



REVIEW OF BASIC IMMUNIZATION SERVICES AT LOK BAHU HEALTH CENTER JANUARI-JULI 2025

Rahmania¹✉, Aprilia Nurlaila Zahro¹, Wa Ode Nurul Azkiah¹, Ainaya Salsabila¹, Hanis Kusumawati Rahayu², Zulhijrian Noor³

¹Program Studi Profesi Dokter, Fakultas Kedokteran, Universitas Mulawarman, Samarinda, Indonesia

²Laboratorium Ilmu Kesehatan Masyarakat-Kedokteran Komunitas, Fakultas Kedokteran, Universitas Mulawarman, Samarinda, Indonesia

³Pusat Kesehatan Masyarakat Lok Bahu, Samarinda, Indonesia

Abstrak

Imunisasi dasar lengkap (IDL) merupakan program prioritas untuk mencegah Penyakit yang Dapat Dicegah dengan Imunisasi (PD3I). Penelitian ini meninjau pelaksanaan layanan IDL di Puskesmas Lok Bahu, Samarinda, periode Januari–Juli 2025 dengan pendekatan deskriptif kualitatif. Informan meliputi tenaga kesehatan, kader, manajemen puskesmas, farmasi, dan orang tua. Data diperoleh melalui wawancara, observasi, dan telaah dokumen, lalu dianalisis dengan reduksi, penyajian, dan verifikasi melalui triangulasi. Perencanaan telah disusun melalui RUK dan koordinasi lintas sektor, tetapi strategi menjangkau populasi sulit masih terbatas dan dukungan anggaran non-vaksin bergantung pada swadaya kader. Pelaksanaan menghadapi kendala kekurangan tenaga, keterlambatan distribusi vaksin, serta resistensi masyarakat dan kekhawatiran orang tua terhadap efek samping. Evaluasi melalui Mini Lokakarya Triwulan berjalan, namun terdapat ketidaksinkronan pencatatan dan keterlambatan pelaporan. Capaian IDL belum memenuhi target nasional sehingga diperlukan penguatan koordinasi, pendanaan, distribusi vaksin, komunikasi risiko, dan integrasi sistem pencatatan..

Kata Kunci: Imunisasi dasar lengkap, perencanaan, pelaksanaan, evaluasi, Puskesmas Lok Bahu

Abstract

Complete basic immunization (CBI) is a priority public health program aimed at preventing Vaccine-Preventable Diseases (VPDs). This study aimed to review the implementation of CBI services at Lok Bahu Health Center, Samarinda City, during the period of January–July 2025. This research employed a descriptive qualitative design involving key informants (health workers and posyandu cadres) and supporting informants (health center management, pharmacy staff, and parents). Data were collected through in-depth interviews, observation, documentation, and review of official records, then analyzed through data reduction, data display, and conclusion verification using source, method, and data triangulation. The findings revealed that at the planning stage, the program was arranged through the Annual Activity Proposal Plan (RUK) and cross-sectoral coordination; however, specific strategies to reach hard-to-reach populations were still limited, community involvement remained suboptimal, and non-vaccine funding relied heavily on cadres' self-sufficiency. At the implementation stage, the main obstacles included limited health personnel and cadres, delays in vaccine distribution, and community resistance to immunization. From the beneficiaries' perspective, parents' time constraints and concerns about vaccine side effects also affected the completeness of child immunization. At the evaluation stage, the Mini Quarterly Workshops functioned as forums for identifying barriers and cross-sectoral follow-up, yet discrepancies persisted between manual recording and the ASIK digital application, alongside reporting delays from posyandu. In conclusion, CBI coverage in the Lok Bahu Health Center working area has not met the national target, influenced by planning, implementation, and evaluation factors that have not been fully integrated. Strengthening cross-sectoral coordination, funding support, stable vaccine distribution, adaptive risk communication, and synchronization of digital recording systems are required to sustainably improve immunization coverage.

Keywords: Complete Basic Immunization, Planning, Implementation, Evaluation, Lok Bahu Health Center

INTRODUCTION

Complete basic immunization is one of the most effective public health interventions for preventing morbidity, disability, and mortality caused by Vaccine-Preventable Diseases (VPDs). The immunization program has become a national priority, established under the Universal Child Immunization (UCI) initiative, with a minimum coverage target of 80% in every village or subdistrict to achieve herd immunity (Kementerian Kesehatan RI, 2023). According to data from the Ministry of Health in 2022, national coverage of complete basic immunization reached 93.2%, although distribution remains uneven across provinces and districts/cities.

In East Kalimantan, complete basic immunization coverage varies among regions. Samarinda City, as the provincial capital, experienced a decline in coverage in 2025 and has not yet met the national target. This situation highlights a gap between program targets and field implementation (Dinas Kesehatan Kota Samarinda, 2022). Community health centers (Puskesmas), as primary-level healthcare facilities, play a strategic role in ensuring the achievement of complete basic immunization coverage. However, challenges such as limited human resources, vaccine distribution issues, logistics monitoring, and sociocultural factors within the community continue to hinder target achievement (WHO, 2020; Kementerian Kesehatan RI, 2023).

Lok Bahu Community Health Center is one of the Puskesmas in Samarinda City responsible for providing complete basic immunization services within its working area. Reviewing the implementation of immunization services at

this health center is essential to assess the extent to which the program is carried out according to established standards. The findings are expected to provide an overview of strengths, weaknesses, and potential areas for improvement, serving as the basis for developing strategies to enhance coverage and the quality of immunization services in the Lok Bahu Health Center's working area.

METHOD

This study employed a qualitative descriptive design to provide an in-depth overview of the implementation of complete basic immunization services at Lok Bahu Community Health Center, Samarinda City, during the period of January–July 2025. The study involved two groups of informants: key informants and supporting informants. Key informants consisted of healthcare workers and *posyandu* cadres who were directly involved in the planning and implementation of the immunization program within the Lok Bahu Health Center's working area. Supporting informants included health center management, the person in charge of pharmaceutical services, as well as parents representing their experiences in obtaining immunization services for their children. Informants were selected using purposive sampling based on their roles and relevance to the research focus. This process was complemented by snowball sampling through recommendations of additional informants during the final stages of in-depth interviews. Data collected comprised primary data obtained through in-depth interviews, direct observation, and documentation of immunization activities

and secondary data derived from official health center documents, immunization coverage reports, and supporting literature.

To ensure the validity of the data, the researcher applied triangulation using three approaches: source triangulation by comparing information from various key and supporting informants; method triangulation through the combination of observations, interviews, and documentation; and data triangulation by comparing field findings with relevant official documents and records (Lim, 2024). Data analysis followed the steps of data reduction, data display, and conclusion drawing and verification. This analysis process aimed to identify and assess indicators associated with the implementation of complete basic immunization services at Lok Bahu Health Center, Samarinda, and to compare them with the indicator targets established in the immunization program.

RESULT AND DISCUSSION

Planning

Overall Communication Plan

The study found that the communication planning for the immunization program at Lok Bahu Community Health Center (Puskesmas Lok Bahu) was carried out in a structured and coordinated manner, involving multiple media platforms and the participation of various stakeholders, including the health center, posyandu cadres, the pharmacy unit, and the community through local leaders. Informant 6 stated, *“as the initial planning stage, all plans for each health program conducted by the health center are discussed in the Activity Proposal Plan (RUK) meeting held one year prior; this meeting covers program plans for the upcoming year.”*

Communication planning conducted through the Activity Proposal Plan (RUK) aligns with the guidelines for health program planning at community health centers, as regulated in Minister of Health Regulation No. 19 of 2024 concerning Puskesmas. This document serves as an annual guideline containing all programs to be implemented, including immunization. It ensures that every activity has a clear planning foundation and is accountable both administratively and technically (Kementerian Kesehatan RI, 2014).

Similarly, Informant 1 explained that systematic planning was carried out by forming an immunization group consisting of parents along with the program managers and implementers at the health center. Social media platforms such as Instagram, Facebook, and WhatsApp were also used as information channels to reach a wider community. Informant 1 also emphasized the importance of two-way communication, stating, *“the health center not only provides face-to-face counseling but also offers a WhatsApp number for mothers who wish to consult, allowing communication and complaint management to be more responsive.”*

The use of digital media such as WhatsApp, Instagram, and Facebook demonstrates the adaptation of the immunization program to advances in communication technology, consistent with WHO recommendations on digital health interventions to strengthen immunization programs (WHO, 2018). Social media not only broadens the reach of information but also facilitates two-way communication, enhancing interactions between healthcare workers and the community. This is important because two-way communication helps respond quickly to public questions and concerns, supporting the success of immunization programs (Sitorus, 2021).

In addition, regarding communication in logistics and supplies, Informant 7 stated, *“the communication*

system through a large WhatsApp group ensures that information on vaccine stock is delivered quickly, making monitoring and controlling distribution easier.” This is an essential component in preventing vaccine stockouts.

The intensive coordination between the health center and the pharmacy unit in managing vaccine stock and distribution through WhatsApp groups demonstrates effective communication to ensure uninterrupted vaccine availability. This rapid communication system aligns with WHO and Ministry of Health standards for efficient and safe vaccine cold-chain management and distribution (WHO, 2019; Kementerian Kesehatan RI, 2020). Good communication prevents vaccine shortages that could disrupt immunization coverage.

Availability of Special Strategies for Hard-to-Reach Populations

The study shows that although efforts to reach hard-to-reach groups have been made, structured and systematic special strategies are still not optimal and vary across the health center’s service areas.

Informant 4 explicitly stated that *“there are no specific strategies designed to reach community groups who face barriers such as limited transportation facilities or work conditions that make it difficult to comply with immunization schedules. This issue has been reported to the health center, but there has been no follow-up until now.”* This results in existing approaches remaining limited and less effective for hard-to-reach populations. In contrast, Informant 3 revealed the presence of an active strategy involving routine monthly home visits using a sweeping method to monitor and provide education to children who are not brought by their parents to the posyandu.

Informant 5 also added that a posyandu-based approach is used to reach hard-to-reach groups and those who are hesitant or anti-vaccine. *“Each posyandu is responsible for recording infants and*

children who require complete basic immunization in their respective areas and reporting this periodically. However, the health center does not yet have a specific mapping strategy related to immunization and relies on coverage data reported by each posyandu. Additionally, handling anti-vaccine groups still relies on direct education through a personal approach by the health promotion unit or program holders, without a structured mapping strategy.”

According to Ministry of Health Regulation No. 12 of 2017, immunization strategies must include the identification and special outreach to at-risk groups and hard-to-reach populations, such as those in remote areas, seasonal workers, or individuals with socioeconomic barriers that limit access to services. Findings from Informant 3 regarding the absence of specifically designed strategies and the lack of follow-up on reported issues indicate inadequate implementation of this principle.

Differences between the interviews with Informants 3 and 4 show disparities in implementation practices. Informant 3 has adopted an active visit method (house-to-house sweeping), which is one of the proactive approaches recommended by WHO and the Ministry of Health to reach children who cannot attend the posyandu (WHO, 2018). This approach also aligns with immunization program policies emphasizing the importance of active tracking and continuous updating of infant immunization data to ensure equitable immunization coverage, as outlined in Ministry of Health Regulation No. 12 of 2017.

Furthermore, challenges related to vaccine-hesitant groups represent a complex issue requiring specialized approaches, both technically and socioculturally (WHO, 2021). The use of social media and direct outreach at posyandu by the health promotion unit represents a form of local innovation.

However, these approaches remain reactive and are not supported by systematic strategies or documented mapping of anti-vaccine groups. This aligns with literature emphasizing the need for multi-dimensional approaches, including community dialogue, engagement of local leaders, and mapping of community opinion dynamics (Larson et al., 2020).

Involvement of Other Parties in Planning

Furthermore, the involvement of other parties in planning the health center's immunization program reflects the dynamics of community and stakeholder participation in designing and implementing immunization activities at the village to subdistrict level.

Based on the statement from Informant 3, joint meetings with community leaders are not routinely held in their working area: *"The urban village office, neighborhood units (RT/RW) rarely participate in posyandu activities; when it comes to immunization, their involvement tends to be minimal. So usually posyandu cadres often have to take the initiative themselves. These community figures are generally only active when there is a specific budget allocation."* This indicates a lack of active participation from the community and grassroots-level stakeholders.

However, on the other hand, Informant 4 reported that in another working area of Lok Bahu, community leaders contributed meaningfully to immunization efforts. They stated, *"community leaders actively help gather and encourage residents to participate in immunization activities,"* showing concrete community involvement in the planning and implementation of immunization programs during certain periods.

At the subdistrict level, both Informants 5 and 6 reported, *"we regularly attend cross-sectoral meetings every three months in the form of mini workshops that discuss various health issues, including*

efforts to improve immunization coverage. In these meetings, various parties such as religious leaders from KUA, subdistrict heads (camat), village heads (lurah), PKK, and posyandu cadres are invited to provide educational approaches aligned with community social contexts. For posyandu cadres, usually only a few representatives attend, not all cadres from the working area of Lok Bahu, because these cross-sectoral meetings are organized jointly by several health centers. The general public is rarely included in these meetings." Although representation of posyandu cadres is limited in each mini workshop, the forum serves as an important space to align perspectives and formulate joint improvement strategies. From the administrative coordination aspect, the roles of the Social Affairs Office and the village administration are considered crucial for optimizing inter-agency synergy, given the common misconception that posyandu falls directly under the health center. Informant 6 explained, *"the Social Affairs Office and village administration should be more proactive in coordinating posyandu cadres since posyandu is under the Social Affairs Office, so that inter-agency collaboration can run optimally and does not place full responsibility on the health center."*

Based on the finding that community meetings involving local elements such as RT, RW, village heads, and community leaders are not routinely held, this reflects low community participation in immunization planning. Limited active participation from the community may impact the effectiveness of the immunization program, especially regarding mobilization and outreach. According to Ministry of Health Regulation No. 12 of 2017 on Immunization Implementation, community involvement is essential to increase immunization coverage, as active community participation strengthens cultural and social approaches in program implementation (Kementerian Kesehatan RI, 2017). In

addition, WHO emphasizes that community and local stakeholder engagement is one of the key strategies to achieve optimal immunization coverage (WHO, 2018).

Suboptimal coordination among non-health sectors is another challenge identified in this study. Posyandu, which administratively falls under the Social Affairs Office, is still widely assumed to be part of the health center, resulting in disproportionate distribution of responsibilities. Law No. 23 of 2014 on Regional Government stresses the importance of synergy between government agencies to ensure health program implementation without overlapping duties. Informant 6 stated the need for the Social Affairs Office and village administration to play a more active role in coordinating posyandu cadres so cross-sector collaboration can function optimally an important step in strengthening the management of immunization programs at the grassroots level.

Budget and Funding

The findings related to government funding for activities, workforce, and materials in the complete basic immunization program show the presence of funding limitations that affect program implementation. Funding mechanisms also vary across implementation levels, from posyandu to the health center.

Informant 3 mentioned that *“activity budgets are obtained from member contributions or other internal funding sources,”* indicating that limited funds are the main barrier to optimizing immunization and education activities. Informant 4 emphasized that *“all activities are self-funded through a cost-sharing system by the cadres,”* reflecting the minimal availability of dedicated budgets over the past two years.

Regarding workforce funding, according to Informant 1, *“although posyandu cadres are responsible for heavy tasks ranging from identifying infants and*

children, encouraging immunization, to documenting and reporting immunization data, they receive very limited financial compensation.” Cadre honorarium is not managed directly by the health center but depends on funding from the urban village office, village funds, the probabaya program, and support from the Social Affairs Office. Thus, the health center focuses mainly on coordination and health-related guidance.

According to Informant 6, funding for vaccines and routine operations has been allocated through the Health Operational Assistance Fund (BOK), but distribution issues have resulted in uneven vaccine supply, causing stock shortages in some health centers. This may be related to funding challenges in vaccine distribution management.

The findings regarding planning for complete basic immunization services at Puskesmas Lok Bahu indicate significant challenges in funding activities, workforce, and program support materials. The field findings show that most immunization activities conducted at posyandu are not fully supported by routine allocations from village government or the health center; instead, they rely heavily on internal resources or cadre self-funding. This situation limits cadres' capacity to conduct immunization activities and provide community education.

However, according to Ministry of Health Regulation No. 12 of 2017 on Immunization Implementation, local governments are obligated to provide operational non-vaccine costs for routine and supplementary immunization activities. These costs include transportation and accommodation for staff, consumables, community mobilization, maintenance and repair of cold chain equipment and immunization vehicles, logistics distribution, and disposal of immunization medical waste (Kementerian Kesehatan RI, 2017). Based on this regulation, funding for non-vaccine activities such as outreach,

community mobilization, or staff transportation should be part of the official planning of local governments and health centers, not entirely reliant on cadre self-funding.

Efforts to address funding gaps at Puskesmas Lok Bahu include the use of the Health Operational Assistance Fund (BOK), allocated based on the annual Activity Proposal Plan (RUK). However, the funds received remain limited, especially for financing out-of-facility immunization activities. According to Ministry of Home Affairs Regulation No. 12 of 2023, BOK management includes budgeting, implementation, administration, reporting, accountability, and oversight.

In comparison with Indonesia's health legal framework namely Law No. 36 of 2009 and Law No. 17 of 2023 on Health it is clearly stated that basic immunization is a child's right and a government obligation to ensure its implementation (Republik Indonesia, 2009; Republik Indonesia, 2023). Yet the findings at Puskesmas Lok Bahu show limitations in field-level implementation, particularly regarding non-vaccine aspects. This highlights the need for improvements in funding mechanisms so that financial support is not focused solely on vaccines but also includes support for cadres, transportation, and community education activities.

Availability of Information, Education, and Communication (IEC) Materials

The findings on the availability of Information, Education, and Communication (IEC) materials in the complete basic immunization program indicate that, despite several efforts from various parties, the availability and distribution of IEC materials related to immunization still face several challenges and variations in implementation.

According to Informant 3, cadres currently provide very minimal immunization education, whether through

face-to-face sessions or digital media. They stated, *“educational materials are mostly focused on other topics such as oral health and family planning, while specific immunization education is not available.”*

This situation is worsened by the absence of IEC support materials such as pamphlets, posters, or leaflets related to immunization, which hinders the optimization of immunization counseling at the community level. Similarly, Informant 4 added that communication by cadres relies on manual methods and WhatsApp groups, but the development and distribution of immunization educational materials remain limited. This creates significant challenges for cadres in delivering maximum education.

From the perspective of Informants 1 and 2, the health center has prepared various communication and educational materials, both verbal and digital. They stated, *“we provide the midwife's contact number in the MCH Handbook during each in-facility immunization visit as an additional communication channel, which is part of our strategy to expand access to information and support smooth handling of community complaints related to immunization, as well as to facilitate consultation access.”* This demonstrates innovation in expanding the reach of immunization information through digital technology.

Informant 5 explained that *“educational communication is carried out through diverse approaches, including religious channels through the Office of Religious Affairs (KUA) and personal approaches through village heads, PKK, and posyandu cadres.”* In addition, social media and digital platforms such as WhatsApp serve as important tools for disseminating educational materials more widely and in a more targeted manner.

Based on the research findings, the availability of immunization-specific IEC materials at the posyandu cadre level is still very limited, which hampers the success of

immunization education in the community. This is consistent with the Ministry of Health Regulation (Permenkes No. 12 of 2017 on Immunization), which emphasizes the importance of providing adequate promotional and educational materials to support the success of immunization programs. The lack of materials such as pamphlets, posters, and leaflets limits cadres' ability to deliver immunization messages effectively. WHO also states that accessible, culturally appropriate IEC materials are crucial for improving immunization acceptance and coverage (WHO, 2019).

The health center, as the frontline institution for immunization program implementation, has made important innovations, such as distributing midwives' contact numbers through the MCH Handbook and using WhatsApp groups as educational communication channels. This approach aligns with recommendations from the Ministry of Health and WHO, which encourage the use of information technology to expand the reach of immunization communication and facilitate community consultation (Kementerian Kesehatan RI, 2020; WHO, 2021). Furthermore, communication approaches involving religious institutions and community leaders, such as KUA, village heads, and PKK, represent multi-channel strategies consistent with WHO principles on risk communication and behavior change (WHO, 2017).

The finding that posyandu cadres currently provide very minimal immunization education and tend to focus on other topics, such as dental health and family planning, reflects a shift in focus or priority at the field level. This indicates a need to adjust training strategies and strengthen support for immunization-specific IEC materials.

Although the health center's efforts are significant, issues related to sustainability of IEC materials and coordination with posyandu cadres remain

major challenges. Considering the vital role of posyandu cadres in delivering education at the community level, and their function as a bridge between health services and the population, this study highlights the need for strengthened coordination and equitable distribution of IEC materials to ensure consistent quality of immunization counseling.

Implementation

Adequacy of Workforce and Training

The study findings indicate that limited intensive communication among health workers and shortages in human resources are significant barriers in the implementation of immunization services. Informant 4 stated, "*there are often only the two of us; when many children come at once, we get confused about dividing tasks.*" This reflects a high workload caused by insufficient staffing. From the health center's perspective, informant 6 reported, "*there are only two of us handling the program, it's difficult when immunization happens alongside other activities,*" illustrating both limited personnel and inadequate coordination in role distribution. Additionally, informant 2 emphasized that in dealing with vaccine refusal, health workers often work alone without additional support: "*when there are anti-vaccine parents, we go explain by ourselves; there's no help yet from community leaders.*"

The lack of intensive communication among health workers and limited human resources highlights a gap between field needs and system support. According to health workforce management theory, adequate staffing both in number and competency is a key determinant of program success (WHO, 2016). Furthermore, the concept of *capacity building* underlines the importance of continuous training and effective coordination to ensure optimal performance of field workers. In terms of regulation, the Indonesian Ministry of Health Regulation

No. 12 of 2017 on Immunization and the Posyandu Guidelines (Kementerian Kesehatan RI, 2011) emphasize that the success of immunization programs heavily relies on cross-sector collaboration and strengthened capacity of cadres through training and sustained communication. Thus, although training opportunities and formal coordination forums exist, field practices do not yet reflect intensive communication or adequate workforce support. As a result, cadres and health workers often feel overwhelmed and perceive that they are working alone in carrying out immunization activities.

Availability and Continuity of Services

The interviews revealed that although immunization services at the posyandu are routinely carried out, vaccine logistics remain a major obstacle in the field. Several cadres reported that delays in vaccine distribution led to temporary service disruptions. Informants 3 and 4 noted, *“we are already prepared at the posyandu, but if vaccines arrive late from the health center, we have to wait.”* Similarly, informant 1 said, *“we distribute vaccines according to the posyandu schedule, although sometimes there are stock issues at the District Health Office that cause service delays.”*

These findings show that the main issue lies not in cadre readiness or posyandu scheduling, but in vaccine availability, which at times is disrupted due to distribution constraints at the District Health Office level. This creates a bottleneck in logistic inputs, leading to service constraints in the field.

According to Notoatmodjo (2012), the sustainability of health services heavily depends on the reliability of inputs, including sufficient logistics. This aligns with the Ministry of Health’s Technical Guidelines for Immunization (2020), which stress the importance of proper cold chain management and timely vaccine distribution. When vaccine distribution is

inconsistent, service continuity at the posyandu becomes at risk, even if procedures at the health center and cadre levels are already in line with standards. Thus, it can be concluded that vaccine stock shortages in the field reflect coordination gaps at the upstream level (District Health Office). This underscores the need to strengthen the vaccine logistics system (Vaccine Logistics Management Information System/VLMIS) to prevent supply delays and ensure that community immunization services run consistently.

Immunization Beneficiaries

The study identified several barriers faced by parents in completing their children’s immunization schedules. These challenges are primarily related to time constraints due to work and concerns about vaccine side effects. Informant 9 shared, *“I actually want to complete my child’s immunization, but I often don’t have the time because my husband and I both work. Sometimes I miss the schedule or don’t know about it, especially when posyandu falls on a workday.”* Additionally, there were concerns about side effects: *“I was also hesitant because I heard stories from neighbors about their children getting fevers after immunization, so I was a bit afraid to take my child.”*

This narrative shows that although parents may want to complete immunization, structural barriers such as inflexible service schedules and psychological barriers related to fear of side effects still hinder compliance. This aligns with the Health Belief Model (Janz & Becker, 2014), which states that health behaviors are influenced by perceived benefits and barriers. In this case, perceived barriers (time and side effects) outweigh perceived benefits, reducing adherence to vaccination schedules. Studies by Balqis, Atika, & Candra (2023) also confirm that beyond knowledge, parental perceptions play a crucial role in determining the completeness of child immunization.

Evaluation

Immunization recording is carried out manually as well as through the ASIK application. However, discrepancies were found between the manual records and ASIK data, where the IDL (Complete Basic Immunization) coverage in ASIK appeared lower. Informant 2 explained, *“there are two forms of recording IDL coverage ASIK and manual. Often the data in ASIK shows lower coverage, even though the manual data is higher.”* Delays in reporting from the network were also a challenge. Some posyandu failed to report on time because new cadres replaced the previous ones without proper handover. This situation resulted in delayed follow-up. Meanwhile, according to Informant 5, evaluations are routinely conducted through the quarterly Mini Workshop Forum, held every three months. They explained, *“the mini workshop evaluates findings after community observations. If issues cannot be solved at the puskesmas level, they are referred to cross-sector partners and then re-evaluated for follow-up.”* This forum functions as a coordination platform between the puskesmas, posyandu cadres, and other involved sectors, ensuring that problems that cannot be resolved at the primary level can be escalated appropriately.

Overall, the evaluation results indicate that the complete basic immunization coverage in the Lok Bahu Health Center working area remains low, primarily due to limited vaccine logistics, shortages of implementing personnel, and resistance from parts of the community. Nevertheless, the evaluation mechanisms through the Mini Workshop (MINILOK) and the Quarterly Mini Workshop have played an important role in identifying barriers, formulating follow-up strategies, and strengthening cross-sector coordination to support the success of the complete basic immunization program.

Findings of this study on the evaluation of the complete basic immunization program at Lok Bahu Health Center highlight various interconnected challenges, including logistic constraints, limited human resources, and community resistance to immunization. Evaluation is an essential component of the health program management cycle because it assesses the extent to which achievements meet established targets and identifies obstacles requiring follow-up (Kementerian Kesehatan RI, 2021). In the context of immunization, evaluation also aims to ensure that complete basic immunization (IDL) coverage meets the national standard of at least 95% to prevent outbreaks of vaccine-preventable diseases (VPDs) (WHO, 2020). Another significant challenge lies in immunization recording and reporting.

This study found discrepancies between manual records and ASIK data, where IDL coverage recorded in ASIK appeared lower than manual reports. Additionally, delayed reporting from posyandu particularly due to cadre turnover without proper handover resulted in unsynchronized data and slow follow-up. This aligns with the Ministry of Health RI (2021), which emphasizes the importance of accurate and timely health information systems in supporting decision-making for immunization programs. Data discrepancies not only affect reported coverage but may also result in errors in vaccine distribution, as field needs are not accurately reflected in national systems.

In terms of evaluation mechanisms, Lok Bahu Health Center has implemented the Mini Workshop (MINILOK) and the Quarterly Mini Workshop as internal and cross-sectoral coordination forums. Through these forums, issues encountered in the field are collectively discussed; if unresolved at the health center level, they are escalated to relevant sectors for further action. This aligns with the community-based management concept recommended

by the Ministry of Health, where evaluation involves not only health workers but also cross-sector partners, cadres, and the community (Kementerian Kesehatan RI, 2017).

Thus, although IDL coverage remains low, the evaluation mechanism through MINILOK serves as an important platform for identifying problems, planning strategies, and strengthening collaborative networks. Overall, this discussion shows that low complete basic immunization coverage in the Lok Bahu Health Center area is caused by multiple factors—vaccine shortages, limited human resources, community resistance, and weaknesses in recording systems. However, routine evaluation via the Mini Workshop (MINILOK) and the Quarterly Mini Workshop can be viewed as strengths that support program sustainability.

Moving forward, necessary efforts include improving the national vaccine distribution system, enhancing the capacity of health workers and cadres through training, developing more adaptive risk communication strategies, and synchronizing manual and digital recording systems. Strengthening these components is expected to increase complete basic immunization coverage and help achieve the national target of 95% consistently and sustainably.

CONCLUSION

Based on the findings of this study, although planning has been carried out through formal forums such as the RUK and cross-sector coordination, its implementation has not been optimal. Community involvement remains limited, specific strategies to reach target groups have not been developed, and budgetary support is insufficient. These conditions make it difficult to fully achieve the targeted complete basic immunization

coverage. At the implementation stage, the involvement of health workers, posyandu cadres, and the network of health facilities is already in place; however, complete basic immunization coverage remains low due to fundamental barriers such as limited parental availability, concerns about vaccine side effects, lack of intensive communication, and logistic problems related to vaccine stock availability. Meanwhile, program evaluation remains limited and not well integrated. Reporting of immunization achievements focuses only on attendance numbers without in-depth analysis, compounded by the suboptimal use of the ASIK digital application, which hampers monitoring efforts. In addition, cross-sector support has not been maximized.

Based on these findings, several improvements are needed. First, strengthen planning and data systems by enhancing the quality of ASIK application use, improving data integration between posyandu and puskesmas, and providing training for cadres and health workers to ensure more accurate and real-time recording. Second, strengthen immunization implementation through continuous education involving community leaders, expanding risk communication approaches, and ensuring a more stable vaccine distribution system to prevent stock shortages. Third, optimize evaluation and cross-sector coordination by conducting regular supervision, analyzing contributing barriers, making better use of digital data, and increasing the involvement of local government and the Social Affairs Office in supporting posyandu cadres.

REFERENCES

- Balqis, S., Atika, A., & Candra, A. (2023). Faktor yang berhubungan dengan kelengkapan imunisasi dasar pada bayi. *Jurnal Kesehatan Masyarakat Dinas Kesehatan Kota Samarinda*. (2022). *Profil Kesehatan Kota Samarinda Tahun 2021*. Samarinda: Dinkes Kota Samarinda.
- Janz, N. K., & Becker, M. H. (1984). The Health Belief Model: A decade later. *Health Education Quarterly*, 11(1), 1–47. <https://doi.org/10.1177/109019818401100101>
- Kementerian Kesehatan Republik Indonesia. (2011). *Pedoman umum pengelolaan posyandu*. Jakarta: Kemenkes RI.
- Kementerian Kesehatan Republik Indonesia. (2017). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 12 Tahun 2017 tentang Penyelenggaraan Imunisasi*. Jakarta: Kemenkes RI.
- Kementerian Kesehatan Republik Indonesia. (2020). *Petunjuk teknis penyelenggaraan imunisasi*. Jakarta: Direktorat Jenderal Pencegahan dan Pengendalian Penyakit, Kemenkes RI.
- Kementerian Kesehatan Republik Indonesia. (2021). *Pedoman Praktis Manajemen Program Imunisasi di Puskesmas*. Direktorat Jenderal Pencegahan dan Pengendalian Penyakit.
- Kementerian Kesehatan Republik Indonesia. (2022). *Strategi Komunikasi Nasional Imunisasi 2022-2025*. Jakarta: Kemenkes RI.
- Kementerian Kesehatan Republik Indonesia. (2023). *Strategi pengembangan teknologi informasi kesehatan*. Jakarta: Kementerian Kesehatan Republik Indonesia.
- Kementerian Kesehatan Republik Indonesia. (2024). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 19 Tahun 2024 tentang Penyelenggaraan Pusat Kesehatan Masyarakat*. Jakarta: Kemenkes RI.
- Kementerian Kesehatan RI. (2021). *Petunjuk Teknis Bantuan Operasional Kesehatan (BOK) Tahun 2021*. Jakarta: Direktorat Jenderal Kesehatan Masyarakat.
- Larson, H.J., Jarrett, C., Schulz, W.S., Chaudhuri, M., Zhou, Y., Dubé, È., Schuster, M., MacDonald, N.E., & Wilson, R.J. (2015). Measuring vaccine hesitancy: The development of a survey tool. *Vaccine*, 33 34, 4165-75.
- Lim, W. M. (2024). What is qualitative research? An overview and guidelines. *International Journal of Qualitative Methods*, 23, 1–13. <https://doi.org/10.1177/14413582241264619>
- Notoatmodjo, S. (2012). *Promosi kesehatan dan perilaku kesehatan*. Jakarta: Rineka Cipta.
- Republik Indonesia. (2009). *Undang-Undang Nomor 36 Tahun 2009 tentang Kesehatan*.
- Republik Indonesia. (2014). *Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah*.
- Republik Indonesia. (2023). *Undang-Undang Nomor 17 Tahun 2023 tentang Kesehatan*.
- World Health Organization. (2016). *Working together for health: The World health report 2016*. Geneva: WHO.
- World Health Organization. (2017). *Strategic advisory group of experts on immunization, conclusions and recommendations*. Geneva: WHO.
- World Health Organization. (2019). *Immunization in practice: A practical guide for health staff*. Geneva: WHO.
- World Health Organization. (2019). *Improving communication for*

- immunization: A practical guide.
Geneva: WHO.
- World Health Organization. (2020).
Immunization coverage and vaccine
supply management. Geneva:
World Health Organization.
- World Health Organization. (2020).
Immunization in the context of the
Sustainable Development Goals.
Geneva: WHO.
- World Health Organization. (2021).
Addressing vaccine hesitancy.
Geneva: WHO.
- World Health Organization. (2021).
Utilizing digital technologies for
immunization services. Geneva:
WHO.
- World Health Organization. (2023). Global
vaccine market report 2023.
Geneva: World Health Organization