

EXPLORING THE MANAGEMENT STRATEGIES OF HEALTH SERVICES AND FACILITIES FOR THE OLDER ADULT IN WEST MANGGARAI, EAST NUSA TENGGARA, INDONESIA

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ABSTRACT

This study explores the management strategies implemented in health services and facilities for the older adult population in West Manggarai, East Nusa Tenggara, Indonesia. The research focuses on the unique healthcare needs of older adult residents and investigates various approaches adopted by local health institutions to enhance the quality of care, promote accessibility, and address specific challenges associated with aging. The sample for this research consists of seven health care personnel. The method used in this study was qualitative, involving in-depth interviews. This study highlights the effectiveness of an upstream model approach that implements a collaborative network of village health centers and public primary healthcare facilities as a comprehensive continuum for providing healthcare services. This approach also used the Integrated Health Post for Older Adults programs as a frontline initiative for community-based healthcare services. By prioritizing community engagement, preventive care, and integrated healthcare services, these upstream models pave the way for a sustainable healthcare system that prioritizes the health and well-being of aging populations, particularly in rural areas.

Keywords: *leadership, health care services, health care*

INTRODUCTION

In the complex global healthcare landscape, providing healthcare services to the older adult population has become increasingly crucial, given the rapid growth of this demographic worldwide. Indonesia, as the world's largest archipelagic state with 17,505 islands, 6,000 of which are inhabited, and administratively divided into 33 provinces, faces unique challenges due

to its demographic changes.¹ The diverse populations across these islands have posed difficulties in implementing consistent health measures and ensuring equal access to healthcare services nationwide.² Indonesia's healthcare system faces several significant challenges, including strained resources, limited healthcare infrastructure, and healthcare disparities across different regions.³ These issues are worsened by the

geographical distribution of the population, making it challenging to provide consistent and comprehensive healthcare services for all older adults.

In the complex healthcare landscape of Indonesia, the West Manggarai regency stands out as an intriguing case study. Despite the constraints of limited healthcare personnel, concerted efforts are ongoing to optimize the availability of health services for older adults.⁴ Local authorities and healthcare providers in West Manggarai have recognized the imperative of addressing these complexities and are actively developing a management strategy that incorporates creative and innovative solutions to ensure that older adults receive the care they rightfully deserve.

As a result, the findings of this research present a compelling study worthy of further exploration, emphasizing the significance of a holistic and interconnected health service management system. This approach ensures the provision of comprehensive health services for older adults and effectively addresses the challenges posed by limited resources for healthcare workers. Implementing such a system has the potential to create a more inclusive and responsive healthcare infrastructure for the region's aging population. Furthermore, upon deeper examination, there emerges an opportunity to revolutionize the care of older adults on a broader scale. This vision encompasses a future where older adults are not mere passive recipients of care but active participants in their own well-being, surrounded by a community that genuinely values and supports their health journey.

METHOD

This research used a qualitative methods approach, which involved in-depth

interviews with healthcare personnel in local health facilities from November 2022 to September 2023. This approach aligns with the recommendations of Moser & Korstjens and Aspers & Corte, aiming to enable a thorough investigation of participants' experiences and provide valuable insights into the lived experiences, challenges, and perspectives of healthcare personnel as they navigate healthcare services within various resource constraints.^{5,6}

This study focuses on seven healthcare personnel working in local healthcare facilities in Sok Rutung village, located in West Manggarai, East Nusa Tenggara, Indonesia. The research focuses on a heterogeneous pool of healthcare personnel participants to ensure a comprehensive perspective on the issue and contribute to the triangulation of resources.

The author reported that all study procedures were approved by the Medical and Health Research Ethics Committee (MHREC) of the Faculty of Medicine, Public Health, and Nursing at Universitas Gadjah Mada – Dr. Sardjito General Hospital, with the referral number KE/FK/1412/EC/2022. The study obtained informed consent from all individual participants who were included in the research.

RESULTS AND DISCUSSION

Based on **Table 1**, it reveals that the majority of participants fell within the age range of 30 to 39 years old, totaling 57.1% of all participants. Among the participants, 28.6% were aged between 50 to 59 years old, while only 14.3% were in the age range of 40 to 49 years old. Meanwhile, the gender distribution showed a relatively balanced representation, with 57.1% being women and 42.9% being men.

Furthermore, all healthcare personnel participants were from West Manggarai and identified as Catholics. In terms of professions, the majority were nurses, totaling for 71.4% of the sample, followed by doctors (14.3%) and public primary healthcare leaders (14.3%).

Additionally, 71.4% of respondents from each facility were from public primary health care facilities or ‘Puskesmas’, with the remainder from village health centers or ‘Poskesdes’. This distribution highlights the persistent challenges faced by healthcare personnel in remote areas. The high concentration of nurses in the sample emphasizes their crucial role in healthcare delivery. They are often at the forefront of addressing the challenges of providing medical care in remote and underserved regions, especially in areas with a limited number of healthcare personnel.^{2,4}

This observation is supported by a study conducted by Pramono & Fanumbi in several villages in Maluku, which is also a remote region of Indonesia. The study revealed that the presence of doctors in primary health care facilities lasted only 2-3 months, followed by prolonged periods of vacancy. Consequently, daily health services were exclusively staffed by nurses.⁷ Meanwhile, a study conducted by Kadar et al. shows that healthcare personnel in remote areas play a more direct role in the service process and administration of medical drugs, with nurses taking the forefront position in this responsibility.¹

Table. 1 Demographic characteristics of health care personnel participants

Characteristic	Categories	Number (percent) (N=7)
Age	30-39 years old	4 (57.1%)

	40-49 years old	1 (14.3%)
	50-59 years old	2 (28.6%)
Sex	Man	3 (42.9%)
	Women	4 (57.1%)
Profession	Doctor	1 (14.3%)
	Nurse	5 (71.4%)
	Public primary healthcare leader	1 (14.3%)
Facilities	Village health center	2 (28.6%)
	Public primary health care	5 (71.4%)

As we explore the findings further, it becomes evident that understanding the unique experiences and distinct challenges faced by nurses in remote locations is essential for making effective policies and initiatives that truly address their needs. The significant presence of nurses in these areas emphasizes the importance of implementing targeted strategies and support systems to enhance their impact. These individuals fulfill multiple roles, serving not only as primary caregivers but also as educators and community health advocates. In many cases, nurses in remote settings are required to quickly adapt to diverse medical situations, showing their versatility and resilience.⁸

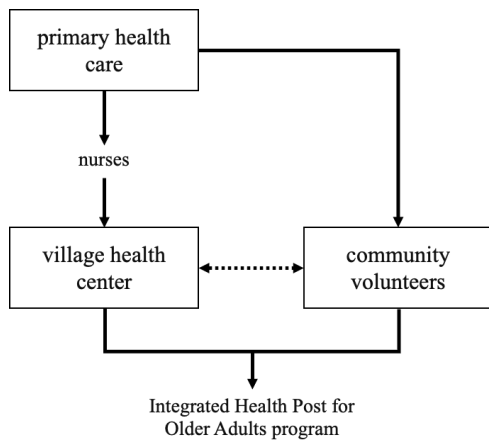


Fig. 1 Management steps for providing older adult care by public primary health care facilities

In our findings, we observed that in these limited situations, public primary health care leaders take the initiative to develop strategies (see **Fig. 1**) that are more focused on an upstream approach. They prefer delivering healthcare services closer and more directly to the older adult population by utilizing village health center facilities. In this approach, nursing personnel are assigned on a rotating basis to each village to assist in running the Integrated Health Post for Older Adults program on a monthly basis. The leaders of the public primary health care also engage community volunteers to participate in the program, fostering a sense of mutual attachment and a shared commitment to promoting health for older adults.

Upstream-centric approach

In the management of older adult healthcare services in Manggarai, a well-organized system (see **Fig. 2**) has been established to provide the specific needs of the aging population. A key aspect of this system involves the strategic division of work areas between public primary health care facilities and village health centers. This division ensures a comprehensive approach to older adult care, starting with

initial health screenings carried out in the villages through the village health center.⁸

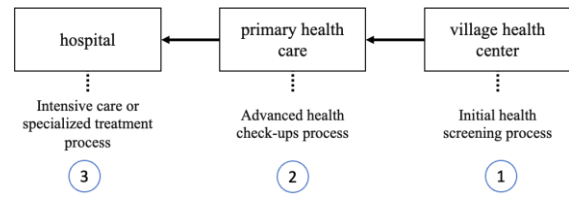


Fig. 2 Management steps for providing older adult care

In addition to the aforementioned steps, the Integrated Health Post for Older Adults program (see **Fig. 3**) plays a crucial role in coordinating health education programs specifically designed for the older adult population.¹ These programs are strategically designed to prioritize the promotion of healthy lifestyles, implementation of preventive measures, and effective disease management customized to the specific needs of older adults.^{1,7} Through targeted health consultation sessions, the initiative aims to empower older adults by providing them with knowledge and resources.⁹ The goal is to encourage, initiate, and enable individuals to actively participate in preserving their health and well-being as they age. This approach not only enhances the quality of care provided but also fosters a sense of autonomy and engagement among older adults, promoting a more proactive and informed approach to their health in later years.^{9,10}



Fig. 3 Activities carried out in the Integrated Health Post for Older Adults program

Thus, besides providing medical care through free health check-ups, the management of older adult health care services in Manggarai places strong consideration on fostering a supportive community environment.¹¹ Recognizing the significance of addressing the holistic needs of older adults, the healthcare system incorporates social activities and support groups, such as aerobic exercises, and the provision of additional healthy foods. These integrated initiatives extend beyond medical interventions, aiming to enhance the overall well-being of the older adult population. By incorporating recreational opportunities, such as aerobic exercises, and providing nutritional support, the management aims to create a comprehensive system that meets the diverse needs of older adults.¹² More importantly, these activities serve more than just recreational purposes; they also create spaces for social interaction, reducing the risk of isolation and making a significant contribution to the mental and emotional well-being of older adult residents.^{11,13} In the process, this holistic approach emphasizes the commitment to not only addressing medical concerns but also fostering a thriving and supportive community for older adult individuals.¹⁴

Additionally, feedback mechanisms are established in each session to gather

insights from both healthcare providers and the older adult community, fostering a culture of continuous improvement and adaptability within the existing healthcare network.¹³ This feedback mechanism ensures that healthcare services remain responsive to the evolving needs and preferences of older adults, thereby enhancing the overall effectiveness and quality of care.

Contrary to this, a study by Pramono & Fanumbi revealed that the Health Post for Older Adults did not operate effectively every month in the observed study villages. Most of older adults lack awareness of information and schedules for routine program activities, which leads to their infrequent participation in local health services. Based on the results of their study, we can conclude that the effectiveness of the Health Post for Older Adults program cannot rely solely on healthcare personnel. Instead, it requires the establishment of a joint commitment and supportive community engagement to ensure the well-being of older adults.⁷

Meanwhile, based on our argumentation, the core of this healthcare initiative lies in the systematic implementation of the Integrated Health Post for Older Adults at the village level, which requires a collaborative effort among healthcare personnel, older adults, and the community itself. Through this program, the health of older adults is regularly monitored, enabling the early detection of potential health issues. In any event where health concerns are identified, older adults receive their required medications through the program without incurring any costs; the medications are provided free of charge. This 'affordable' indicator is crucial for overcoming barriers faced by the aging population in maintaining their health.¹¹

Beyond affordability, the program is designed to be available, accessible, appropriate, and integrated with other health, social, and service providers.¹

This proactive approach holds significant importance in maintaining the well-being of the older adult population and plays a pivotal role in preventing the escalation of health problems. By facilitating interventions regularly and providing necessary medications without financial barriers, the Integrated Health Post for Older Adults not only promotes the health of older adult individuals but also demonstrates a commitment to proactive and accessible healthcare within the community.¹¹

Meanwhile, for more advanced check-ups or medical interventions, the process transferred to public primary health care (see **Fig. 2**), which follows an outpatient treatment model. This facility serves as a central hub for specialized health care services, offering a higher level of care when needed. The coordination between the village health center and the public primary health care ensures a continuum of care, with the latter serving as an essential link in the healthcare chain. This coordinated approach ensures that individuals in need of more advanced medical attention receive it promptly and efficiently. The public primary health care, with its specialized services, is better equipped to address the progressive and diverse healthcare needs of the community. This reinforces the commitment to providing comprehensive and accessible healthcare services for all. The synergy between the village and public primary health care showcases a well-organized healthcare system that prioritizes continuity and responsiveness to various medical needs.

Management of advanced stages of the treatment

In cases where patients require intensive care or specialized treatments, the networked healthcare system (see **Fig. 2**) takes a further step by facilitating the transfer of individuals from public primary health care to the hospital. This escalation in care reflects a collaborative effort among the various healthcare facilities to address the diverse and evolving needs of older adults in Manggarai. This transition between healthcare levels ensures that patients receive the appropriate level of care based on the complexity of their medical conditions. The collaboration between public primary health care facilities and hospitals highlights a commitment to provide a comprehensive and responsive healthcare system. This showcases the importance of coordinated efforts to address the specific healthcare needs of the older adult population.

In the process, this tripartite system, which includes village health centers, public primary health care facilities, and hospitals, operates cohesively as a networked healthcare system. The interaction and coordination among these facilities create a well-structured framework that prioritizes the health and well-being of the older adult population in Manggarai. By combining preventive measures, community engagement, and specialized care, this approach not only addresses the immediate healthcare needs of the older adult population but also lays the foundation for a sustainable and inclusive approach to older adult care that can be replicated in other regions, particularly in remote areas. This holistic framework stands as a testament to the community's commitment to the health and

well-being of its older adult individuals, setting a standard for comprehensive and compassionate healthcare systems.¹ Through this interconnected structure, the healthcare system ensures comprehensive coverage and responsiveness, reflecting a commitment to providing optimal healthcare services for the older adult residents of Manggarai.

The hospitals within the system serve as final hubs for specialized medical interventions (see **Fig. 2**), ensuring that advanced treatments and surgeries are readily available when needed. Emergency response protocols are well-established, with easily accessible communication channels between all levels of care, ensuring prompt and effective responses to urgent health concerns. This interconnectedness is a testament to the commitment to a patient-centric approach, where the focus is not only on treating diseases but also on promoting the overall quality of life for the older adult population.

In essence, the healthcare system in Manggarai showcases a model that not only treats illnesses but also strives to prevent them and promote the overall well-being of the older adult population. Through its integrated and collaborative structure, it stands as a testament to the community's dedication to creating a supportive and nurturing environment for the aging residents, even in the face of limited healthcare personnel.

Proactive health services management for the older adult

Based on our observations, the leader of the public primary health care has implemented proactive measures to manage the health of the older adult population within their jurisdiction. These measures aim to ensure that every older adult has

access to National Insurance (BPJS) through a government-sponsored model—as it was mandated by the government that every older adult in Indonesia will be covered under a universal health coverage system that is fully subsidized.¹¹ The leader systematically conducts house-to-house checks to verify the insurance status of every older adult resident. If an older adult is found to be lacking national insurance, the leader takes the initiative and encourages immediate action to facilitate their registration in the national insurance system. This approach is motivated by the recognition of older adults as a vulnerable group susceptible to rapid health fluctuations.¹⁵

The leader emphasizes the importance of swift access to health services and care without financial constraints, considering that the health needs of older adults can change rapidly. The availability of national insurance is considered essential for providing timely and unrestricted healthcare services to this vulnerable population.¹¹ Through these efforts, the public primary health care leader demonstrates a commitment to ensuring that the older adult population receives prompt and unimpeded access to necessary healthcare resources.

As a point of consideration, a study conducted by Wulandari & Laksono in the older adult population of East Java, the main island of Indonesia's capital city, encompassing both urban and rural areas, revealed a notable lack of health insurance among the majority of elderly individuals. Particularly, only 45.5% of older adults in urban areas and 40.8% in rural areas were found to possess health insurance under a government-sponsored model.¹⁶ Meanwhile, in a study conducted by Madyaningrum et al., it was found that a

significant 53.1% of older adults, drawn from a total sample population of 2,912 across Indonesia, did not have health insurance.² Based on both studies, this emphasizes that there is a significant proportion of older adults in Indonesia who still lack essential health insurance coverage, particularly those in remote regions. Additionally, another finding from a study conducted by Setiawan et al. suggested that approximately 54.58% of older adults in Indonesia had insurance coverage in 2015.¹⁷

Based on the aforementioned studies, the proactive house-to-house checks conducted by the leader of the public primary health care, serve not only the purpose of verifying insurance status but also provide an opportunity for health assessments and the identification of potential health issues. During these visits, the leader and their team can take the opportunity to educate older adult residents about preventive measures, healthy lifestyle choices, and the importance of regular check-ups. By fostering a direct and personal connection with the community, the leader creates a supportive environment that encourages open communication about health concerns.¹⁰ This approach plays an essential role in safeguarding the health and well-being of the older adult residents under their care. The leader ensures that older adult residents feel empowered to actively participate in their own health management, contributing to a collaborative effort to promote a healthier community.

Thus, the leader of the public primary health care plays an essential role in ensuring the success and regularity of the Integrated Health Post for Older Adults program, recognizing it as a fundamental component of the healthcare strategy. This

monthly program represents a significant commitment to upstream management, focusing on preventive care and localized health services. By organizing these sessions in the villages within their jurisdiction, the public primary health care leader demonstrates a keen understanding of the unique challenges faced by the older adult population, particularly in rural areas.

The Integrated Health Post for Older Adults program is designed to bring healthcare directly to the grassroots level, acknowledging the importance of accessibility and convenience for older adult residents. This issue is grounded to the lack of actively running programs or service facilities for older adults in Indonesia, particularly in rural areas.¹⁸ This proactive approach aims to eliminate barriers that may prevent individuals from seeking essential health check-ups and services.¹⁸ In doing so, it addresses the challenge faced by older adults who have to travel long distances to urban hospitals, which can be financially burdensome, physically demanding, and with limited transportation options.^{14,16,19,20}

According to the study by Laksono et al., in a general setting, the average travel time required to reach public primary health facilities is at least 10-30 minutes, with 74.6% in urban areas and 73% in rural areas.¹⁴ The total costs for urban areas indicate that 49.7% state it requires at least < IDR 5,000, while for rural areas, 48.5% mention it requires at least IDR 5,000 – IDR 10,000. Therefore, based on the information provided above, we can conclude that the requirements for accessing public primary health care facilities can certainly be burdensome for some older adults.

Furthermore, by conducting health check-ups and health consultation sessions

in the villages, the leader of public primary health care promotes community engagement and support. Local healthcare professionals who are familiar with the specific needs of older adults in these areas can provide health advice and interventions. This not only enhances the quality of care but also strengthens the relationship between healthcare providers and the community, fostering trust and understanding.¹¹ The emphasis on preventive measures and early interventions within the Integrated Health Post for Older Adults program aligns smoothly with the broader goal of proactive health care management. By addressing health issues at their early stages, the program aims to prevent the escalation of conditions and contribute to maintaining the health and well-being of the older adult population. Regular monitoring and health education provided through these sessions empower older adults with the knowledge necessary for self-care and healthier lifestyles.⁹ The program also ensures the recording of their health conditions and health history.

As a point of consideration, there is an argument that emphasizes the importance of having expert medical personnel for the successful implementation of the Integrated Health Post for Older Adults program.²¹ Recognizing the importance of professional oversight, the leader of the public primary health care emphasizes the active participation of medical personnel from the center's facilities in overseeing and supervising the program.¹¹ This intentional engagement extends to working directly in the program's implementation alongside community volunteers in each village, and it operates on a rotating and routine basis. The leader's proactive approach ensures

that the health program strictly adheres to health guidelines and regulations provided by experts. The integration of medical professionals into the program's execution serves as a testament to the commitment to maintaining a high standard of care. Despite potential challenges posed by limited personnel, this hands-on involvement reinforces the public primary health care's dedication to aligning with established health protocols for the well-being of the older adult population in the community.^{11,21}

Furthermore, the active involvement of medical personnel provides a valuable educational opportunity for community volunteers. By working alongside healthcare experts, volunteers can gain insights into best practices, medical protocols, and effective communication strategies.¹¹ This knowledge transfer contributes to the overall capacity of knowledge within the community, creating a more informed and skilled network of individuals dedicated to older adult healthcare.¹ The leader's insistence on the direct involvement of medical personnel in the Integrated Health Post for Older Adults program provides an example of a commitment to excellence and adherence to established health standards. This proactive approach not only ensures the program's effectiveness in providing high-quality care but also fosters a collaborative and empowered community capable of addressing healthcare needs.

The integration of medical expertise into community initiatives promotes sustainable healthcare practices and empowers local volunteers with the knowledge and skills necessary for ongoing, effective healthcare management.^{11,21} In a study conducted by Ramadhania et al., it was explained that

volunteers (*cadres*) who assist with the healthcare of older adults at the village health center feel a sense of satisfaction from the expression of gratitude given by the older adults—some volunteers have spiritual reasons, believing that helping others in need is part of worship and leads to positive outcomes for them in the afterlife—which makes them feel appreciated.²¹

Systematic documentation older adult health development

The leader of the public primary health care demonstrates a proactive management approach by mandating regular documentation of results from the Integrated Health Post for Older Adults program on a monthly basis. This commitment to regular monitoring serves as a fundamental component of the healthcare system’s proactive approach to managing the health of older adults (see **Fig. 4**).²² The recorded results are then transferred to the public primary health care for in-depth analysis, creating a systematic process. This systematic approach to health data analysis enables the identification of emerging health issues and the early detection of potential health risks that might require further or more intensive treatment for older adults.²² In cases where issues are identified, public primary health care can provide immediate advice and, if necessary, facilitate referrals to more intensive and specialized care at public primary health care facilities or nearby hospitals. This response ensures that older adults receive the appropriate level of care and intervention, preventing the escalation of health conditions.

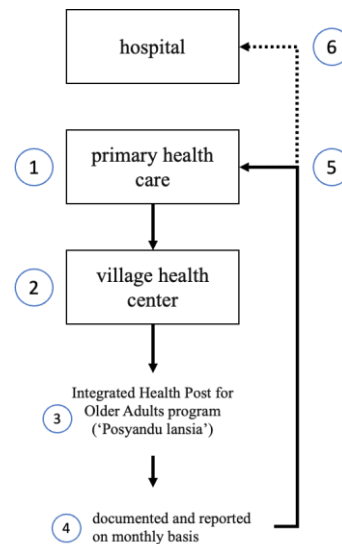


Fig. 4 A series of documentation processes for older adult health development

The proactive nature of this approach emphasizes a commitment to maintaining the well-being of the older adult population. By intervening at the early stages of health issues, the healthcare system demonstrates a dedication to preventive and responsive care, ultimately contributing to the overall health and quality of life of older adult residents. This strategy aligns with a holistic and patient-centered approach, emphasizing the importance of effective healthcare management for older adults.

The roles of both the Integrated Health Post for Older Adults program and public primary health care provide a mutually sustainable collaboration or synergy. The program, operating at the local level, serves as the frontline for routine health monitoring and data collection, while public primary health care leverages its expertise and resources for in-depth analysis and coordination of care. This collaboration is not only efficient but also reinforces a comprehensive and holistic approach to creating a dynamic and responsive healthcare system in the long term.

CONCLUSIONS

Based on this study, we can learn that primary health care facilities in West Manggarai, East Nusa Tenggara, serve as pivotal hubs for managing village health centers. These centers are essential for providing comprehensive health services to the community, particularly the older adult population. Despite the challenges, such as limited personnel, they are showing a strong commitment to ensuring adequate healthcare through an upstream model approach. This includes promoting equitable health services, such as door-to-door initiatives and placing health services more directly at the village level.

Through the strategy of ensuring the implementation of the Integrated Health Post for Older Adults program in each village and integrating it into village health center facilities across the district, serving as a chain of interconnected health services with advanced healthcare facilities (primary health care facilities and hospital),

has led to a sustainable healthcare system. This model is not only curative but also preventive. Furthermore, by involving volunteers from the community in every health program, they foster a sense of responsibility and encourage active participation, not only in their own well-being but also in that of others, thus has led to a sustainable model in which everyone plays a role in maintaining a supportive and healthy environment, particularly for the aging population.

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