Formosa Journal of Science and Technology (FJST) Vol. 4, No. 9, 2025: 2663-2674



Study of the Low Visit of Mothers of Toddlers of the Damal Tribe to the Agikemok and Nella Posyandu in the Working Area of the Kwamki Narama Health Center, Mimika Regency, Central Papua

Veronika Dogopia¹, Arius Togodly², Rosmin M. Tingginehe^{3*}, Agus Zainuri⁴, Sarce Makaba⁵, Novita Medyati⁶

Department of Public Health Sciences, Faculty of Public Health, Cenderawasih University

Corresponding Author: Rosmin M. Tingginehe, rosemariati16@gmail.com

ARTICLEINFO

Keywords: Integrated Health Post, Damal Tribe, Community Participation, Toddler Health, Central Papua.

Received: 7, August Revised: 21, August Accepted: 23, September

©2025 Dogopia, Togodly, Tingginehe, Zainuri, Makaba, Madyati: This is an open-access article distributed under the terms of the Creative Commons Atribusi 4.0 Internasional.

ABSTRACT

This study examines the low attendance of mothers of toddlers from the Damal Tribe at the Agikemok and Nella Posyandu under the Kwamki Narama Health Center, Regency, Central Papua. Using a qualitative case study with 16 informants, the research found a decline in participation between 2023 and 2024. main themes emerged: inconsistent attendance, limited socio-cultural influence, economic barriers, suboptimal support from health workers due to inadequate facilities, and generally positive but insufficient community perceptions. The study concludes that economic constraints, infrastructure limitations, and lack of family support are the main causes of low participation. Strengthening Posyandu facilities, community empowering leaders, developing sustainable, locally based programs are recommended.

ISSN-E: 2964-6804

DOI: https://doi.org/10.55927/fjst.v4i9.221 https://traformosapublisher.org/index.php/fjst

INTRODUCTION

Indonesia faces serious challenges in improving public health, particularly in maternal and child health. Integrated Service Posts (Posyandu), a form of Community-Based Health Efforts (UKBM), play a strategic role in monitoring toddler growth and development and preventing stunting. While this program has been implemented nationally, particular challenges arise in the context of indigenous communities in remote areas of Indonesia, particularly Central Papua.

The World Health Organization (WHO) estimated in 2018 that 51 million children worldwide experienced malnutrition, with 2.8 million deaths due to malnutrition (Ministry of Health, 2022). Indonesia, a country with a high prevalence of malnutrition in Asia, faces unique complexities in managing infant health. The 2021 Village Potential Data (PODES) shows that although approximately 90% of Indonesia has integrated health posts (Posyandu), community participation remains low, with only 40% of toddlers being taken to Posyandu every month, 32% attending irregularly, and 28% never attending Posyandu.

This situation is further complicated by Indonesia's diverse geographic and demographic realities. Central Papua, a newly established province, faces unique challenges in implementing public health programs. Data from Central Papua Province for 2025 shows that the number of visits to children under five in 2023 reached only 23.67% of the national target of 78.87%, and declined to 22.64% in 2024. Mimika Regency, a regency in Central Papua, showed a similar trend, achieving 24.38% in 2023 and 23.63% in 2024.

The Kwamki Narama District in Mimika Regency is a particular focus of this research due to its unique demographic characteristics. This area is predominantly inhabited by the Damal and Dani tribes, who still maintain customary values and traditions in their daily lives. The Damal, as part of the Amungme/Uhunduni ethnic group, have a distinctive social system, beliefs, and lifestyle, including views on health and medicine.

Posyandu Agikemok and Posyandu Nella, two health posts serving the Damal Tribe, showed a significant decrease in visits. Toddler visit data shows that Posyandu Nella experienced a decrease from 66 toddlers with 36 weighed (54.55%) in 2023 to 51 toddlers with 22 weighed (43.14%) in 2024. Meanwhile, Posyandu Agikemok also experienced a decrease from 69 toddlers with 46 weighed (66.7%) in 2023 to 59 toddlers with 34 weighed (57.63%) in 2024.

The low level of community participation in integrated health service posts (Posyandu) in indigenous areas demonstrates the complexity of the problem, which cannot be resolved solely with conventional approaches. Factors influencing mothers' attendance at Posyandu in indigenous communities include socio-cultural, economic, geographic, educational, and health service quality aspects. A thorough understanding of these factors is key to designing targeted and sustainable intervention strategies.

Previous research has shown that community participation in integrated health service post (Posyandu) programs is influenced by various complex factors. Nazri et al. (2016) stated that service satisfaction, maternal attitudes, and

support from community leaders play a significant role in increasing Posyandu visits. Meanwhile, Lassa et al. (2021) found that family support, particularly from husbands, is a key determinant in mothers' decisions to bring their toddlers to Posyandu.

The cultural context of the Damal people provides a unique dimension to the study of integrated health post (Posyandu) participation. The Damal people have belief systems, social structures, and gender roles that may differ from those of the general population. Highly upheld traditional values, family communication patterns, and decision-making authority can influence community health attitudes and behaviors.

In addition to cultural factors, the mountainous geography of the Kwamki Narama region with limited transportation access adds to the complexity of the problem. Difficult road conditions, long distances, and limited transportation can pose physical barriers for mothers of toddlers to regularly attend integrated health posts (Posyandu). The economic situation of families, which generally rely on subsistence farming, can also influence the mothers' time and energy priorities for participating in Posyandu activities.

The quality of integrated health post (Posyandu) services is another important factor. Limited facilities, staff competency, availability of health workers, and the quality of communication and education provided can impact community satisfaction and motivation to continue participating. In the context of indigenous communities, a culturally sensitive approach to service delivery and the use of local languages are crucial.

This study aims to comprehensively analyze the factors contributing to the low number of visits by mothers of toddlers from the Damal Tribe to the Agikemok and Nella Integrated Health Posts (Posyandu). Using a qualitative approach, this study seeks to gain an in-depth understanding of the perspectives of various stakeholders, including mothers of toddlers, families, Posyandu cadres, health workers, community leaders, and local government officials.

The significance of this research lies in its contribution to the development of culturally based public health intervention strategies. The findings are expected to provide valuable input for policymakers in designing more effective maternal and child health programs in indigenous areas, not only in Central Papua but also in other regions in Indonesia with similar characteristics.

THEORETICAL REVIEW

Community participation in integrated health service posts (Posyandu) has been the focus of extensive research in the public health literature. Participation, in this context, is defined as active community involvement in Posyandu activities, including regular attendance by mothers of toddlers, involvement in educational activities, and utilization of child growth and development monitoring services. Nazri et al. (2016) identified that maternal participation in Posyandu is strongly influenced by satisfaction with services, maternal attitudes toward health programs, and intention to attend regularly.

Sociocultural factors play a significant role in determining public health behavior, particularly in indigenous communities. Green and Kreuter (2005) in

their PRECEDE-PROCEED model emphasize that predisposing factors, including beliefs, cultural values, and social norms, are key determinants of health behavior. In the context of indigenous Papuan communities, traditional belief systems, patriarchal family structures, and gender roles can influence decision-making regarding children's health. Anderson (1995) states that models of health service access need to consider cultural factors as enabling or disabling factors that can facilitate or hinder the utilization of health services.

Family economic factors are a key determinant of access to and utilization of health services. Grossman (1972) in his demand for health theory explains that individuals will invest time and resources in health based on cost-benefit calculations. In the context of integrated health posts (Posyandu), opportunity costs, such as time lost from work or other productive activities, can be a barrier to participation, particularly for families with low economic status. Rukmana et al. (2024) found that outreach and education for cadres are crucial, especially when mothers' formal education levels are low.

The role of health workers and integrated health post (Posyandu) cadres as frontline workers in the health system is crucial in increasing community participation. Rogers' (1962) diffusion of innovation theory explains that the adoption of new health programs requires credible and trustworthy change agents. Posyandu cadres, who come from local communities and understand the local language and culture, act as opinion leaders who can influence community attitudes and behavior. Tiyas (2024) and Supri & Zulfira (2024) emphasize that without adequate facilities and the support of competent cadres, health promotion alone is insufficient to encourage community participation.

Public perception and knowledge of the benefits of integrated health services (Posyandu) are cognitive factors that influence health behavior. The Health Belief Model developed by Rosenstock (1966) emphasizes that perceived benefits and perceived barriers are the main predictors of preventive health behavior. Majidah et al. (2021) show that appropriate education can improve public understanding, but a systematic and sustainable approach is needed to transform perceptions into concrete actions.

METHODOLOGY

This study used a qualitative approach with a case study design to explore in depth the factors influencing the low number of visits by mothers of toddlers of the Damal Tribe to the Agikemok and Nella Integrated Health Posts (Posyandu) within the Kwamki Narama Community Health Center (Puskesmas) working area, Mimika Regency, Central Papua. The choice of a qualitative approach was based on the need to understand the subjective perspectives of informants and the complex local cultural context (Sugiyono, 2018).

The study was conducted in June-July 2025 in the working area of the Kwamki Narama Community Health Center, focusing on two integrated health posts (Posyandu), namely Posyandu Agikemok and Posyandu Nella. Research informants were selected by purposive sampling with the criteria of having knowledge and experience related to the Posyandu program. A total of 16 informants consisted of: 2 mothers of toddlers from the Damal Tribe, 4 Posyandu

cadres, 1 head of the Community Health Center, 1 nutrition officer, 3 community/traditional/religious leaders, 2 husbands, and 3 local government officials.

Data collection techniques included in-depth interviews using a structured interview guide, participant observation of integrated health post (Posyandu) activities and the community environment, and document review of Posyandu visit data and area profiles. Data validity was ensured through source triangulation by comparing information from various informant categories. Data analysis used the content analysis method according to Colaizzi (1978), which includes verbatim transcription, extraction of significant statements, formulation of meaning, grouping of themes, and validation with informants. Ethical aspects of the research included informed consent, informant privacy, and the principle of non-maleficence in accordance with qualitative research standards.

RESEARCH RESULTS

Domestic Based on the results of in-depth interviews with 16 informants, this study identified five main themes that explain the low number of visits by mothers of toddlers from the Damal Tribe to the Agikemok and Nella Posyandu.

Low and Inconsistent Participation Rates

The data shows significant fluctuations in attendance, with an average of only 4-8 children brought each month. One mother of a toddler stated: Toddler attendance at the integrated health post (Posyandu) shows an inconsistent pattern among the families studied. Some mothers admitted never bringing their children to the Posyandu for routine checkups. However, others regularly bring their children to be weighed every month. Posyandu cadres observed that family participation rates fluctuated significantly over time. On some occasions, only 5-6 children attended a single Posyandu session. This situation illustrates the suboptimal utilization of basic health services at the community level.

Family support, especially from husbands, is a crucial factor influencing toddler attendance at the integrated health post (Posyandu). Some mothers reported that their husbands never discussed or encouraged the importance of bringing their children to the Posyandu. Conversely, some mothers received full support from their husbands to regularly attend Posyandu activities. This difference in support reflects varying levels of family understanding and concern for children's health. Husbands' involvement in supporting toddler health programs still needs to be improved. Consistent family support is key to the success of Posyandu programs in the community.

Socio-Cultural Factors

The Damal people's traditional culture and beliefs do not pose significant barriers to utilizing integrated health service posts (Posyandu). All interviewees stated that there were no cultural influences preventing them from bringing their children to Posyandu. This indicates that the Damal people are quite open to modern health programs. The absence of conflict between traditional values and preventive health practices is a positive asset for program development. This

openness indicates good potential for increasing the coverage and quality of Posyandu services. This finding contrasts with some other regions where cultural resistance to health programs persists.

Although culture is not a barrier, the role of community leaders in encouraging participation in integrated health service posts (Posyandu) remains suboptimal. Traditional and religious leaders have not been actively involved in community outreach and motivation. One leader admitted that they were not used to participating due to their limited understanding of the Posyandu program. This lack of involvement from community leaders leads to missed opportunities to strengthen family motivation. However, support from respected community figures can be a powerful motivating factor. Capacity building efforts are needed to increase the understanding and involvement of community leaders in health programs.

Significant Economic Barriers

Family economic conditions are a major barrier to community participation in the integrated health service post (Posyandu) program. Mothers tend to prioritize income-generating activities to meet daily needs. They prefer to spend time gardening and seeking other sources of income. Economic constraints force families to focus on meeting immediate needs like food. Time that should be spent taking children to the Posyandu is diverted to productive activities. This situation reflects the dilemma between short-term economic needs and long-term health investments.

Integrated health post (Posyandu) cadres observed that community behavior patterns were heavily influenced by economic factors. Families were more interested in attending Posyandus when there were assistance programs or the distribution of basic food supplies. Conversely, when Posyandu activities only included weighing and health checks, participation was low. Communities perceived the time spent attending Posyandus without receiving direct assistance as a waste of time. They preferred to use that time to gather firewood or work in the garden. This perception of "wasted time" indicates a lack of awareness of the long-term benefits of regular health checks.

The Role of Health Workers and Cadres is Not Optimal

Health promotion efforts have been implemented using a locally appropriate approach to increase community participation. The health promotion team was deliberately selected from indigenous Papuans to ensure greater community acceptance. The use of local languages in delivering health information is an effective communication strategy. This approach demonstrates the cultural sensitivity of health workers in implementing the program. Communication using familiar language helps communities understand the importance of integrated health post (Posyandu) services. This strategy should increase community trust and participation in health programs.

However, limited infrastructure poses a serious obstacle that hinders the effectiveness of the integrated health post (Posyandu) program. Cadres struggle to provide optimal services due to the lack of a dedicated building. The lack of a permanent and adequate location makes Posyandu services inconsistent and

unprofessional. This situation impacts the quality of services provided to toddlers and mothers. Without adequate facilities, Posyandu programs struggle to thrive and achieve maximum impact on the community. Infrastructure investment is an urgent need to ensure quality primary health care.

Positive Perception but Does Not Encourage Regular Attendance

Mothers of toddlers demonstrated a positive perception of the benefits of the integrated health service post (Posyandu) program for their children's health. They understood that the Posyandu program aimed to promote the well-being and health of toddlers. Mothers acknowledged that the program could help maintain children's health and development. This basic understanding of the benefits of Posyandu demonstrates a positive initial awareness. This positive perception is crucial for increasing community participation. However, this general understanding needs to be deepened to encourage consistent visits.

The community's low level of education is a limiting factor in a comprehensive understanding of integrated health services (Posyandu). Most people in the region lack adequate formal education. This limited education impacts their ability to understand the importance of regular and ongoing health monitoring. While they understand the basic benefits of Posyandu, their understanding of the long-term consequences remains limited. Low levels of education also affect their ability to absorb more complex health information. This situation demands a simpler and more easily understood educational approach.

The Community Health Center (Puskesmas) has developed an innovative strategy to increase community participation through the "Gizi Masuk Rumah" (Nutrition at Home) program. This program includes cooking demonstrations using locally sourced ingredients. This approach combines nutrition education with the utilization of locally available resources. Live cooking demonstrations in residents' homes help mothers understand how to prepare nutritious meals for their children. This strategy is more practical and readily accepted because it aligns with the community's economic conditions and capabilities. The program also strengthens the role of mothers as the primary determinant of family nutrition in the household.

In addition, health services are being expanded through a mobile community health center (Puskesmas) program to reach remote areas. This mobile service helps overcome geographic and accessibility barriers faced by communities. Empowering local cadres is also a key strategy in building communication bridges with the community. Cadres from the local community are more trustworthy and understand local conditions. They act as motivators and convey health information to neighbors and family. The combination of these three strategies is expected to improve the coverage and quality of health services in the region.

DISCUSSION

This study reveals the complexity of factors influencing indigenous community participation in public health programs. The findings indicate that the low participation of mothers of toddlers in the integrated health service post (Posyandu) among the Damal Tribe is not due to cultural rejection. Practical and structural factors are the primary determinants of community participation in the Posyandu program. Economic conditions, limited infrastructure, and education levels play a greater role than traditional values. These results provide a new perspective on the dynamics of health program acceptance in indigenous communities. This more accurate understanding is crucial for designing targeted and effective interventions.

These findings challenge the common assumption that indigenous communities tend to be resistant to modern health programs. The Damal tribe demonstrated openness to integrated health service posts (Posyandu) without conflicting with their cultural values. The main barriers stem from limited economic resources and inadequate infrastructure. Communities prioritize productive activities to meet basic needs over attending Posyandu. The lack of a permanent Posyandu building also worsens the quality of services provided. The results of this study provide a strong foundation for developing intervention strategies that focus on improving the community's structural and economic conditions.

Economic factors are a key determinant, consistent with Grossman's (1972) theory of health demand, where the opportunity cost of lost time for productive activities exceeds the perceived benefits of visiting a health post (posyandu). The opportunity cost of lost income from gardening or gathering firewood is considered greater than the benefits of a health check. This theory explains why communities with low economic levels tend to neglect long-term health investments. Their primary priority is meeting immediate and immediate basic needs. This situation is exacerbated by the lack of direct incentives perceived by the community, as observed by Nazri et al. (2016) who found that satisfaction with services is a key factor in participation. The Damal tribe, who rely on subsistence activities, prioritize activities that provide direct economic benefits. Communities dependent on a subsistence economy require strong justification to abandon productive activities. Without immediate benefits, such as the provision of supplementary food or medicine, they tend to focus on activities that provide immediate economic results. This highlights the need to redesign the posyandu program to accommodate the needs and economic conditions of the local community.

Furthermore, the minimal influence of cultural factors in this study is interesting to examine further. Unlike the literature that emphasizes cultural barriers to access to healthcare for indigenous communities, the Damal tribe demonstrated openness to modern healthcare services. This may be due to the acculturation process that has occurred or the effectiveness of the cultural approach implemented by health workers. These findings challenge generalizations about indigenous peoples' attitudes toward modern healthcare interventions. This openness indicates flexibility in their cultural value systems, which presents significant opportunities for developing more effective healthcare programs in indigenous communities.

The minimal cultural barriers are likely due to the acculturation process that has taken place within the Damal community. Contact with outside cultures and exposure to modern health systems may have altered their perceptions. The effectiveness of cultural approaches employed by health workers may also be an important factor in reducing resistance. The use of indigenous Papuan health promotion teams and communication in local languages demonstrates good cultural sensitivity. These strategies help build trust and reduce suspicion of health programs. The combination of acculturation factors and appropriate approaches creates an environment conducive to the acceptance of modern health services.

Furthermore, limited integrated health service post (Posyandu) infrastructure poses a significant structural barrier, supporting the findings of Tiyas (2024) and Supri & Zulfira (2024) that adequate facilities are a prerequisite for effective health promotion. Implementing Posyandu in home gardens reduces the program's credibility and appeal to the community. Inadequate infrastructure creates an impression of unprofessionalism and reduces the quality of services provided. The public becomes less trusting of programs implemented without adequate facilities. These limitations also impact the ability of staff to provide optimal and comprehensive health services.

Implementing integrated health service posts (Posyandu) in irregular and unrepresentative locations reduces the program's appeal to the community. The credibility of health programs is questioned when they lack adequate infrastructure. The public tends to doubt the quality of services provided in locations lacking standard health facilities. This creates the perception that the Posyandu program is less serious and not a priority for the government. The lack of supporting facilities such as waiting rooms, private examination areas, and complete equipment further reduces community motivation. Infrastructure investment is urgently needed to increase the credibility and effectiveness of Posyandu programs in these areas.

Despite positive public perceptions of integrated health posts (Posyandu), this has not yet driven consistent behavioral change. This phenomenon demonstrates the gap between attitude and behavior described in the Health Belief Model, where perceived barriers (economic and structural barriers) outweigh perceived benefits. The low level of formal education in the community, as found by Rukmana et al. (2024), complicates the transmission of knowledge and the formation of routine health habits.

Innovative programs like "Gizi Masuk Rumah" (Nutrition at Home) demonstrate the significant potential of approaches that integrate health education with practical community needs. This strategy aligns with findings by Dina et al. (2025) and Fachirunisa et al. (2024) that local food-based cooking demonstrations effectively increase community participation and understanding of nutrition. This approach overcomes opportunity cost barriers by providing practical added value for participants.

CONCLUSIONS AND RECOMMENDATIONS

This study revealed that the low number of visits by mothers of toddlers from the Damal Tribe to the Agikemok and Nella Integrated Health Posts (Posyandu) is more due to economic, structural, and limited infrastructure factors than cultural barriers. The Damal Tribe demonstrates openness to modern health programs, but is constrained by family economic priorities, limited Posyandu facilities, and a lack of systematic support from family and community leaders.

Key findings indicate that low and inconsistent participation is influenced by high economic opportunity costs, with mothers prioritizing productive activities. Sociocultural factors are not a significant barrier, but the role of community leaders in encouraging participation remains minimal. Limited integrated health post infrastructure and the lack of direct incentives perceived by the community exacerbate the situation.

Effective strategies for increasing participation include: strengthening integrated health post infrastructure by constructing suitable buildings, intensifying personal approaches through home visits and empowering local cadres, developing sustainable programs that integrate health education with the practical needs of the community, such as cooking demonstrations based on local foods, and empowering community, traditional, and religious leaders in the socialization of health programs.

This research contributes to the development of context-based public health intervention strategies, particularly for indigenous communities in remote areas. Policy implications include the need for dedicated budget allocations for integrated health post (Posyandu) infrastructure development in indigenous areas, the development of incentive programs tailored to local needs, and capacity building for community leaders and cadres in culturally sensitive health promotion.

FURTHER STUDY

This study has several limitations that should be acknowledged in interpreting the results. First, the study was limited to two integrated health posts (Posyandu) within the working area of a single community health center (Puskesmas) with a specific focus on the Damal Tribe. Therefore, generalizing the findings to other indigenous communities or different geographic regions requires caution. Second, data collection was conducted over a limited time period (June-July 2025), which may not capture seasonal variations in Posyandu visit patterns, given that indigenous people's economic activities are heavily influenced by agricultural cycles and weather conditions. Third, the study relied on retrospective interviews, which are susceptible to informant recall bias, particularly in recalling past visit frequency and reasons for non-attendance.

Based on these limitations, future research is recommended to employ a longitudinal design with a longer observation period to capture dynamic participation patterns throughout the year, and to expand the geographic scope by involving multiple sites from various indigenous communities in Central Papua to enhance external validity. Further research should also integrate a mixed-methods approach with a stronger quantitative component, such as a structured survey to objectively measure factors influencing participation, and

an experimental intervention study to test the effectiveness of recommended participation-enhancing strategies. Furthermore, future research should explore the perspectives of toddlers themselves through child-friendly research methods and conduct cost-effectiveness analyses of various intervention strategies to provide more practical implementation guidance for policymakers at the regional level.

ACKNOWLEDGMENT

All authors would like to thank everyone involved in this research.

REFERENCES

- Anderson, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, 36(1), 1-10.
- Dina, P., Hasibuan, R., & Gurning, F. P. (2025). Strategi peningkatan partisipasi ibu balita ke Posyandu dengan analisis SWOT di wilayah kerja Puskesmas Belawan. *Jurnal Pengabdian Masyarakat Bangsa*, 10(1), 0-13.
- Fachirunisa, P. N., Elvandari, M., Tri Wahju, S., Islam Kurniansyah, F., Studi Ilmu Gizi, P., Kesehatan, F., Singaperbangsa Karawang, U., Pacar Keling, P., & Kesehatan Kota Surabaya, D. (2024). Sosialisasi demo masak PMT untuk balita gizi kurang dan ibu hamil KEK kepada kader Posyandu di wilayah Puskesmas Pacar Keling. *Journal of Human and Education*, 4(3), 577-584.
- Green, L. W., & Kreuter, M. W. (2005). *Health program planning: An educational and ecological approach* (4th ed.). McGraw-Hill.
- Grossman, M. (1972). On the concept of health capital and the demand for health. *Journal of Political Economy*, 80(2), 223-255.
- Kemenkes RI. (2022). Profil kesehatan Indonesia 2021. Pusdatin Kemenkes RI.
- Lassa, F., Sinaga, M., & Takaeb, A. E. L. (2021). Relationship between family support and cadres with mother activity weighing toddler. *Timorese Journal of Public Health*, 3(3), 93-102. https://doi.org/10.35508/tjph
- Majidah, N. M., Sulistiyawati, S., & Paramashanti, B. A. (2021). Effect of maternal nutrition education on knowledge, attitude, and practice related to infant and toddler feeding. *Nutri-Sains: Jurnal Gizi, Pangan dan Aplikasinya*, *5*(2), 73-82. https://doi.org/10.21580/ns.2021.5.2.5245
- Nazri, C., Yamazaki, C., Kameo, S., Herawati, D. M. D., Sekarwana, N., Raksanagara, A., & Koyama, H. (2016). Factors influencing mother's participation in Posyandu for improving nutritional status of children under-five in Aceh Utara district, Aceh province, Indonesia. *BMC Public Health*, 16(1), 1-9. https://doi.org/10.1186/s12889-016-2732-7
- Rogers, E. M. (1962). Diffusion of innovations. Free Press.
- Rosenstock, I. M. (1966). Why people use health services. *The Milbank Memorial Fund Quarterly*, 44(3), 94-127.
- Rukmana, E., Fransiari, M. E., Damanik, K. Y., & Nurfazriah, L. R. (2024). Differences in knowledge of Posyandu cadres and mothers of toddlers regarding stunting and its association with stunting incidence in toddlers. *Amerta Nutrition*, 8(3SP), 61-70. https://doi.org/10.20473/amnt.v8i3SP.2024.61-70

- Sugiyono, S. (2018). Metode penelitian pendidikan pendekatan kualitatif, kuantitatif dan R & D (4th ed.). Alfabeta.
- Supri, A., & Zulfira, R. (2024). Faktor yang mempengaruhi kunjungan balita di Posyandu. *Journal of Nursing AACENDIKIA*, 3(1), 5-13. https://doi.org/10.59183/aacendikiajon.v3i1.33
- Tiyas, D. W. (2024). Peningkatan partisipasi kunjungan Posyandu balita melalui penguatan dukungan mitra. *Jurnal Pengabdian Masyarakat Bangsa*, 1(11), 3052-3056. https://doi.org/10.59837/jpmba.v1i11.648