

The Role of Standard Operating Procedures in Elderly Posyandu Services at the Doi-Doi Community Health Center UPT in Mattappawalie Village, Pujananting District, Barru Regency

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Article Info	ABSTRACT
Keywords: SOP, elderly integrated health post, service quality, Doi-Doi Health Center UPT	This study aims to analyze the role of Standard Operating Procedures (SOPs) in improving the quality of services at the Elderly Integrated Health Post (Posyandu) at the Doi-Doi Community Health Center (Puskesmas) in Mattappawalie Village, Pujananting District, Barru Regency. SOPs are essential guidelines that standardize each stage of service delivery to ensure efficiency, effectiveness, and responsiveness to the needs of the elderly. This study employed a qualitative approach, collecting data through observation, in-depth interviews, and documentation. The results indicate that the existence of SOPs has a positive impact on the timeliness of services, clarity of staff workflows, and increased satisfaction among the elderly. However, challenges remain, such as a lack of understanding among some staff and suboptimal socialization and routine training. Therefore, SOPs play a crucial role not only as a technical reference but also as a tool for continuous service quality improvement at the Posyandu for the elderly. Capacity building of health workers and cadres is necessary through regular technical guidance to maximize SOP implementation.
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INTRODUCTION

Posyandu for the elderly is a form of community-based health service that focuses on promotive and preventive efforts for the elderly. Within the context of public services, the existence of Posyandu for the elderly is vital for early detection of disease risks and maintaining the quality of life of the elderly on an ongoing basis. One key factor in ensuring optimal service delivery is the implementation of structured and consistent Standard Operating Procedures (SOPs). SOPs serve as guidelines for health workers and cadres in providing services in accordance with established standards. Implementing SOPs can also reduce the risk of procedural errors that could harm elderly patients, who are physically and psychologically more vulnerable. In many cases, the implementation of SOPs also determines the success of community-based health programs. Therefore, it is important to examine in depth how SOPs are implemented in Posyandu services for the elderly in various regions, including Barru Regency.

The increasing number of elderly people in Indonesia requires healthcare providers to strengthen elderly-friendly service systems, including through Posyandu. According to Statistics Indonesia (BPS) data, the number of elderly Indonesians will reach 10.82% of the total population in 2023 and is expected to continue to increase annually (BPS, 2023). This increase requires a systematic response from the health sector, particularly through primary health care services such as Community Health Centers (Puskesmas) and Integrated Health Posts (Posyandu). This is where strengthening SOPs as part of service governance becomes crucial. Good SOPs not only explain procedures but also serve as a means of continuously improving service quality. According to the Indonesian Ministry of Health (2022), implementing SOPs in elderly care can improve efficiency, safety, and patient satisfaction. Therefore, Community Health Centers (UPT Puskesmas), as the frontline healthcare providers, must have clear, easy-to-understand SOPs that are consistently implemented.

At the Doi-Doi UPT Puskesmas in Mattappawalie Village, Pujananting District, Posyandu services for the elderly are a crucial part of local community health efforts. However, the reality on the ground often shows variations in SOP implementation, both in terms of staff understanding and consistency in their application. This highlights the importance of evaluating the role of SOPs comprehensively. According to Lestari et al. (2021), differing understanding of Standard Operating Procedures (SOPs) often leads to inconsistencies in service delivery in the field. Furthermore, routine monitoring of SOP implementation is often neglected due to limited resources and staff workloads. Yet, the success of Posyandu (Integrated Health Posts) for the elderly depends heavily on the regularity and standards applied in routine activities such as blood pressure measurements, nutritional status checks, and health education.

The quality of SOP-based health services has been proven to increase accountability and public trust in public services. According to research by Sari and Wulandari (2020), consistently implemented SOPs can increase patient satisfaction by up to 35% compared to services without them. Implementing SOPs also helps create equality of service between Posyandus. This is crucial because the elderly have the same right to quality health services, regardless of their location. Therefore, SOPs are a crucial instrument for ensuring equitable and non-discriminatory services. In Posyandu services for the elderly, SOPs also serve to regulate time, schedules, and intervention procedures specific to the elderly group.

In many studies, SOPs are viewed as the foundation of healthcare quality management. They help streamline work processes, increase productivity, and reduce reliance on individuals. As explained by Mahfud et al. (2022), SOPs for Posyandu services for the elderly should include service components such as health risk identification, nutrition education, vitamin administration, and medical referrals when necessary. However, obstacles to SOP implementation still frequently occur, particularly in remote areas such as Pujananting District. These include a lack of training for cadres, regulatory changes, and logistical limitations. Therefore, it is important to analyze the extent to which SOPs function as intended in the field, including at the Doi-Doi Community Health Center (UPT).

Another important aspect of SOPs is their ability to standardize communication between healthcare workers and elderly patients. Elderly patients often face communication barriers due to age, hearing, or understanding. Therefore, SOPs must also include effective and empathetic communication strategies. As noted by Indriyani et al. (2023), SOPs equipped with communication guidelines specifically for the elderly can increase effectiveness. health education and patient understanding of their health conditions. In the context of community services, SOPs are not only technical tools but also social tools that strengthen the relationship between health workers and the beneficiary community.

Posyandu (Integrated Service Posts) for the elderly in various regions in Indonesia exhibit diversity in organizational structure and resources. In some places, SOPs are developed by district health offices and adapted to local characteristics. However, many Community Health Centers (Puskesmas) have not yet fully digitized SOPs or integrated them into their service monitoring and evaluation systems. A study by Rizka and Adi (2021) found that the lack of SOP updates and weak activity documentation hampered the implementation of elderly services. Therefore, innovation and openness in developing and evaluating SOPs are essential to address the evolving needs of the elderly population.

Another important factor determining the effectiveness of SOPs is the role of health cadres as the spearhead of Posyandu activities. Without the active involvement of cadres who understand and implement SOPs, SOPs become merely administrative documents. In a study by Putri et al. (2020), cadres who received regular training on SOPs demonstrated more consistent and high-quality service performance. Therefore, regular training and supervision from the Community Health Center (Puskesmas) are key to ensuring that SOPs are implemented properly. Furthermore, strengthening the capacity of cadres can also be a strategy for empowering the community in general.

Implementing SOPs is not only important from an operational perspective, but also from an ethical perspective in healthcare services. As a vulnerable group, older adults have the right to be treated with respect and dignity in every healthcare interaction. SOPs that incorporate ethical service values can prevent ageism and ensure that services are holistic and humane. As explained by the WHO (2021), a person-centered care approach should be the foundation of every policy and SOP in the primary healthcare sector. Therefore, SOP development needs to incorporate a humanitarian perspective and be based on scientific evidence.

It is also crucial to closely monitor the sustainability of SOP implementation at the Posyandu (Integrated Health Post) for the elderly. In the long term, SOPs that are not reviewed and adjusted will become outdated and irrelevant. Therefore, according to Yusuf and Hanifah (2022), SOPs should be living documents, regularly updated based on field evaluations and changing community needs. At the Doi-Doi Community Health Center (UPT Puskesmas), regular evaluation of SOPs can be conducted through internal audits and feedback from service users, namely the elderly and their families. This step will promote accountability and sustainability of services.

However, the influence of local culture on SOP implementation cannot be ignored. In communities with strong social ties, a community-based service approach needs to be integrated into SOPs. SOPs that are too rigid can conflict with local values, hindering community acceptance. Therefore, the SOPs developed need to take into account the socio-cultural context of Mattappawalie Village. According to Rahmawati et al. (2023), involving community leaders in SOP development can increase the effectiveness of service delivery in rural areas.

Based on the above description, this research is crucial to understand the extent to which SOPs support Posyandu services for the elderly in the Doi-Doi Community Health Center (UPT Puskesmas) work area. The results are expected to provide input for improving the elderly health care system and serve as a reference in formulating local health policies. By understanding the roles, challenges, and solutions in implementing SOPs, Posyandu services for the elderly can be more focused, efficient, and responsive to the needs of the elderly in Barru Regency.

METHODOLOGY

This study employed a qualitative descriptive approach to explore the role of Standard Operating Procedures (SOP) in the elderly Posyandu services at UPT Puskesmas Doi-Doi, Mattappawalie Village, Pujananting District, Barru Regency. Data were collected through in-depth interviews, direct observations, and document analysis between July 5, 2025, and August 10, 2025. The key informants consisted of seven individuals: (1) Mrs. Idia (80), elderly participant; (2) Mrs. Nur Intan, AMK.G (37), health officer; (3) Mrs. Saimang (65), elderly participant; (4) Mrs. Miptahul Jannah, S.Kep., N.S. (36), nurse; (5) Mrs. Sukmawati, S.S.Kep., N.S. (37), elderly examination officer; (6) Mrs. Ernawati, ST.r.Kes (35), head of administration; and (7) Sarina (24), elderly Posyandu cadre.

Data collection began with the preparation of interview guidelines to ensure that all relevant aspects of SOP implementation were addressed. Observations were carried out during Posyandu sessions to examine the sequence of services, staff responsibilities, and adherence to SOPs. Supporting documents such as SOP manuals, attendance records, and monthly reports were also reviewed to triangulate the findings from interviews and observations. Data analysis was conducted using ATLAS.ti Version 24. The analysis followed three stages: open coding, axial coding, and selective coding. Open coding involved breaking down interview transcripts, observation notes, and documentation into discrete codes. Axial coding was used to identify relationships among codes and group them into broader categories. Selective coding integrated these categories into core themes that represented the main findings of the study.

The ATLAS.ti-assisted analysis produced four major themes: the role of SOP as work guidelines, the effectiveness of service delivery, challenges in implementation, and expectations for future improvements. These themes were then interpreted in relation to the context of rural healthcare service delivery, with particular emphasis on elderly healthcare in Posyandu settings. To ensure validity and reliability, data triangulation was applied by

comparing and cross-verifying information obtained from different sources and methods. Member checking was also conducted, where preliminary findings were shared with key informants to confirm the accuracy of interpretations. This methodological approach ensured that the research findings were credible, contextually grounded, and reflective of the actual conditions at UPT Puskesmas Doi-Doi.

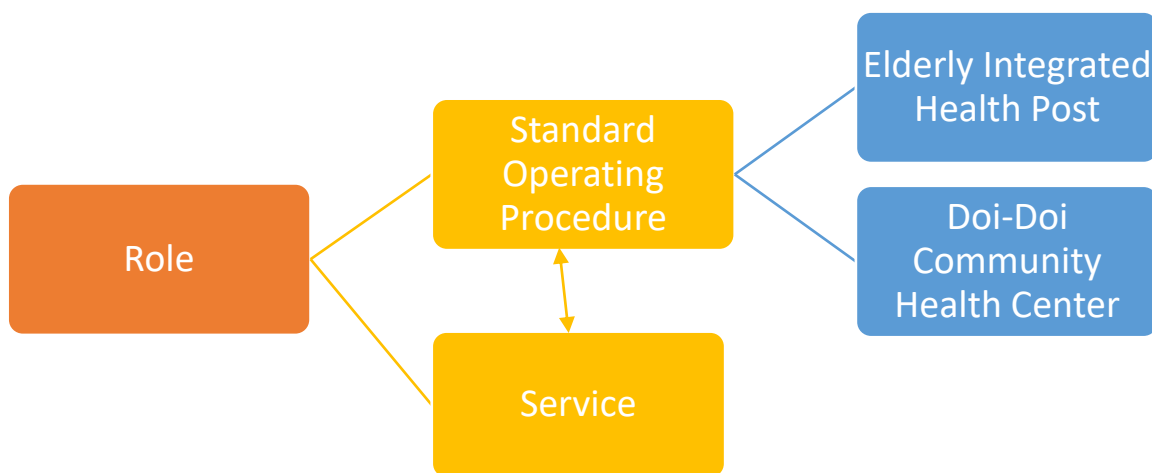


Figure 1. Thinking Framework Diagram

RESULTS AND DISCUSSION

Research Results

This research was conducted at the Doi-Doi Community Health Center (Puskesmas) in Mattappawalie Village, Pujananting District, Barru Regency, focusing on the implementation of Standard Operating Procedures (SOPs) in Posyandu services for the Elderly. Based on interviews, observations, and document review, it was found that SOPs serve as the primary reference for healthcare workers to provide structured, measurable, and tailored services tailored to the needs of the elderly. These SOPs cover the stages of registration, health examinations, counseling, and recording service outcomes. With the implementation of SOPs, Posyandu activities for the Elderly are more orderly and systematic, although challenges remain, such as limited human resources, supporting facilities, and inconsistent attendance at each scheduled activity.

Posyandu services for the elderly at the Doi-Doi Community Health Center demonstrate the importance of Standard Operating Procedures (SOPs) as a reference for providing quality services. Based on an interview on July 6, 2025, with the Head of Administration (KTU) of the Doi-Doi Community Health Center (Puskesmas), Mrs. Ernawati, ST.r.Kes., it was explained that the SOP for the elderly Posyandu (Integrated Health Post) had been prepared in

accordance with guidelines from the Barru Regency Health Office. The SOP covers the flow of health checks, nutritional services, and providing health education for the elderly. She stated that the SOP serves as the main guideline to ensure services do not run sporadically or depend on individuals. "With the SOP, all officers understand their responsibilities and workflow, from registering the elderly to providing education," she said. The SOP also serves as a basis for evaluating team performance and identifying service weaknesses that need to be improved every month. In a follow-up interview on July 18, 2025, a health worker, Nurhayati, AMK., explained that the SOP has streamlined the service process. "Before the SOP was consistently implemented, there was often confusion between the division of roles for cadres and medical staff. But now everything is more systematic," she said. In addition, the SOP also helps officers in handling cases of elderly people who require special treatment, such as hypertension or diabetes. Nurhayati added that SOPs significantly support service effectiveness because they clearly regulate time and procedures. For example, each Posyandu activity is scheduled for registration at 8:00 a.m., health checks from 8:30 a.m. to 10:00 a.m., and counseling at 10:30 a.m. This schedule is designed to avoid long queues, which can cause discomfort or fatigue for the elderly. One Posyandu cadre for the elderly, Mrs. Ernawati, ST.r.Kes, interviewed on July 18, 2025, explained that the cadre training on SOPs has been very helpful in their work. She said, "We as cadres have a better understanding of our respective duties, for example, who is responsible for weighing the elderly, who accompanies them to the consultation room—it's all covered in the SOP." She also emphasized the importance of coordination between cadres and health workers as part of effective work procedures.

Mrs. Ernawati also explained that throughout the activity, the SOPs regulate how cadres should record elderly data, both manually and electronically. This allows the Community Health Center (Puskesmas) to more easily access data on elderly people for follow-up. This includes recording weight, blood pressure, and general health complaints, which can be used for medical records. Meanwhile, an interview with one of the elderly service recipients, Mr. Abbas, conducted on July 25, 2025, provided a perspective from a service user. He stated that the service now feels more orderly and faster. "I used to have to wait a long time, but now I'm immediately directed as soon as I arrive. I don't have to worry because there's a clear flow," he said with a smile. This demonstrates that the SOP has a real impact on the comfort of the elderly.

An interview with Mrs. Idia (80 years old), an elderly person who regularly attends the Integrated Health Post (Posyandu), revealed that she experienced real benefits from services organized according to the SOP. She explained that the service flow starts with registration, weighing, blood pressure measurement, and a general health check. However, she acknowledged that sometimes there are delays when health workers have to first treat patients at the community health center. This indicates that even though the SOP has been clearly formulated, its implementation is still influenced by the availability of personnel and the dynamics of the situation on the ground. Health worker, Ms. Nur Intan, AMK.G, stated that the SOP for the Elderly Posyandu (Integrated Service Post for Elderly) was developed based

on Ministry of Health guidelines and adapted to the conditions of the work area. SOPs play a crucial role in clearly dividing tasks, from cadres recording attendance to nurses conducting physical examinations. The challenge is maintaining consistent attendance for the elderly, which is often hampered by weather, distance, or other factors. u deteriorating health conditions.

Another respondent, Ms. Saimang (65), expressed that she felt better health care was provided through the Elderly Posyandu service. The activity schedule was communicated by the cadre, and examinations were conducted according to established procedures. However, she hoped the service could include simple laboratory tests such as blood sugar measurements, not just blood pressure and weight. This demonstrates the community's expectation for expanded service coverage beyond the current standard operating procedures (SOPs).

According to Ms. Miptahul Jannah, S.Kep. NS., implementing SOPs helps expedite work processes because the service flow is clearly defined. Before the standard SOPs, there was often overlapping duties between officers and cadres, but this is now rare. However, having elderly people arrive outside the scheduled time disrupts the smooth flow of service because officers have to readjust the order of examinations.

Ms. Sukmawati, S.S.Kep. N.S., who is in charge of examining the elderly, emphasized that SOPs are very useful in maintaining service quality, especially regarding the recording and reporting of elderly health data, which must be summarized and submitted to the Health Office every month. Obstacles arise when the number of participants exceeds estimates, increasing the duration of services and requiring staff to work quickly without compromising accuracy.

From an administrative perspective, Mrs. Ernawati, ST.r.Kes, Head of Administration, explained that SOPs facilitate coordination between departments at the community health center and ensure that every activity of the Elderly Posyandu (Integrated Health Post) is well documented. However, she emphasized that the smooth implementation of SOPs is highly dependent on the readiness of facilities and infrastructure. Delays in the distribution of equipment or the running out of disposable medical supplies can hinder optimal SOP implementation. Elderly Posyandu cadre, Sarina (24), stated that SOPs provide clear guidance for cadres in preparing activities, from inviting participants and preparing the venue, recording attendance, and directing participants through the service flow. A common obstacle encountered is the absence of elderly people, requiring cadres to conduct home visits, which requires additional time and effort. (Interview, August 10, 2025)

Field observations indicate that the service flow of the Elderly Posyandu (Posyandu for the Elderly) at the Doi-doi Community Health Center (UPT Puskesmas) generally follows standard operating procedures (SOPs), starting with registration, vital sign measurements, health counseling, and recording service results. However, external factors such as bad weather, geographical conditions, and limited transportation often hinder the participation of elderly people, especially those living in remote areas.

Documentation analysis indicates that the SOP for the Elderly Posyandu has been prepared in writing, socialized, and understood by officers and cadres. Each has a clear task list. However, technical obstacles, such as a broken blood pressure monitor, prevent certain procedures from being carried out according to standards, requiring officers to make adjustments in the field. All interviewees agreed that the SOP contributes significantly to improving the quality and regularity of Elderly Posyandu services. Elderly people feel better served because of the clear and structured service process, while officers feel their work is more focused. Improved logistical support, broader socialization, and the development of examination services are important. Recommendations for maximizing the effectiveness of SOPs.

Furthermore, this study shows that implementing SOPs increases public trust in health services. Consistency of procedures and professionalism of staff are factors that drive higher participation of the elderly, thus supporting the achievement of health program targets in the Doi-doi Community Health Center (UPT) work area. Therefore, SOPs are not only technical instruments, but also strategic tools for building positive relationships between health workers and the community. A final finding is the need for regular evaluation of SOPs to ensure they remain relevant to evolving health needs of the elderly, technological advances, and regional dynamics. Without evaluation, SOPs have the potential to become rigid and unadaptive to field conditions. Therefore, the active involvement of the community health center, cadres, and the community is key to the continued effective implementation of SOPs in supporting Posyandu (Integrated Health Post) services for the Elderly.

Input from the elderly interviewed also indicates that they want to be involved in the development of SOPs. "We have experience, we know what we need. If we can be involved, that's even better," said Mr. Nasaruddin, SKM. (36), a community health officer. This opens up opportunities for a participatory approach in the development of subsequent SOPs to make them more responsive to the needs of beneficiaries. In general, SOPs have been proven to provide clear and consistent work direction for all elderly Posyandu activity implementers. However, the success of the implementation. Yes, it's largely determined by commitment, ongoing training, and effective communication. With continuous improvement, SOPs can become a crucial pillar in achieving quality healthcare for the elderly in Barru Regency.

Thematic Analysis Using ATLAS.ti 24

This study analyzed qualitative data using ATLAS.ti Version 24, a software designed for systematic coding and thematic analysis of textual, observational, and documentary data. The process involved open, axial, and selective coding to identify recurring patterns and develop four main themes: the role of SOP as work guidelines, service effectiveness, implementation challenges, and expectations for future improvements. The software facilitated precise categorization of interview transcripts, field notes, and documentation, ensuring analytical rigor and transparency. Figures 1 and 2 present the visual output of this analysis in the form of a frequency chart and a thematic relationship map, respectively.

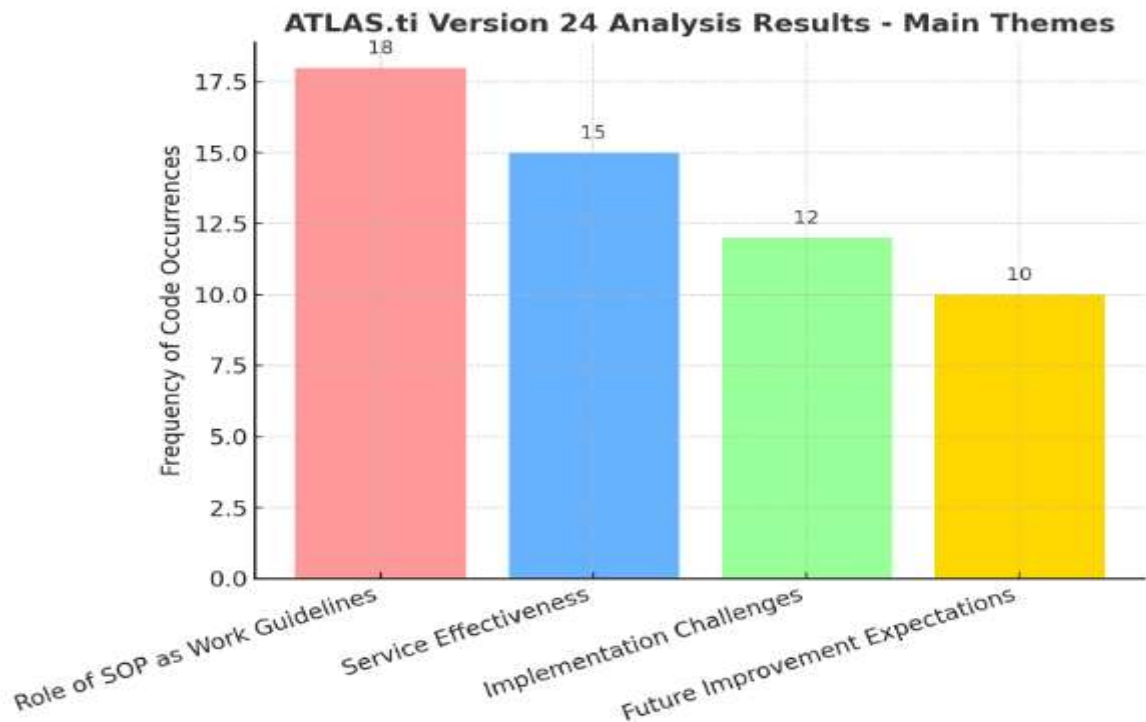


Figure 2 Frequency of Main Themes Identified through ATLAS.ti Version 24 Analysis

This bar chart visualizes the frequency of code occurrences for each main theme derived from qualitative analysis of SOP implementation in elderly Posyandu services. The themes include: (1) Role of SOP as Work Guidelines, highlighting its function as a structured reference for health workers and cadres; (2) Service Effectiveness, reflecting improvements in service quality, punctuality, and consistency; (3) Implementation Challenges, encompassing issues such as human resource shortages, limited facilities, and irregular elderly attendance; and (4) Future Improvement Expectations, including the need for expanded services and updated SOP content. The chart uses four distinct colors for easy differentiation of each theme. Data was obtained from interviews, observations, and documentation conducted between July 5 and August 10, 2025, at UPT Puskesmas Doi-Doi, Kelurahan Mattappawalie, Kecamatan Pujananting, Kabupaten Barru. The coding process followed open, axial, and selective stages using ATLAS.ti Version 24 to ensure systematic and rigorous analysis. This figure serves to quantitatively summarize the thematic weight of each category in the dataset, thereby highlighting the dominant focus areas and the relative importance assigned by participants during data collection.

Theme Relationship Map - ATLAS.ti Analysis

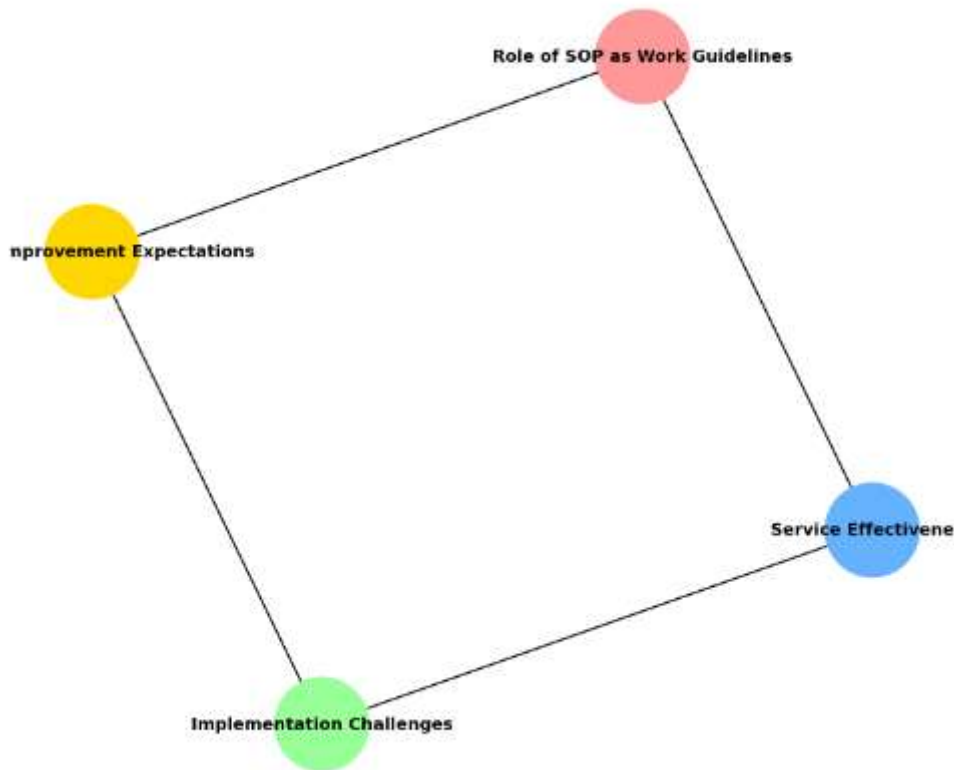


Figure 3 Theme Relationship Map from ATLAS.ti Version 24 Analysis

This network diagram depicts the conceptual linkages between the four primary themes identified in the study on SOP’s role in elderly Posyandu services. The nodes represent thematic categories Role of SOP as Work Guidelines, Service Effectiveness, Implementation Challenges, and Future Improvement Expectations while the connecting lines indicate interdependencies or correlations identified through axial and selective coding stages. Larger nodes signify themes with higher frequency of occurrence, while proximity between nodes reflects stronger conceptual association. This visualization helps to clarify how SOP functions as a central pivot influencing both service quality and community trust, yet is also constrained by implementation barriers. Data for this network was collected between July 5 and August 10, 2025, from seven key informants and additional field documentation at UPT Puskesmas Doi-Doi. ATLAS.ti Version 24 facilitated the creation of this relationship map, ensuring analytical transparency and traceability. The figure not only supports thematic analysis but also provides a visual framework for understanding operational, procedural, and contextual factors shaping elderly healthcare delivery in the study area.

Discussion

The implementation of Standard Operating Procedures (SOPs) at the Elderly Posyandu (Integrated Health Post) at the Doi-Doi Community Health Center (UPT Puskesmas) has proven to provide clear work guidelines for healthcare workers and cadres. The SOPs outline

service steps, from registration and vital sign checks, health education, to recording service results. With a standardized flow, each officer can carry out their duties in a structured manner and avoid overlapping roles. This finding aligns with previous research confirming that SOPs help maintain the consistency and quality of public health services. However, compliance with SOPs is still influenced by field conditions such as the number of personnel, equipment availability, and implementation times, which are sometimes disrupted by emergencies at the community health center.

The effectiveness of SOP implementation is also evident in the increased satisfaction of the elderly with Posyandu services. Respondents, such as Mrs. Idia and Mrs. Saimang, reported feeling more cared for and confident in the services provided because the procedures are clear and orderly. This demonstrates that SOPs serve not only as technical guidelines but also as building trust between staff and the community. This trust is crucial for increasing elderly participation in Posyandu activities. However, this effectiveness can be improved by expanding the types of examinations, for example, adding blood sugar or cholesterol tests relevant to the health needs of the elderly.

Obstacles to SOP implementation in the field include limited human resources, facilities, and inconsistent attendance by the elderly. Officers revealed that elderly absences are often influenced by weather factors, distance from their homes, and declining health. Furthermore, logistical constraints, such as delays in the distribution of examination equipment or consumables, can hamper smooth service delivery. This situation emphasizes that the success of SOPs depends not only on the accuracy of officers but also on the support of facilities, infrastructure, and sound logistics management. Therefore, supporting strategies such as transportation for the elderly living in difficult-to-access areas need to be considered.

The use of ATLAS.ti 24 qualitative analysis software in this study helped researchers identify four main themes: the role of SOPs as work guidelines, service effectiveness, implementation obstacles, and hopes for future improvement. The open coding, axial coding, and selective coding processes enabled systematic data organization, making the patterns of relationships between themes clear. Visualizations such as frequency graphs and theme relationship maps made the analysis more transparent and understandable. This method also strengthens the validity of the research because the analysis results rely not only on the researcher's subjective interpretation but also on well-structured data.

Future hopes expressed by respondents and officers include increasing the dissemination of SOPs to all healthcare workers and cadres, adding more types of health checks tailored to the needs of the elderly, and routinely evaluating SOPs to ensure they remain relevant. SOP updates are necessary to adapt to advances in medical technology, changes in public health conditions, and regional dynamics. If all parties—the community health center, cadres, and the community—can collaborate in supporting SOP implementation, the quality of Posyandu Lansia services at the Doi-Doi Community Health Center (UPT) will be optimal. Thus, SOPs can continue to function as a strategic tool in improving the quality of services and the health status of the elderly in this region.

CONCLUSION

This study concludes that the implementation of Standard Operating Procedures (SOP) plays a significant role in enhancing the quality, consistency, and efficiency of elderly Posyandu services at UPT Puskesmas Doi-Doi. The findings, derived from interviews, observations, and document analysis, indicate that SOPs provide clear guidance for health workers and cadres, ensuring that services are delivered in a structured and organized manner. Despite these benefits, challenges such as inconsistent attendance of elderly participants, limited resources, and logistical constraints hinder optimal implementation. The thematic analysis using ATLAS.ti Version 24 highlighted four key themes: the role of SOP as work guidelines, service effectiveness, implementation challenges, and expectations for improvement. Strengthening logistical support, expanding service types, and increasing community engagement are essential steps to maximize the impact of SOPs in elderly healthcare services. This research underscores the importance of continuous evaluation and adaptation of SOPs to align with evolving community needs and healthcare contexts.

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