

Research Article

Public Services in the Health Sector Based on the Principles of Human-centered Governance in Jeneponto Regency

St. Meriam*, Sangkala, Nurdin Nara, and Muh. Akmal Ibrahim

Department of Public Administration, Faculty of Social and Political Sciences, Hasanuddin University, Makassar, Indonesia

Abstract.

This study was carried out because the critical role of applying the principles of human-centred governance is to improve the quality and access to fairer and more responsive health services in Jeneponto Regency. This study aimed to assess the implementation and supporting and inhibiting factors of these principles in the regional health service system. This study is qualitative and uses a case study method that explores the implementation of the principles of human-centred governance in health services in Jeneponto Regency. Data were collected through in-depth interviews, participatory observations, and documentation studies, and analyzed thematically by using NVivo 12 Plus; the validity of the result was ensured by conducting source triangulation. This study proves that the application of the principles of human-centred governance in health services in Jeneponto Regency has reflected the values of empathy, transparency, accountability, and community participation that have a positive impact on citizen satisfaction and strengthen the relationship between the government and the community. Nonetheless, the actualization of these principles is still constrained by inadequate financing, lack of capacity, unmotivated health workers, poor community involvement, and cumbersome bureaucracy. Thus, local government needs to strengthen the capacity of the resource through strategic efforts, simplify bureaucratic processes, and create a more inclusive and sustainable dialogue space.

Keywords: accountability, empathy, human centered governance, participation, health services

1. Introduction

Public services in the health sector consist of a set of activities implemented by the government to fulfil the health needs of the community equitably, affordably, and in a qualified manner [1]. Such services provide health facilities [2], medical personnel [3], medicines [4], public health programs, like immunization, nutrition [5], and environmental sanitation [6]. So, public services for the health sector have three primary purposes: to increase the health of the community [7], through the prevention of disease [8], and to ensure the right of every citizen to get decent health services. Moreover, in its delivery, public health services should adjudicate values of justice, efficiency, and accountability

Corresponding Author: St.
Meriam; email:
maryammeycha@gmail.com

Published: 2 September 2025

Publishing services provided by
Knowledge E

© St. Meriam et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the 2nd Doctoral International Conference Committee.



and be made available to vulnerable sectors of society, the most disadvantaged of which are often excluded from service access [9].

Public services in the health sector are an important factor in improving the quality of life of the community, especially in areas with development problems, such as Jeneponto Regency. However, the reality on the ground many times shows a dichotomy between the needs of the community and what is received in terms of accessibility, quality of services received and citizen participation in the provision of services [10]. While regions such as Yogyakarta and Surabaya have successfully implemented participatory health governance models with documented improvements in service delivery outcomes, and Makassar has pioneered digital health innovations to enhance accessibility, Jeneponto Regency presents a distinct case due to its unique geographical, socio-economic, and cultural characteristics that have not been adequately examined through a human-centered lens. In this regard, human-centred governance is relevant since it is based on the principles of participation, empathy, transparency, and accountability in public service governance [11]. This approach helps all service providers put humans at the centre of every policy and service that is implemented. Hence, this research is necessary to identify and analyze how far the values of human-centred governance are carried out in the health service governance system in Jeneponto Regency as a recommendation for more inclusive and responsive service governance to the needs of the community.

Human-centred Governance is, generally, a governance philosophy in which humans are at the core of every planning, decision-making, and policy-executing process. It has convinced us that government exists fundamentally to satisfy needs and enhance the well-being of society equitably and evenly. In this context, however, this does not refer only to results (outcomes) but also processes involving active community participation, empowerment, and fulfilling fundamental rights as citizens. In a government that puts this principle into practice, the government will listen to the needs and desires of our community, create a space for discussion of such needs, and facilitate collaboration between public, private, and community sectors [12].

This literature gap is due to the limited number of studies that specifically report, describe and/or highlight relevant human-centred governance principles in the context of public service in the health sector, especially in regions with development challenges such as Jeneponto Regency. Unlike studies from Bali and West Java that have examined healthcare governance reform through technological integration and cultural adaptation approaches [13], or research from East Nusa Tenggara focusing on community health

worker empowerment models [14], Jeneponto's case remains underexplored. Most of the previous studies have quantitatively emphasized aspects of bureaucratic efficiency and service achievements. However, not many have explored how to apply the values of participation, empathy, transparency and accountability in health service practices at the local level. The novelty of this research lies in its concept, which puts a human-centred perspective as an analytical framework for evaluating the quality of health service governance so that it can provide new insights that are more contextual and more grounded in community needs in the context of improving public services as a whole.

Therefore, this study aims to answer two main questions, namely: (a) what is the form of application of the principles of Human Centered Governance in public services in the health sector in Jeneponto Regency, and (b) what are the supporting and inhibiting factors in the implementation of these principles? The purpose of this study is to identify and analyze the application of the principles of human-centred governance in public services in the health sector in Jeneponto Regency, as well as to reveal the factors that support and inhibit its implementation. The implications of this study are not only theoretical in the development of public service governance studies but also practical for local governments in designing human-centred service strategies in order to realize a just and sustainable health system.

2. Material and Methods

This study employs a qualitative approach with a case study method to holistically examine the application of human-centered governance principles in public health services in Jeneponto Regency. This methodological choice enables researchers to understand the dynamics, context, and social complexity that shape governance practices of participation, empathy, transparency, and accountability in health service delivery. The case study approach allows for deeper exploration of these processes from the perspectives of various stakeholders.

Data collection utilized three primary methods: in-depth interviews, observation, and documentation studies. To ensure comprehensive representation across the health service ecosystem, a total of 32 key informants were purposively selected based on their direct involvement in health service provision or receipt. The informant distribution comprised: Local Government Officials (8 informants), Healthcare Professionals

(10 informants), Community Health Service Recipients (10 informants), and Civil Society Organizations and Academics (4 informants)

Interviews were structured to identify experiences, perceptions, and understanding of human-centered governance principles, while observations focused on service practices and provider-community interactions. Documentation studies examined policies, program reports, and other relevant official documents.

For data analysis, this study utilized NVivo 12 Plus software to perform systematic thematic analysis. The analytical process began with interview transcription and observation notes, followed by data input into NVivo for open coding, where relevant data segments were assigned labels or codes. Subsequently, axial coding clustered these codes into higher-level categories or themes based on governance principles. The final analytical stage involved selective coding, generating thematic narratives around key governance values—participation, empathy, transparency, and accountability. NVivo 12 Plus facilitated a more systematic and transparent analytical process, enabling comprehensive data linkage and pattern identification.

To ensure data validity, source triangulation techniques were employed to compare and verify information collected from multiple sources. This triangulation approach incorporated interviews with diverse key informants, document analysis, and observational data regarding health service programs, policies, and reports. This methodological rigor helped reduce bias, enhance credibility of findings across the representative sample, and ensure that interpretations aligned with ground reality. Furthermore, the triangulation process strengthened research arguments by incorporating multiple perspectives from diverse stakeholders within Jeneponto's health service ecosystem.

3. Results and Discussion

The This section reviews the application of Human Centered Governance principles in public services in the health sector in Jeneponto Regency, as well as the factors that support and hinder its implementation. This discussion aims to provide a comprehensive overview of the effectiveness and challenges in adopting this approach in the context of health services in the area.

3.1. Implementation of human-centered governance principles in public services in the health sector in Jeneponto Regency

This section describes how the principles of Human Centered Governance, such as participation, empathy, transparency, and accountability, are applied in health services in Jeneponto Regency, and how these principles affect the quality and access to health services for the community (Fig 1).

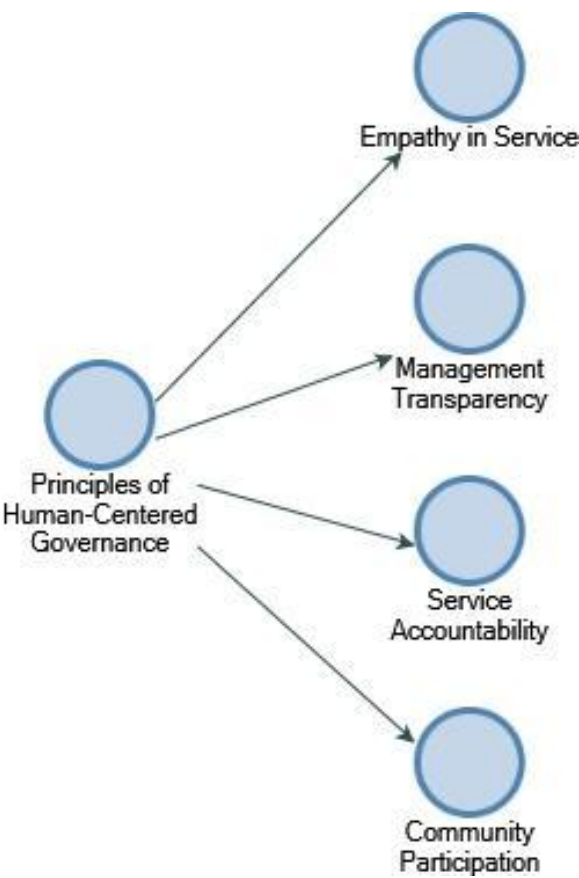


Figure 1: Application of human-centered governance principles in public services in the health sector.

Empathy in public health services in Jeneponto Regency guarantees the extent to which service providers are able to feel the needs and feelings of the community being served. In this frame of reference, empathy is realized at its core through respecting all individuals, making room for their complaints and aspirations, and providing soft and delicate services suited to the social and cultural conditions of the configuration. Healthcare workers are expected not just to provide procedures but also to attend to the emotional and psychological needs of patients. Thus, the application of empathy with this service can increase public satisfaction, create closeness between the community and service providers, and stimulate the public to be actively involved in maintaining

health and participating in health programs conducted by the government. Moreover, supportive services could decrease injustice and anxiety for patients [15], so trust in the health service system of the government could be improved.

As reflected in an interview with, Head of Binamu Community Health Center:

“We’ve implemented a cultural approach in providing health services, especially for maternal and child health. Our midwives are trained to understand local customs and beliefs so that health interventions can be accepted without conflicting with community traditions. This empathetic approach has significantly increased the number of deliveries assisted by health professionals in the last two years.” (15 March 2025)

As part of transparency in the management of health services in the Jeneponto district, it is an openness of information on policies, procedures, budget allocation and the results of the service to the community. The community needs to understand the processes that take place in the service system and to be involved in supervision. In another light, service accountability will make health service providers account for the degree of quality and achievement and be accountable to the public for every insertion done. It was found that the implementation of transparency and accountability positively affects the increase in public trust in the government, reduces the potential for abuse of authority, and encourages improvements in the quality of service [16]. Moreover, both are a good base for continuous improvement, where the community can give feedback or register complaints. These are two components that are considered when making decisions and improving health service policies.

Regarding transparency implementation, a community leader from Arungkeke District, stated:

“There has been a noticeable improvement in how health budget information is shared with the community. Now we can access financial reports through the district website and information boards at health centers. This transparency has built trust, as we can see where resources are allocated. However, we still face challenges in understanding technical budget terms, and sometimes updated information is delayed.” (22 February 2025)

The principle of human-centered governance is that the community is involved in the planning, implementation, and evaluation of health programs. Actively engaged communities can contribute crucial insights into on-the-ground needs and preferences so that policies enacted are more targeted in the right direction. However, in practice,

community participation in Jeneponto is limited, as many people do not fully understand their rights in the health system, including barriers to accessing information and communicating with service providers. Thus, there must be an increase in this participation by strengthening health education and facilitating access to information and broader dialogue between the government and the community [17]. Suppose the community does not participate properly. In that case, health policies will not represent the real needs of the community, which, in turn, can decrease the effectiveness of health services.

Head of the Health Department, highlighted accountability measures in her interview:

“We have established a performance-based accountability system where each health facility must report their service quality indicators quarterly. These reports are discussed in public meetings with community representatives, allowing direct feedback on service performance. This system has created healthy competition among facilities to improve their services and has reduced disparities in healthcare quality across the regency. One challenge we’re addressing is standardizing performance indicators to ensure fair comparisons between facilities in urban and remote areas.” (10 April 2025)

This comprehensive analysis of human-centered governance principles in Jeneponto’s health sector demonstrates both progress and persistent challenges. The integration of community voices, enhanced empathy in service delivery, increased transparency in operations, and strengthened accountability mechanisms have collectively improved health service accessibility and quality. However, as the data reveals, implementation remains uneven across facilities and districts, with rural and remote areas experiencing gaps in full implementation. Moving forward, policy recommendations should focus on standardizing these principles across all service points while maintaining flexibility to address local contextual factors.

A strategic phased approach is recommended to address the identified barriers. Phase I should establish foundational elements through regulatory reform that simplifies bureaucratic procedures and standardizes service quality indicators across facilities. Phase II should focus on capacity development by implementing targeted training programs for healthcare workers in empathy-based care and community engagement techniques, particularly in underserved areas. Phase III should strengthen accountability mechanisms by developing integrated digital platforms for transparent budget reporting

and community feedback, while implementing performance incentives tied to human-centered metrics. Throughout all phases, cross-sectoral partnerships between government, NGOs, and community organizations should be formalized through collaborative governance frameworks that institutionalize participation in decision-making processes and ensure sustainability beyond political transitions.

3.2. Supporting and inhibiting factors in the implementation of human-centered governance principles in Jeneponto Regency

This section discusses the factors that influence the success or obstacles in implementing the Human Centered Governance principle in Jeneponto Regency. The supporting factors are seen in Fig. 2.

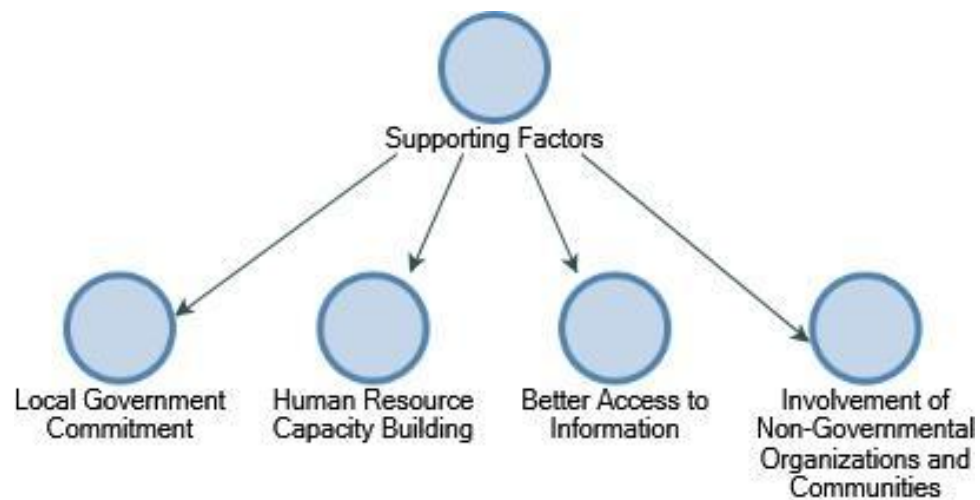


Figure 2: Supporting factors for the implementation of human-centered governance principles in Jeneponto Regency.

The strong commitment of the Jeneponto Regency government plays a vital role in implementing the principles of Human Centered Governance in the health service sector. This commitment is reflected in policies that prioritize community welfare as the main priority and allocate sufficient budget for the health sector. With policies that support the interests of the community, the local government can ensure that every individual in Jeneponto Regency has equal access to quality health services. In addition, the government's commitment is also seen in ongoing efforts to improve health facilities and increase the availability of medical personnel so that the services provided are more inclusive and responsive to community needs. This commitment was articulated by Head of Jeneponto Regency, during an interview on 25 January 2025:

“Our administration has prioritized health service improvement by allocating 15% of our regional budget to the health sector, a 4% increase from the previous fiscal year. We are implementing a ‘Health First’ policy framework that mandates all development planning must consider health impacts. This includes establishing five new remote health posts and recruiting 28 additional medical personnel this year to serve previously underserved communities.”

The expansion of human resources (HR) is one aspect of implementing the human-centered governance principle. Good training and high-level discipline of medical workers will enable them to effectively fulfill the tasks assigned to them and meet the needs and expectations of the four primary stakeholders in the safety of health care in the community: the community, the health care system, the health care market, and health care professionals themselves. Thus, HR training and skills development should focus on ensuring that health workers can fully perceive and respond holistically to community needs. Adequate HR will also increase the quality of health services and increase community trust in the existing health system. Well-trained HR hopefully leads to a way of building a more inclusive space for the entire organization, a place where everyone is heard and appreciated.

Head of HR Development at the District Health Department, explained during an interview on 8 February 2025:

“We have implemented a comprehensive capacity-building program focusing on both technical and soft skills for our health workers. In the past year, 87% of our medical staff have completed training on patient-centered care and cultural sensitivity. Our evaluations show a 32% improvement in patient satisfaction scores following these training programs. We’re also seeing health workers taking more initiative in adapting services to community needs rather than just following standard protocols.”

Supporting the principles of human-centered governance in health services requires increasing public access to information. Governments would gain from enhancing openness and allowing communities to take a more proactive role in decision-making by offering a range of readily available communication options, including social media, government websites, and health information centers. This would help communities understand what their health system rights mean and should give them the capacity to ensure service quality. Such increased uptake improves the chance that service providers can better reflect community needs and drive accountability.

This is another very important supporting factor in the implementation of the human-centered governance principle, where non-governmental organizations (NGOs) and local community organizations are involved in various projects and programs. Because of this reason, involvement is crucial for the implementation of this principle. NGOs working on health and human rights issues can serve as a bridge between the government and the community, diagnose field-level issues, and give feedback from the field to strengthen policy. Furthermore, working with local communities ensures that the policies that are created are more aligned with the local community’s characteristics and needs. In addition to reinforcing policy implementation, the active role of NGOs and communities fostered a sense of ownership and shared responsibility in maintaining public health. Director of the Jeneponto Health Advocacy Network, shared during an interview on 17 March 2025:

“Our organization has established a collaborative framework with the health department where we conduct quarterly community health forums in each district. These forums have successfully identified local health priorities that might otherwise be overlooked in centralized planning. For example, in Bangkala District, we discovered that maternal health services were underutilized due to cultural sensitivities, which led to the development of a culturally appropriate maternal care program involving traditional birth attendants working alongside medical professionals.”

There are also inhibiting factors in the implementation of human-centered governance principles in Jeneponto Regency. The description is seen in Fig. 3 as follows.

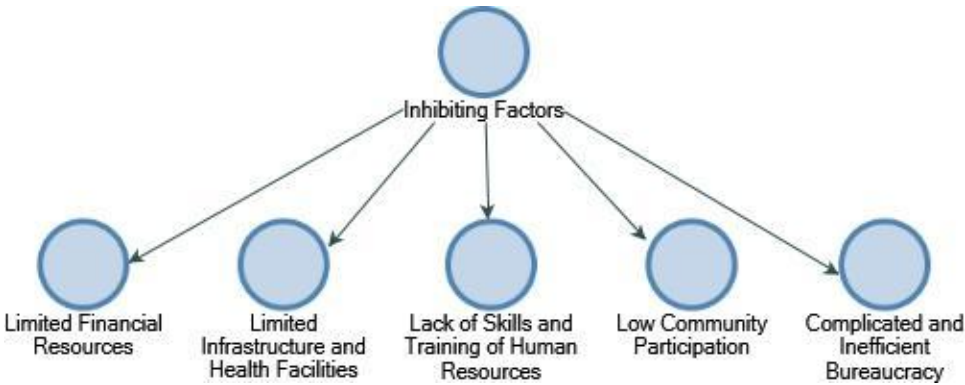


Figure 3: Inhibiting factors in the implementation of human-centered governance principles in Jeneponto Regency.

Limited health budget allocation is one of the obstacles to the implementation of human-centered governance principles in Jeneponto Regency. Dedicating insufficient budgets has led to many inadequate health facilities, the absence of medical equipment,

and limited delivery of quality health services. It is also impossible to provide community-level services and improve the quality of services without an adequate budget. Another barrier to the implementation of human-centered governance is the lack of adequate infrastructure. Many health facilities in Jeneponto Regency are still in poor condition, and some people cannot access them, especially those living in remote areas. Constrained resources in these health facilities undermine the quality of health services and obstruct people's access to required health services. The budget constraints were highlighted by a member of the Regional People's Representative Council's Health Commission, who stated during an interview on 5 April 2025:

“Despite the increased percentage allocation for health, the absolute amount remains insufficient due to our limited regional revenue. When adjusted for inflation, our per capita health spending has effectively decreased by 7% in real terms. This translates to delayed facility renovations and inability to procure essential diagnostic equipment. For instance, three health centers in the southern district have been waiting for basic laboratory equipment replacement for over two years due to budget constraints.”

In addition, the lack of training and skills development for medical personnel and health support personnel in Jeneponto Regency hampers the implementation of the principles of Human Centered Governance. Health workers who are not well trained in the principles of empathy, transparency, and accountability will have difficulty in providing services that are in accordance with the needs of the community. Increasing the capacity of human resources in the field of health services must be a priority to overcome this. Although community participation is an important element in the principles of human-centered governance, in Jeneponto Regency, community participation in the planning and supervision of health services is still relatively low. This factor is caused by the lack of community understanding of their rights in health services, as well as limited access to information about available health programs. Low community participation reduces the effectiveness of existing policies and hinders a more inclusive decision-making process. A village midwife serving in Turatea District, expressed her concerns during an interview on 22 February 2025:

“Many of us in remote health posts receive only standardized training that doesn't address the unique challenges we face in our communities. I've been working here for five years and have received only two professional development opportunities, neither of which addressed how to effectively communicate health information to communities with low literacy levels. We need practical training on engaging communities with

different educational backgrounds and cultural beliefs to truly implement human-centered approaches.”

Overly complicated bureaucracy and inefficient procedures often become obstacles in the implementation of the Human Centered Governance principle. The many layers of bureaucracy in the health service system in Jeneponto Regency hinder the process of making decisions that are fast and responsive to community needs. This makes health services less flexible, slow, and unable to accommodate changes in needs quickly, thus reducing public trust in the government. Therefore, simplifying the bureaucracy and reforming service governance are important steps to encourage the creation of a more adaptive and responsive system. This effort will also strengthen public trust in the government as a service provider that is oriented towards human needs. A community leader from Kelara District, detailed bureaucratic challenges during an interview conducted on 15 March 2025:

“When our village needed an emergency response system for snake bites, which are common during harvest season, we had to navigate seven different approval processes across three government departments. The approval process took eight months, during which two villagers suffered severe complications from snake bites due to delayed treatment. Such bureaucratic complexities directly contradict the principles of responsive governance and put lives at risk when timely decisions are critical.”

The implementation of human-centered governance principles in Jeneponto’s health sector demonstrates a complex interplay between progressive initiatives and persistent structural challenges. The interviews reveal that while there is genuine commitment at leadership levels to adopt these principles, implementation is hampered by systemic limitations in resources, bureaucratic processes, and capacity development. The evidence suggests that successful implementation requires not only policy commitments but also structural reforms to streamline decision-making processes, strategic resource allocation, and targeted capacity building that addresses the specific needs of different healthcare contexts within the regency.

Based on these findings, we recommend a three-tiered implementation strategy to address the identified challenges. First, establish a Governance Reform Task Force comprising representatives from government, healthcare facilities, and civil society to redesign administrative procedures, reducing approval layers by at least 40% while maintaining necessary oversight. Second, develop a Health Resource Allocation Framework that prioritizes equitable distribution based on population needs assessments

rather than historical allocations, with specific mechanisms for rural and remote areas to access additional resources through simplified application processes. Third, implement a Capacity Enhancement Program that combines formal training with mentorship systems, where high-performing facilities partner with underperforming ones to transfer knowledge and best practices in human-centered service delivery. These structural reforms should be accompanied by quarterly progress evaluations using community-validated metrics to ensure accountability and enable continuous improvement toward a truly responsive health governance system.

4. Conclusion

The main findings of this study demonstrate that human-centered governance principles have been implemented in health services in Jeneponto Regency, though with varying degrees of effectiveness across different dimensions. As evidenced through interviews with healthcare providers, government officials, and community members, empathy is manifested through culturally sensitive approaches to maternal and child health services, which has increased both utilization rates and community satisfaction. Transparency has improved through the publication of budget information on facility information boards and district websites, though challenges remain in making technical information accessible to communities with limited education. Accountability mechanisms have strengthened through the implementation of performance-based reporting systems and quarterly public meetings, creating healthy competition among facilities while highlighting the need for standardized indicators that account for regional disparities.

This study also identified several significant inhibiting factors that require systematic attention to optimize the implementation of these principles. Budget limitations, as highlighted by Health Commission member Anwar Dg. Sitaba, have resulted in a 7% decrease in real per capita health spending, directly impacting facility maintenance and equipment procurement. Infrastructure inadequacies particularly affect remote areas, while the limited professional development opportunities for healthcare workers—evidenced by village midwife Bidan Hasniati receiving only two training opportunities in five years—hamper service quality. Community participation, while growing, remains constrained by knowledge gaps and access barriers. Additionally, bureaucratic complexity creates critical delays in decision-making, as demonstrated by the eight-month approval process for

an emergency snake bite response system that resulted in preventable complications for community members.

The implementation challenges and successes documented in Jeneponto Regency offer valuable insights for national health governance initiatives. The transparency mechanisms developed locally align with Indonesia's Electronic-Based Government Systems (SPBE) as mandated by Presidential Regulation No. 95/2018, demonstrating how digital accountability tools can be adapted for regions with varied infrastructure capacity. The documented disparities in healthcare access and quality directly inform National Health Insurance (JKN) implementation strategies, particularly regarding how universal coverage programs must account for regional resource variations and capacity limitations. Furthermore, the community participation approaches that showed promise in Jeneponto support Indonesia's commitment to Sustainable Development Goal 16, offering evidence-based practices for strengthening institutional responsiveness in healthcare delivery. By addressing the systemic barriers identified in this regency-level study, policymakers can develop more nuanced national frameworks that accommodate regional diversity while advancing Indonesia's broader health system objectives.

References

- [1] Tollera G, Retta MT, Girmay AM. Patient satisfaction with healthcare services and associated factors at public health centers in Addis Ababa, Ethiopia. *Discov Soc Sci Health*. 2025;5(1):44155.
- [2] Salangwa C, Munthali R, Mfuné L, Nyirenda VK. Public-Private partnership (PPP) and health service delivery in Malawi: The case of Christian Health Association of Malawi (CHAM) facilities in Mzimba district. *Health Policy OPEN*. 2025 Mar;8:100139.
- [3] Xu L, Zhang Y. A quality function deployment–based resource allocation approach for elderly care service: perspective of government procurement of public service. *Int Soc Work*. 2021;64(6):992–1008.
- [4] Vieira FS, Zucchi P. Financiamento da assistência farmacêutica no sistema único de saúde. *Saude Soc*. 2013;22(1):73–84.
- [5] Alves L. Lula Government starts repairs to Brazil's child health services. *Lancet Child Adolesc Health*. 2023;7(5):306–7.
- [6] Giné-Garriga R, Delepiere A, Ward R, Alvarez-Sala J, Alvarez-Murillo I, Mariezcurrena V, et al. COVID-19 water, sanitation, and hygiene response: review of measures and

- initiatives adopted by governments, regulators, utilities, and other stakeholders in 84 countries. *Sci Total Environ.* 2021 Nov;795:148789.
- [7] Yuan Q. (2024). Promoting Multi-actor Collaboration for New Online Service during Public Health Emergency: Roles of an Innovation Lab at Local Government. *ACM International Conference Proceeding Series*, 81–87.
- [8] Jia H. Government Digital Transformation and the utilization of Basic Public Health Services by China's migrant population. *BMC Public Health.* 2024 Nov;24(1):3253.
- [9] Ikpebe E. (2024). Challenges of public service delivery in developing countries. *Handbook of Public Service Delivery*, 323–339. <https://doi.org/10.4337/9781035315314.00028>.
- [10] Amiruddin H, Ansariadi A, Palutturi S, Wahidin M, Akmal AR, Tasya Z, et al. Counseling quality of dangerous signs of pregnancy health in work region of urban and rural puskesmas (Public health center) Jeneponto. *Open Access Maced J Med Sci.* 2020;8 T2:172–5.
- [11] Bason C, Austin RD. Design in the public sector: toward a human centred model of public governance. *Public Manage Rev.* 2022;24(11):1727–57.
- [12] Bason, C. (2017). Leading public design: Discovering human-centered governance. *Leading public design: Discovering human-centered governance*, 1–257.
- [13] Dewi PS, Nurcahyo F, Bramantyo A. (2025). Cultural Sensitivity in Healthcare Research: Lessons from Rural Indonesia. *Forum for University Scholars in Interdisciplinary Opportunities and Networking* 1 (1):582-590. <https://prosiding.ut.ac.id/>
- [14] Dewi PS, Zaharuddin Z. Exploring The Management Strategies Of Health Services And Facilities For The Older Adult In West Manggarai, East Nusa Tenggara, Indonesia. *Jurnal Manajemen Kesehatan Indonesia.* 2024;12(2):207–18.
- [15] Schwartz M, Berkowitz J, McCann-Pineo M. Understanding the Role of Empathy and Gender on EMS Clinician Occupational Stress and Mental Health Outcomes. *Prehosp Emerg Care.* 2024;28(4):635–45.
- [16] Thompson A. Trust, transparency, and accountability in health and pharmaceutical systems. *J Pharm Health Serv Res.* 2025;16(1):2025.
- [17] Nurhayati P., P., Yahya, M., Pratiwi, R. D., Misnawati, Fitriani, L., & Intang, S. N. (2021). The effect of education level and health facilities on maternal participation through health services at binuang public health center, Polewali Mandar District. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 3090–3097.