MSC Journal Of Medical Surgical Concerns
ISSN 2797-8400 (Print)
ISSN 2797-8419 (Online)
Doi: 10.56922

NOMOR
286/DST/C3/HIM.01.00/26

ARTICLE INFORMATION
Received: May, 02, 2026
Revised: May, 15, 2026
Available online: May, 30, 2026
at: https://e-jurnal.iphorr.com/index.php/msc

Implementation of complete basic vaccination among low-income families participating in Indonesian social assistance programs

Fadillah Salwa*, Fitriani Pramita Gurning

Fakultas Kesehatan Masyarakat, Universitas Islam Negeri Sumatera Utara
Corresponding Author: *E-Mail: fadillahsalwa.2111@gmail.com

Abstract

Background: Complete basic vaccination is essential for achieving optimal child health outcomes and preventing vaccine-preventable diseases. Despite Indonesia's national vaccination program mandating complete basic vaccination for children, particularly among Indonesian social assistance programs or *Program Keluarga Harapan (PKH)* recipients, coverage remains suboptimal. In Medan City, complete basic vaccination coverage at Community Health Centers reached only 76.9% in 2024, falling short of the 80% national target, indicating significant gaps in program implementation.
Purpose: To analyze the determinants of complete basic vaccination implementation among low-income families enrolled in Indonesian social assistance programs.
Method: A sequential exploratory mixed methods design was employed. Qualitative data were obtained through in-depth interviews with two key informants (health center coordinator and vaccination officer), while quantitative data were collected from 50 social assistance program recipient mothers using structured questionnaires assessing knowledge, family support, and vaccination completion status. Data analysis included thematic analysis for qualitative data and descriptive statistics for quantitative data, with chi-square tests employed to examine associations between determinants and vaccination outcomes.
Results: Among social assistance program recipient mothers, 56% demonstrated adequate knowledge of vaccination standards, while 48% reported receiving adequate family support. Policy implementation showed high compliance with national guidelines; however, resource constraints were identified, including limited facilities at 40% of posyandu sites and insufficient vaccinator training. Inter-organizational communication challenges were evident in cross-sectoral data collection and target mobilization.
Conclusion: Maternal knowledge and family support were identified as significant determinants of complete basic vaccination among social assistance program recipients. Achieving national vaccination targets requires strengthening health education programs, enhancing family engagement strategies, improving cross-sectoral coordination, and ensuring adequate facility infrastructure and personnel training in resource-limited settings.

Keywords: Complete Basic Vaccination; Maternal Knowledge; Family Support; Social Assistance Programs; Vaccination Coverage.

DOI: https://doi.org/10.56922/msc.v6i1.3147

INTRODUCTION

Vaccination is one of the most effective public health interventions to reduce child morbidity and mortality and plays a crucial role in achieving Sustainable Development Goal (SDG) 3 (Ministry of National Development Planning of the Republic of Indonesia, 2023). According to the World Health Organization (WHO) and UNICEF, approximately 14.5 million children globally have not received any vaccination (zero-dose), with more than half coming from several countries, including Indonesia (United Nations Children's Fund, 2024; World Health Organization, 2022). National data also indicate that millions of children in Indonesia have not yet received complete basic vaccination (Ministry of Health of the Republic of Indonesia., 2023). The failure to achieve optimal vaccination coverage not only increases the vulnerability of children to Vaccine-Preventable Diseases (VPDs) such as diphtheria, tetanus, and measles, but also poses a severe threat to global and national health security by risking devastating outbreaks and increasing long-term healthcare costs.

The Indonesian government implements a national vaccination program aimed at providing complete basic vaccination for children, including hepatitis B, BCG, DPT-HB-Hib, polio, and measles vaccines. This program is supported by Indonesia social assistance programs or Program Keluarga Harapan (PKH), a conditional cash transfer program provided by the government to low-income families to improve access to education, health, and social welfare services. In the health sector, social assistance programs beneficiaries are required to utilize health services, including ensuring that children receive complete basic vaccination (Ministry of Social Affairs of the Republic of Indonesia, 2021).

This conditionality is strategically designed to break the intergenerational cycle of poverty by investing in human capital early in life. Theoretically, the financial incentives and strict requirements provided by the social assistance programs should guarantee near-universal vaccination compliance among its recipients. However, vaccination coverage remains below the national target in several regions (Trianto, Dasman, & Lestari, 2021), indicating an implementation paradox where economic assistance alone is insufficient to overcome structural, communicative, and behavioral barriers to healthcare access.In North Sumatra Province, vaccination coverage remains below the national target, with Medan also demonstrating suboptimal vaccination coverage levels. (North Sumatra Provincial Health Office, 2024). At Padang Bulan Selayang II Health Center, coverage decreased from 81.9% in 2023 to 76.9% in 2024 (North Sumatra Provincial Health Office, 2024).

This indicates a gap between policy targets and implementation. A vaccination coverage rate of 76.9% is critically concerning because it falls significantly short of the 90% to 95% threshold required to achieve adequate community protection. Such a decline in a specific working area suggests localized bottlenecks in service delivery, community mobilization, or cross-sectoral coordination that urgently need to be addressed to prevent local disease clusters. Based on Van Meter and Van Horn's policy implementation theory, program success is influenced by policy standards, resources, organizational characteristics, communication, implementer attitudes, and social environment (Barkatullah, 2023; Maimunah, Setiawan, & Raudah, 2025).

This theoretical framework is highly relevant and comprehensive for analyzing public health programs, as it evaluates both the internal bureaucratic processes of the health center (top-down approach) and the external socio-environmental factors affecting the beneficiaries (bottom-up approach). Consequently, this study aims to analyze the determinants of complete basic vaccination program implementation among social assistance programs beneficiaries in the working area of Padang Bulan Selayang II Health Center, aiming to provide evidence-based recommendations for strengthening future health policies.

RESEARCH METHOD

A mixed-methods approach using a sequential exploratory design. The study was conducted in the working area of Padang Bulan Selayang II Health Center, Medan City.The population consisted of mothers of toddlers who were social assistance

Fadillah Salwa*, Fitriani Pramita Gurning

Fakultas Kesehatan Masyarakat, Universitas Islam Negeri Sumatera Utara
Corresponding Author: *E-Mail: fadillahsalwa.2111@gmail.com

DOI: https://doi.org/10.56922/msc.v6i1.3147

programs beneficiaries. A total of 50 respondents were selected using stratified random sampling. Qualitative data were obtained through in-depth interviews with two key informants, including the vaccination coordinator and a vaccinator. Data collection techniques included interviews, observation, document review, and structured questionnaires. The questionnaire consisted of 35 items measuring knowledge, resources, health service support, inter-organizational communication, implementer attitudes, and family support. Data analysis was conducted using descriptive analysis for quantitative data and thematic analysis for qualitative data validity was ensured through triangulation of sources and method.

RESEARCH RESULTS

Table 1. Social Assistance Programs Beneficiaries In Medan Selayang Subdistrict, 2024

Village	Population (n)	Social Assistance Program Recipients (n)	Social Assistance Programs Recipients (Toddler Components)(n)
Tanjung Sari	36.003	442	21
PB Selayang II	25.701	307	37
PB Selayang I	9.792	189	5
Asam Kumbang	20.621	363	18
Beringin	7.500	70	7
Sempakata	11.498	84	9
Total	111.115	1.455	97

This table presents the distribution across six villages in Medan Selayang Sub-district, based on 2024 data from the Medan City Social Service Office. While Tanjung Sari has the largest population and number of beneficiaries, PB Selayang II has the highest number of toddlers in beneficiary families (n=37), representing the primary target group for vaccination coverage analysis

Table 2. Sampling Technique Distribution by Sub-district

Village	Population	Sample
Tanjung Sari	21	11
PB Selayang II	37	19
PB Selayang I	5	2
Asam Kumbang	18	9
Beringin	7	4
Sempakata	9	5
Total	**97**	**50**

Fadillah Salwa*, Fitriani Pramita Gurning

Fakultas Kesehatan Masyarakat, Universitas Islam Negeri Sumatera Utara
Corresponding Author: *E-Mail: fadillahsalwa.2111@gmail.com

DOI: https://doi.org/10.56922/msc.v6i1.3147

This table details the stratified random sampling technique used to determine the study's sample size. From a total population of 97 mothers receiving social assistance program with toddlers, a sample of 50 respondents was selected proportionally across each Sub-district to ensure representative data for the mixed-methods analysis.

DISCUSSION

The implementation of the basic vaccination program among social assistance program This table details the stratified random sampling technique used to determine the study's sample size. From a beneficiaries is influenced by multiple interconnected factors, consistent with Van Meter and Van Horn's policy implementation framework. The vaccination program at Padang Bulan Selayang II Health Center adheres to national guidelines, specifically Ministry of Health Regulation No. 12 of 2017. Health workers demonstrate a high level of policy literacy, understanding the 80% national coverage target (Directorate of Health Promotion and Community Empowerment, Ministry of Health of the Republic of Indonesia, 2022). However, a significant gap exists between institutional policy clarity and community perception, as approximately 44% of respondents displayed inadequate knowledge regarding vaccination service standards. This lack of health literacy among mothers suggests that while the "top-down" information flow among officials is effective, the "bottom-up" absorption of information remains a critical bottleneck, preventing the program from reaching its maximum target coverage (Harahap & Lubis, 2022).

Regarding resources, human capital and funding were generally found to be adequate, consisting of a program coordinator, a logistics manager, and 12 vaccinators with appropriate health qualifications. Financial support is derived from the national budget through Health Operational Assistance and the regional budget for transportation incentives. Technical vaccine management adheres to the "One Gate Policy," ensuring structured logistics and strict cold chain maintenance, including FIFO (First-In-First-Out) systems and dual-daily temperature monitoring at 2-8°C. Nevertheless, 52% of respondents assessed the resources as insufficient. This disparity is likely due to limited supporting infrastructure at several Integrated Health Service such as inadequate furniture and basic facilities—and the lack of specialized vaccination training for vaccinators, who mostly receive on-the-job guidance rather than formal certification (Astuti, Wigati, & Mundriyastutik, 2023; Wahidah, Widayanti, & Wiedyaningsih, 2024).

The organizational structure is identified as a program strength, characterized by strict adherence to Standard Operating Procedures (SOPs), particularly regarding vaccine storage and limited refrigerator access to maintain potency (Hidayah & Rahaju, 2022). However, inter-organizational communication remains a significant challenge. While internal communication within the health center is robust, coordination with cross-sectoral stakeholders is suboptimal. Data synchronization regarding the number of infants and toddlers in the sub-district is often inaccurate, leading to missed targets. To mitigate this, the health center utilizes digital communication via WhatsApp groups and engages in community-based outreach. Socialization efforts extend into local socio-cultural activities such as ***Perwiritan*** (religious gatherings), ***Arisan*** (community rotating savings groups), and ***PKK*** (Family Welfare and Empowerment) (Fitriah, Mahendradhata, & Putri, 2024).

The positive attitude of implementers also plays a vital role in program resilience. Health workers exhibit professionalism and high responsiveness; notably, many provide their personal contact numbers to parents for consultation regarding Post-vaccination Adverse Events, which fosters a sense of security among mothers. Despite this, positive attitudes alone cannot compensate for the 52% lack of family support. Vaccination uptake is rarely an individual maternal decision; it is deeply influenced by family dynamics. Many respondents reported that they lacked support in the form of physical assistance, such as someone to accompany them to the health center, or moral reminders from husbands and extended family members, which directly correlates with incomplete vaccination among their children (Sakti, Aprianty, & Sutardi, 2023; Sari, Sayuti, & Andri, 2022).

Overall, doses for Polio and Measles were the most frequently missed among social assistance program beneficiaries. Interestingly, despite the

Fadillah Salwa*, Fitriani Pramita Gurning

Fakultas Kesehatan Masyarakat, Universitas Islam Negeri Sumatera Utara
Corresponding Author: *E-Mail: fadillahsalwa.2111@gmail.com

DOI: https://doi.org/10.56922/msc.v6i1.3147

mandatory health requirements imposed on social assistance program recipients, the enforcement of these conditions remains weak. Sanctions are often limited to verbal warnings rather than the actual suspension of social assistance funds, resulting in compliance that is driven more by financial expectation than intrinsic health awareness. Furthermore, it must be noted as a study limitation that some toddlers in the sample had not yet reached the age of 11 months. Their vaccination status is considered "incomplete" only because of their age. However, they can still receive the remaining vaccines through catch-up vaccination programs until they are five years old.

CONCLUSION

Implementation of the basic vaccination program among social assistance program beneficiaries at Padang Bulan Selayang II Health Center has generally been carried out in accordance with national policy standards and guidelines. However, vaccination coverage has not yet reached the expected target due to several influencing factors. Resource limitations, particularly the lack of specific training for vaccinators and inadequate supporting facilities at the community health post, affect service delivery. In addition, inter-organizational communication remains suboptimal, especially in cross-sectoral coordination for target population data collection. While implementer attitudes are positive and organizational characteristics support program implementation, low family support remains a major barrier to achieving full vaccination coverage. Furthermore, the conditionality of the social assistance programs has not been strictly enforced, revealing that financial incentives without stringent compliance monitoring are insufficient. Therefore, improving community education, strengthening cross-sector collaboration, enhancing health worker training, enforcing stricter monitoring for social assistance program beneficiaries, and increasing family involvement are essential to optimize program implementation and achieve national vaccination targets.

REFERENCES

Andani, O. S. (2020). Evaluasi program imunisasi dasar lengkap pada bayi di Puskesmas Sekancing tahun 2018. *Jurnal Kesehatan dan Sains Terapan*, 6(1), 27-51.

Astuti, D., Wigati, A., & Mundriyastutik, Y. (2023). Faktor-faktor yang berhubungan dengan ketersediaan tempat penyimpanan dan pengelolaan vaksin imunisasi dasar pada anak. *Jurnal Ilmu Keperawatan Dan Kebidanan*, 14(1), 38-48.

Barkatullah, B. (2023). Implementasi program imunisasi dasar lengkap pada puskesmas rawat inap Alabio Kecamatan Sungai Pandan Kabupaten Hulu Sungai Utara. *Al 'Iidara Balad*, 5(2), 1–23.

Medan City Health Office (2024). *Profil kesehatan Kota Medan tahun 2023*. Retrieved from : https://dinkes.pemkomedan.go.id

North Sumatra Provincial Health Office. (2024). *Profil kesehatan Provinsi Sumatera Utara tahun 2023*. Retrieved from : https://www.dinkes.sumutprov.go.id

Directorate of Health Promotion and Community Empowerment, Ministry of Health of the Republic of Indonesia. (2022). *Strategi komunikasi nasional imunisasi 2022–2025*. Retrieved from : https://promkes.kemkes.go.id

Fitriah, Y., Mahendradhata, Y., & Putri, L. P. (2024). Evaluasi kerjasama lintas sektor dalam meningkatkan capaian imunisasi dasar lengkap di Kabupaten Sumba Tengah. *Jurnal Kebijakan Kesehatan Indonesia: JKKI*, 13(03).

Harahap, D., & Lubis, M. (2022). Analisis pelaksanaan program imunisasi dasar lengkap di Puskesmas Panyabungan Jae Kabupaten Mandailing Natal tahun 2022. *Jurnal Kesehatan Masyarakat Darmais (JKMD)*, 1(1), 38-47.

Fadillah Salwa*, Fitriani Pramita Gurning

Fakultas Kesehatan Masyarakat, Universitas Islam Negeri Sumatera Utara
Corresponding Author: *E-Mail: fadillahsalwa.2111@gmail.com

DOI: https://doi.org/10.56922/msc.v6i1.3147

Hidayah, U. R., & Rahaju, T. (2022). Implementasi program pelayanan kesehatan ibu dan anak (KIA) di Puskesmas Dupak Kecamatan Krembangan Kota Surabaya. *Publika*, 1317-1330.

Ministry of Health of the Republic of Indonesia. (2023). *Profil kesehatan Indonesia tahun 2023*. Retrieved from : https://www.kemkes.go.id

Ministry of National Development Planning of the Republic of Indonesia (2023). *Laporan pelaksanaan pencapaian tujuan pembangunan berkelanjutan tahun 2023*. Retrieved from : https://sdgs.bappenas.go.id/publikasi/

Ministry of Social Affairs of the Republic of Indonesia. (2021). *Pedoman pelaksanaan program keluarga harapan (PKH) tahun 2021–2024*. Retrieved from : https://kemensos.go.id

Maimunah, H., Setiawan, I., & Raudah, S. (2025). Implementasi program revitalisasi pasar kelua Kecamatan Kelua Kabupaten Tabalong. *Jurnal Kebijakan Publik*, 2(2), 783-793.

Pane, I., Hadju, V. A., Maghfuroh, L., Akbar, H., Simamora, R. S., Lestari, Z. W., & Aulia, U. (2021). *Desain penelitian mixed method*. Yayasan Penerbit Muhammad Zaini.

Sakti, B., Aprianty, H., & Sutardi, D. (2023). The determinants of the successfully completing primary immunization program in Empat Lawang Regency South Sumatera. *MIMBAR: Jurnal Sosial dan Pembangunan*, 81-91.

Sari, P., Sayuti, S., & Andri, A. (2022). Faktor yang berhubungan dengan pemberian imunisasi dasar pada bayi di wilayah kerja Puskesmas PAAL X Kota Jambi. *Jurnal Kesmas Jambi*, 6(1), 42-49.

Sulistyawati, W., Wahyudi, W., & Trinuryono, S. (2022). Analisis motivasi belajar siswa dengan menggunakan model pembelajaran blended learning saat pandemi covid-19. *KadikmA*, 13(1), 68-73.

Trianto, A. A., Dasman, H., & Lestari, Y. (2021). Analisis pencapaian program imunisasi dasar lengkap pada masa pandemi covid-19 di Kabupaten Pesisir Selatan 2021. *Jurnal Kesehatan Andalas*, 10(3), 150-158.

United Nations Children's Fund (2024). *Vaccination and immunization statistics*. Retrieved from : https://data.unicef.org/topic/child-health/immunization/

Wahidah, P., Widayanti, A., & Wiedyaningsih, C. (2024). Persepsi dan pengalaman tenaga kefarmasian terhadap pengelolaan vaksin di puskesmas Kabupaten Kotawaringin Timur. *Majalah Farmaseutik*, 20(1), 101.

World Health Organization. (2022). *Immunization coverage*. Accessed from : https://www.who.int/news-room/fact-sheets/detail/immunization-coverage

Fadillah Salwa*, Fitriani Pramita Gurning

Fakultas Kesehatan Masyarakat, Universitas Islam Negeri Sumatera Utara
Corresponding Author: *E-Mail: fadillahsalwa.2111@gmail.com

DOI: https://doi.org/10.56922/msc.v6i1.3147