS) is not fully realized, which increases the risk of disease transmission. The Cibaliung Community Health Center (Puskesmas), as the sole facility serving the entire sub-district, faces significant challenges in reaching and providing adequate health services to the residents of Curug Village. The limited availability of human resources in the health sector poses a serious issue.

*"We are short of doctors in Cibaliung sub-district. Many young doctors prefer to move to the city after graduation. However, for health personnel such as midwives, there is now at least one in every village to staff the Community Health Posts (Poskesdes). Even those who want to apply find that positions are already filled"* Said Cibaliung Sub-district Officer.

In the analysis of healthcare services in Cibaliung sub-district, the shortage of doctors has become a very important issue. The vacant positions, which should be filled by four to five medical personnel but only occupied by two, indicate a significant deficit in healthcare workers that directly affects the quality of services. This phenomenon is exacerbated by the tendency of young doctors to move to the city after graduation, leaving a large gap in healthcare services in the area. Although the placement of midwives in each village offers some hope, this number is still insufficient to meet complex healthcare needs, especially in villages with difficult access. This condition indicates the need for greater intervention in terms of healthcare workforce distribution policies and the improvement of facilities in remote areas to attract and retain medical personnel. Without systematic efforts to address this issue, healthcare services in Cibaliung sub-district will continue to be below ideal standards, with significant negative impacts on the local community's health.

TABLE 5: Types of diseases affecting residents of curug village.

Jenis Penyakit	Jumlah Orang
Diare	15
Dermatitis	25
Hipertensi	10
ISPA	20
Gastritis	35
Artritis	25
Febris	35

Source: (Cibaliung Community Health Centre, 2024)

The data presented above highlights the seven most prevalent diseases affecting the residents of Curug Village from 2023 to August 2024, as reported by the Cibaliung Community Health Center’s surveillance. Field research revealed that Curug Village lacks a dedicated health center (Puskesmas) and relies solely on the Village Health Post (Pos Kesehatan Desa or Poskesdes) and mobile health services for basic healthcare provision. This situation is exacerbated by the local community’s tendency to overlook their health needs, with many residents preferring alternative medicine over modern healthcare services provided by doctors and midwives.

Furthermore, poor infrastructure access in Curug Village poses a significant barrier for residents seeking further medical care. As Cibaliung sub-district officer said,

*“With its challenging geographical characteristics and distance from the sub-district center, this village faces serious obstacles in providing adequate healthcare facilities.”*

The absence of a Community Health Center (Puskesmas) in Curug Village highlights a significant gap between the conditions on the ground and the mandates outlined in the Minister of Health Regulation No. 75 of 2014 regarding Community Health Centers. This regulation emphasizes the importance of accessibility to Puskesmas for all community members, including those living in remote areas. However, the reality in Curug Village illustrates that the implementation of this regulation remains suboptimal. The lack of a Puskesmas and the difficulty in accessing health facilities in the nearest sub-district not only violates the stipulations set forth in this regulation but also poses potential risks to the health and safety of the village residents, particularly in medical emergencies.

*“There is indeed no Puskesmas or clinic in the village. What exists are the Village Health Post and Integrated Health Service Post (Posyandu). There, we have health*

*personnel, especially village midwives, who play a role in health services at the village level. Currently, there are no doctors in the village.”*

This situation underscores the urgent need for special attention and concrete action from the government to bridge the gap between policy and reality on the ground, as well as to ensure the fulfillment of the community’s basic rights to adequate health access, as mandated by the regulation. In critical situations that require treatment at a Puskesmas or hospital, village residents encounter difficulties traveling outside the village. This condition not only limits the community’s access to more comprehensive health services but also poses potential threats to life in cases of medical emergencies.

The situation highlights an urgent need to enhance health facilities and to raise community awareness about the importance of modern healthcare services in Curug Village. According to data from the Central Statistics Agency (BPS) in 2024, the people of Banten, particularly in areas like Pandeglang, Lebak, Tangerang, and Serang, still rely on traditional birth attendants for maternal health and childbirth care.

TABLE 6: Percentage of Traditional Birth Attendants in Banten Region.

Regency	Dukun (Traditional Birth Attendant)	
	2022	2023
Pandeglang	16,52	12,12
Lebak	17,11	17,06
Tangerang	3,12	NA
Serang	24,73	18,70

Source: (BPS. 2023)

The data is supported by our interviews with the DPMPD, which highlight the impacts of these conditions, particularly evident in the cases of maternal and child mortality in Curug Village, Pandeglang Regency.

*“Many deaths occur during the journey to health facilities due to a combination of long distances, poor road conditions, and limited transportation options”*

In the context of public health analysis, the prevalence of stunting in this village is relatively low. However, the high mortality rates occurring during journeys to health facilities, caused by a combination of long distances, poor road conditions, and limited transportation options, highlight the need for improved transportation infrastructure and accessibility in the area. Efforts for improvement are going through various programs.

## 4.2. Strategies to Address Infrastructure Challenges in Improving Health Quality in Curug Village Using the POAC Analysis Method

### 4.2.1. Planning

Based on field studies, the research team found that the local government, through the Health Office of Pandeglang Regency, has made efforts to plan for reaching all community members, including those in hard-to-reach areas, by implementing a mobile health center program that provides basic health services such as immunizations, treatment for infectious diseases, and reproductive health services. This is illustrated by the following interview excerpt:

*“The Health Office of Pandeglang Regency has planned the Mobile Health Center (Pusling) program as a strategy to enhance health service coverage in hard-to-reach areas, one of which is Desa Curug.”*

*“The Health Office also involves the empowerment of Posyandu cadres and the Family Empowerment and Welfare Movement Team (TP PKK) at the village level to effectively conduct health education activities.”*

Although health service program planning has been carried out, the local government has identified several challenges in accelerating these programs. At least some common issues faced include inadequate infrastructure conditions in the area. This situation complicates the outreach of health programs to all segments of society, particularly for communities located in the most remote areas where infrastructure access has not yet been fully expanded. Furthermore, the local government, through the DPMPD, explained that community resistance is one of the factors that must be considered to ensure that health program plans are accepted and elicit positive responses from the community, encouraging active participation in the programs.

*“Desa Curug in Pandeglang Regency faces infrastructure challenges, such as damaged roads and a lack of adequate health facilities. Additionally, community resistance to change is also a factor that needs to be considered.”*

Moreover, the Head of Cibaliung District stated that very few people choose the health center as their treatment option, preferring alternative medicine, which is more accessible and closer due to the longer distance to the nearest health center from their residences. In this regard, infrastructure limitations on health services open up

alternative options for urgent non-medical treatments. This aligns with the following interview excerpt from the field.

*“Some community members may still hold traditional mindsets, believing that alternative medicine is more effective due to inadequate infrastructure. This is influenced by deep-rooted socio-cultural factors, where habits and beliefs in the community are firmly established.”*

Based on the interview excerpts, the research team found that the root problem in the development of the health sector in Pandeglang Regency, particularly in Curug Village, is the access to infrastructure for health services. This access has implications for the increasing efforts and associated costs incurred to obtain health services that are far from the residential areas of the village community. This fundamental issue complicates the local government's ability to educate and socialize the benefits of formal medical services and to bring these services closer to the community. As a consequence, the community tends to prefer alternative services rather than delaying treatment.

In their study on the use of traditional health services, Nurhayati and Widowati [12] conducted an analysis of household data from the Indonesian National Health Survey in 2013. They found that rural residents were more likely to utilize traditional health services compared to those in urban areas due to limited access to modern health services. The strategic role of the Bupati of Pandeglang as a policymaker is crucial in ensuring that this planning is successfully implemented by the state civil apparatus (ASN) as policy executors. Ginzberg [13] states that health policy has four general objectives: to create a sense of security regarding basic health needs, to promote equity in access to health services, to enhance efficiency in the cost-benefit ratio of health services, and to foster welfare for the general public. In this regard, the government's role is emphasized in addressing the health needs of the community. To fulfill this role, local governments have several policy tools. Stone [14] adds that the government possesses policy instruments to achieve health development goals, including providing direct services such as the initiative for mobile health clinics implemented by health departments.

The second policy tool involves regulating who can provide these services, how they can be delivered, what services will be provided, how these services will be financed, and who qualifies to receive them. In this context, local governments can engage relevant stakeholders, such as the Ministry of Public Works and Public Housing (PUPR) regarding infrastructure access, as well as other parties, including private entities and non-governmental organizations (NGOs).

A third set of policy tools includes positive and negative incentives, such as equitable distribution of services, medical equipment, and healthcare personnel to remote areas. The fourth policy tool in healthcare is facts or persuasion, wherein the government conducts education and outreach on healthy and unhealthy behaviors, treatment, preventive measures, and community health promotion, as well as efforts to reduce stigma associated with enduring habits.

The final policy tool is power, which pertains to who makes decisions. Local governments can utilize the authority granted by the community to address the health needs of the populace.

The planning of health programs in Pandeglang, particularly through the Mobile Health Center (Pusling), demonstrates the local government's efforts to expand access to healthcare services in remote areas. However, the main challenges faced include limited infrastructure and community resistance to formal medical services, leading to a preference for alternative medicine. This complicates program effectiveness, increases healthcare access costs, and slows community acceptance of modern medical services. Therefore, a more comprehensive policy strategy, including cross-sector collaboration and persuasive educational approaches, is needed to ensure that health programs are accepted and optimally accessed by all community members.

#### 4.2.2. Organizing

The organization of health programs in Pandeglang Regency involves various stakeholders.

*"The Health Department serves as the primary coordinator, responsible for the planning, implementation, and evaluation of the Mobile Health Clinic (Pusling) program. Our role is not only to establish policies but also to act as a liaison between the local government and the community, ensuring that all parties are involved in efforts to improve health services"*

At the village level, the Posyandu cadres and the Family Empowerment and Welfare Movement (TP PKK) are well organized to carry out health education activities. The Posyandu cadres are trained to provide relevant health information and conduct outreach to the community about the importance of health and disease prevention. The TP PKK also plays a crucial role in encouraging the community to actively participate in health programs.

*“The Community Empowerment and Village Government Agency (DPMPD) is also involved in organizing this health program, particularly regarding the oversight of village funds. Our agency helps ensure that the funds allocated for health programs are used effectively and efficiently, while also supporting the capacity building of villages through technical guidance and outreach.”*

The organization of health programs in Pandeglang Regency involves various stakeholders with complementary roles. The Health Department serves as the main coordinator, while Posyandu and TP PKK at the village level act as implementers of health education and community mobilization. Meanwhile, the DPMPD ensures budget efficiency and strengthens village capacity. This collaboration is key to improving healthcare services and enhancing community well-being in the region.

#### 4.2.3. Actuating

In the process of implementing health services in the village, the Health Department provides services through the Mobile Health Clinic (Puskesmas Keliling) to ensure that the community in Curug Village can still access health services, despite the distance to the nearest health facilities.

*“The implementation of health programs is conducted through the operational activities of the Mobile Health Clinic”*

Additionally, the Community Empowerment and Village Government Agency (DPMPD) conducts programs in each village to enhance public understanding through health education and outreach.

*“To improve implementation in each village, health education is conducted by Posyandu cadres and the Family Empowerment and Welfare Movement (TP PKK)”*

However, the program's implementation faces challenges, particularly regarding inadequate infrastructure and community resistance to change. The DPMPD is carrying out capacity-building programs; however, with budget constraints and the extensive coverage area, focusing on underdeveloped villages like Curug poses a unique challenge. This concern is echoed by the Head of the Curug Subdistrict, who mentioned that representatives from Curug Village often fail to attend due to access issues.

*“Health-related outreach is frequently conducted; however, residents of Curug Village often do not attend because the location of the outreach events is far away, and they are hindered by transportation costs”*



The government, through the Health Department, strives to provide healthcare services in Curug Village by implementing the Mobile Health Clinic and conducting health education programs through DPMPD, Posyandu cadres, and the Family Empowerment and Welfare Movement (TP PKK). However, the implementation of these programs faces challenges such as inadequate infrastructure, budget constraints, community resistance to change, and accessibility issues due to high transportation costs, which hinder residents from receiving healthcare services and attending health education sessions.

To address these challenges, several solutions can be implemented, including optimizing Mobile Health Clinic services, promoting community-based health education, providing transportation assistance, and collaborating with private sectors or non-governmental organizations to improve access and the effectiveness of healthcare services in underdeveloped villages like Curug.

#### 4.2.4. Controlling

The Health Department conducts regular oversight regarding the progress of health program implementation to ensure that health initiatives operate as planned.

*“This is done through monitoring and evaluation methods conducted periodically, specifically every six months, which include direct field visits and virtual meetings via Zoom. Field visits aim to provide a direct overview of the program’s implementation at the health center, while virtual meetings involve discussions and evaluations with health program stakeholders, such as the head of the health center, quality assurance officers, and healthcare service coordinators.”*

The Community Empowerment and Village Government Agency (DPMPD) also monitors the use of village funds. The DPMPD provides recommendations regarding the allocation of village funds to ensure proper distribution.

*“They are responsible for monitoring the use of village funds allocated for health programs and infrastructure. Close supervision of this fund usage is crucial to ensure transparency and accountability, as well as to minimize the potential for fund misappropriation.”*

However, despite the existing oversight system being implemented, the results achieved still show fluctuations. This indicates that the oversight system has not yet been fully effective in addressing the challenges encountered in the field. Budget

constraints and the vast areas that need to be monitored also pose obstacles to the optimal execution of the controlling function.

The Health Department conducts regular oversight to ensure that health programs are implemented as planned. This is carried out through monitoring and evaluation every six months, consisting of direct field visits and virtual meetings via Zoom. Field visits provide a firsthand assessment of program execution at healthcare centers, while virtual meetings facilitate discussions with key stakeholders, such as health center heads, quality assurance officers, and service coordinators. Additionally, the Community Empowerment and Village Government Agency (DPMPD) supervises the use of village funds, ensuring proper allocation and preventing fund mismanagement. Despite these oversight mechanisms, program outcomes remain inconsistent, indicating that the system has not yet effectively addressed on-ground challenges. Budget limitations and the vast areas requiring monitoring further hinder the optimal execution of these control functions, affecting the overall success of health program implementation.

## 5. CONCLUSION

This study demonstrates that infrastructure challenges in Curug Village, Cibaliung District, Pandeglang Regency, significantly impact the quality of community health. Poor infrastructure, such as inadequate road access and a lack of health facilities, hampers the community's ability to obtain necessary healthcare services, contributing to low health awareness and high maternal and child mortality rates. This research underscores the importance of equitable distribution of skilled and competent healthcare personnel across various regions, particularly in remote areas, to achieve universal health coverage and sustainable development goals.

Through systematic data analysis techniques, this study recommends the implementation of the POAC (Planning, Organizing, Actuating, Controlling) approach in formulating strategies to enhance health quality. Proposed steps include improving health infrastructure, strengthening the distribution of human resources, and enhancing health education programs for the community. Thus, it is expected that the quality of health in Curug Village will significantly improve, ultimately contributing to the welfare of the community and addressing health issues in the area.

## References

- [1] Edna Safitri S, Triwahyuningtyas N, Sugianto S. Analisis Faktor-Faktor Yang Mempengaruhi Tingkat Kemiskinan Di Provinsi Banten. *SIBATIK J J Ilm Bid Sos Ekon Budaya, Teknol dan Pendidik*. 2022;1(4):259–74. <https://doi.org/10.54443/sibatik.v1i4.30>.
- [2] Fachreinsyah D. Desa Curug, Cibaliung Ditargetkan Keluar dari Kategori Tertinggal Tahun Ini [Internet]. Radio Republik Indonesia Digital (RRI Digital). 2023 [cited 2024 Oct 12]. Available from: <https://rri.co.id/banten/bisnis/209526/desa-curug-cibaliung-ditargetkan-keluar-dari-kategori-tertinggal-tahun-ini>
- [3] Sarjito A. Dampak Kemiskinan terhadap Akses Pelayanan Kesehatan di Indonesia. 2024;13(1):397–416. <https://doi.org/10.37304/jispar.v13i1.10520>.
- [4] de Kuiper M. The Neuman Systems Model for Integrated Care Design ICIC20 Virtual Conference – September 2020. 2020;21:1–2. Available from: <https://ijic.org/articles/6348/files/submission/proof/6348-1-23449-1-10-20210824.pdf>
- [5] Saboor A, Khan AU, Hussain A, Ali I, Mahmood K. Multidimensional deprivations in Pakistan: regional variations and temporal shifts. *Q Rev Econ Finance*. 2015;56:57–67.
- [6] 2015 PPN 8 T. Kerjasama Pemerintah dengan Badan Usaha dalam Penyediaan Infrastruktur. 2015.
- [7] Dimasyahputra AS. Kualitas Pelayanan Jalan Tol (Studi Kasus Jalan Tol Soroja) [Internet]. Universitas Komputer Indonesia; 2021. Available from: <http://elibrary.unikom.ac.id/id/eprint/4624>
- [8] Harris P, Riley E, Dawson A, Friel S, Lawson K. “Stop talking around projects and talk about solutions”: positioning health within infrastructure policy to achieve the sustainable development goals [Internet]. *Health Policy*. 2020 Jun;124(6):591–8.
- [9] Batool M, Kumar T. Scenario of health infrastructure in India and its augmentation after independence. *Int J Sci Technol Res*. 2019;8(9):2103–7.
- [10] World Health Organization. The Case for Investing in Public Health. *World Heal Organ Reg Off Eur A public Heal Summ Rep EPHO* 8. 2020;32.
- [11] Hardani HA, Ustiawaty J, Utami EF, Istiqomah RR, Fardani RA, Dhika Juliana Sukmana NHA. Buku Metode Penelitian Kualitatif. Vol. 5, *Revista Brasileira de Linguística Aplicada*. 2020. 1–197 p.
- [12] Sugiyono. Metode Penelitian Kualitatif dan R and D. Volume 3. Bandung: Alfabeta; 2013. 480 pp.
- [13] Nurhayati N, Widowati L. The use of traditional health care among Indonesian Family. *Health Sci J Indonesia*. 2017;8(1):30–5.

[14] Eisenhower DD. The Limits of Health Reform. 1980;69(August):174–6.

[15] Stone DA. Policy Paradox; New Social Work. Third Edit. New York: W.W Norton & Company; 2022.