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“Aktifkan Imunisasi Di Daerah Ku (AMUNISIKU)” Immunization Reach Improvement Program at Tanjung Batu Community Health Center: SWOT Analysis

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Abstract

Immunization is one of the actions that can prevent and reduce morbidity, disability and death due to PD3I. Immunization achievement in Indonesia, especially in the Riau Islands is still very low. Various efforts and attempts have been made to improve immunization achievement. One of them is by launching the innovation "Aktifkan Imunisasi Di Daerah Ku (AMUNISIKU)". This program aims to improve immunization achievement at the Tanjung Batu Health Center UPT. This study is a qualitative study with unstructured interview techniques and uses SWOT analysis to determine the structure and dynamics of the program and search for literature. SWOT analysis: the strengths of the program include: trained health workers, financial support from the government with the Assistance fund for operational costs at the health center level (Bantuan Operasional Kesehatan [BOK]), adequate facilities and infrastructure and the active role of activity participants. The

weaknesses identified are limited implementation time, lack of understanding of the roles and responsibilities of support groups, lack of effective communication between cross-sectors and health facilities. The opportunities found are collaboration and cooperation across sectors and health facilities, technological advances in providing information and education to the community, and new innovations. Possible threats include lack of public awareness, negative stigma or misinformation about immunization, and changes in government policy that can affect commitment and support. Conclusion: utilizing opportunities such as cross-sector collaboration and technology and being prepared to face threats such as misinformation and lack of public awareness. A comprehensive and collaborative approach is needed so that the immunization program can run effectively.

Keywords: SWOT Analysis, Immunization Achievement, Immunization, Innovation Program

Introduction

Immunization is one of the most cost-effective measures to prevent the spread of disease, because it can prevent and reduce illness, disability and death due to PD3I, including tuberculosis, diphtheria, tetanus, hepatitis B, pertussis, measles, rubella, polio, meningitis and pneumonia ^[1]. A program issued in 1974 by the World Health Organization (WHO), namely the Expanded Program on Immunization (EPI), is intended to develop and expand immunization programs throughout the world to reduce child morbidity and mortality ^[2, 3]. WHO estimates that immunization can prevent 2-3 million deaths each year due to diphtheria, pertussis, tuberculosis and measles ^[4].

Around 18.7 million babies worldwide each year are not exposed to basic immunization services ^[5]. WHO data from the vaccine-preventable disease monitoring system, there has been an increase in the prevalence of rubella and measles in 2017-2020 in Sudan ^[6]. Data obtained from SKI in 2023, in Indonesia only 35.8% of children received complete basic immunization. While in the Riau Islands, data on children who received Complete Basic Immunization only reached 38.1% ^[7].

Measles outbreak in South Sudan and increasing prevalence of vaccine-preventable diseases are linked to barriers to access to immunization and cold chain logistics ^[6]. More than three-quarters of children are not on their routine vaccine schedule.

Prompt notification of immunization schedules prior to community visits is associated with a lower likelihood of children being off their immunization schedule^[8].

Many countries have shown progress in achieving the MDGs while some, such as Pakistan, continue to struggle to achieve the average immunization rates. Pakistan experiences a significant gap of up to 60% between the poorest and richest population levels^[9]. Immunization coverage serves to observe the effectiveness of the immunization program^[10]. Low immunization coverage not only makes children vulnerable to disease, disability, and death, but can also reduce immunity in vulnerable groups^[11] which is an important component of the national disease prevention strategy^[12]. Several recent studies have identified weak accountability and governance as major barriers contributing to the poor performance of routine immunization in Nigeria^[13-16].

The involvement of the president as a role model and driver of multi-sector actors in the era of centralization has succeeded in increasing the vertical scale of polio immunization program intervention. An important role is held by Posyandu, but revitalization in the post-reform-decentralization era is still not optimal^[17]. An effective and efficient vaccination delivery strategy is essential to determine the quality and quantity of vaccination services and is an important guarantee for the implementation of a fair and effective national immunization program^[16]. In Papua New Guinea, there are strengths and weaknesses in six categories of program performance relevant to the national immunization strategy and global standards, including adequate staffing, facilities and infrastructure, and operational procedures for immunization services, but these services only reach half to two-thirds of the target^[18].

The various studies above have revealed the low coverage of immunization programs and strategies to improve the achievement of immunization programs in each country. In addition, the strengths and weaknesses of the strategies in an effort to improve the achievement of immunization programs in several countries are also explained, for this reason this study is also to determine the strengths and weaknesses of program innovations in order to improve the achievement of immunization programs at the Tanjung Batu Health Center UPT.

Method

This study uses a qualitative research method. The analysis used in this study uses a descriptive qualitative approach where researchers use unstructured interview techniques. Descriptive qualitative analysis is used to obtain an overview of the scope of the immunization program related to strengths, weaknesses, opportunities and threats using SWOT analysis. SWOT analysis is used to analyze internal and external factors. In the "AMUNISIKU" program, the strategic factors used include the strengths, weaknesses, opportunities and threats of the program.

The subjects of the study were the Head of the Disease Control and Prevention Division of the Health Service, Head of the Health Center, Sub-district Head, Village Head/Head of Village, Head of RW/RT, health workers in the village/sub-district, owners of health facilities (TPMD, TPMB), health cadres, community leaders/religious leaders, and the community.

Results

SWOT analysis is used to determine the strengths, weaknesses, opportunities and threats of the AMUNISIKU program. Based on the results of interviews and direct observations at the research location, internal factors can be found in the AMUNISIKU Program, namely as follows:

1. Strength. There are several strengths that are owned, including:
 - a. Health workers who have been trained in the immunization program
The skills and knowledge of medical personnel in administering immunizations are critical to the success of the program. Advanced training for health workers also proves that health workers are able to administer vaccines correctly and safely.
 - b. Government support through the use of Health Operational Assistance (BOK) funds
The use of BOK funds used to carry out immunization activities such as immunization services at integrated health posts also carries out house-to-house sweeping activities to increase immunization coverage. This is a form of financial support that helps smooth the program.
 - c. Adequate infrastructure
The availability of adequate facilities such as a clean, cool and child-friendly vaccination room in a health center, a place to store vaccines and appropriate medical equipment, can support the smooth implementation of the immunization program.
 - d. Active role of participants
In the immunization program, the level of community participation greatly influences the success of the program. Communities that are aware of the importance of immunization for their children tend to be more supportive and actively participate.
2. Weaknesses. The weaknesses that it has are as follows:
 - a. Time constraints for implementing activities
Sometimes, immunization activities are hampered by time constraints, both by medical personnel and by participants who have limited time or a busy schedule to bring their children for routine immunizations according to the schedule.
 - b. Lack of understanding of the roles and responsibilities of immunization support groups
If there is a lack of understanding or coordination between support groups (e.g. health cadres, communities, and other parties involved), the implementation of immunization activities can be hampered. It is very important to ensure that all parties involved have the same understanding of their duties and responsibilities.
 - c. Lack of effective communication between cross-sectors and health facilities in the work area of the Health Center.
Lack of coordination between related parties (health centers, health services, local governments, and other sectors) can result in a lack of synergy in the immunization program. For example, information that does not reach the community, or health facilities lack the necessary support.

Meanwhile, external factors from the results in the field include the following:

1. Opportunities. Opportunities include:
 - a. Collaboration and cooperation across sectors and health facilities in the health center work area
Close cooperation between various sectors (for example, education, social, health, and local government sectors) can create synergies that accelerate the achievement of immunization program goals. Health centers as the frontline in health services can be effective coordination centers for various parties.
 - b. Technological advances in providing information and education to the public
With the development of technology, information about immunization can be disseminated more quickly and widely. Social media, health applications and other digital platforms make it possible to provide more interactive education and reach people in various locations, including areas that are difficult to reach directly.
 - c. New innovation activities
Innovation in the implementation of immunization service activities can improve the achievement of immunization programs. In addition, innovation in distribution methods and management of immunization data can also increase the effectiveness of the program.
2. Threats
 - a. Lack of public awareness
If people do not understand the importance of immunization, they may be reluctant or even refuse to participate in the immunization program. This can happen due to a lack of adequate information or distrust of vaccination. Therefore, efforts to increase public awareness and knowledge about the benefits of immunization are very important.
 - b. Negative stigma or misinformation
Misinformation or fake news about immunization circulating in the community can cause doubt or fear of vaccination. This can come from unreliable sources or even anti-vaccine groups. Strategies to counter misinformation and spread the right facts should be part of a health communication program.
 - c. Changes in government policy that may affect commitment and support for immunization programs
Changing government policies on immunization programs, both at the national and regional levels, can hinder the smooth running of immunization programs. For example, changes in regulations or budgets governing the distribution of vaccines or health workers can delay or disrupt the implementation of planned programs.

Discussion

UPT Tanjung Batu Health Center has shown its seriousness for the sustainability of the AMUNISIKU program. It has been proven that this program is an effort to improve the achievement of the immunization program in the work area of UPT Tanjung Batu Health Center. Trained health workers are the main strength, continuous training also needs to be carried out for health workers. The provision of quality

services depends on service readiness. The term "readiness" is defined as the achievement and maintenance of the condition of facility readiness to provide comprehensive quality care to patients, one of which is indicated by the availability of trained staff^[19]. Meanwhile, the government provides Health Operational Assistance (BOK) funds which are used to optimize the immunization program, for example by providing immunization services to integrated health posts or conducting immunization sweeps to the homes of residents who have toddlers. Maintenance and management of facilities must be prioritized. Ensuring the availability of good facilities will increase public trust and comfort in carrying out immunization. The less than optimal quality of immunization centers caused by inadequate infrastructure and inefficient processes is caused by the low level of inventory management training among vaccinators^[20]. In addition, high public awareness of the importance of immunization is the main capital in increasing immunization coverage. Time constraints are an obstacle in reaching all immunization targets, both from health workers and from the community itself. When viewed from support groups such as health cadres, there are still many health cadres who do not fully understand their role in the immunization program. So that poor communication between various parties can hinder the achievement of immunization targets. Therefore, cross-sector collaboration from all corners is needed to strengthen support for the immunization program. In order to create new innovations in the immunization program which are useful for increasing the achievement of immunization targets so that the community is aware of the importance of immunization and negative stigma or wrong information about immunization is not widely spread which makes people afraid to bring their children for immunization. In the end, there is a need for policies or regulations that do not change so that the immunization program continues to run.

Conclusion

The findings of this study are the importance of utilizing existing opportunities such as cross-sector collaboration and technology, and being prepared to face potential threats, especially those related to misinformation and lack of public awareness. With a comprehensive and collaborative approach, immunization programs can run effectively and the achievement of immunization targets will increase.

References

1. Ministry of Health. National Report of Riskesdas 2018. Jakarta, 2019.
2. Fenta SM, Biresaw HB, Fentaw KD, Gebremichael SG. Determinants of full childhood immunization among children aged 12–23 months in sub-Saharan Africa: A multilevel analysis using Demographic and Health Survey Data. *Trop Med Health*. 2021; 49(1).
3. Oku A, Oyo-Ita A, Glenton C, Fretheim A, Eteng G, Ames H, *et al*. Factors influencing the implementation of childhood vaccination communication strategies in Nigeria: A qualitative study. *BMC Public Health*. 2017; 17(1):1-12.
4. WHO. Immunization Agenda 2030: A Global Strategy to Leave No One Behind [Internet]. 2020 [cited 2025 Jan 28]. Available from: <https://www.who.int/teams/immunization-vaccines-and-biologicals/strategies/ia2030>

5. Siddiqi DA, Munir M, Shah MT, Khan AJ, Chandir S. Effect of vaccine reminder and tracker bracelets on routine childhood immunization coverage and timeliness in urban Pakistan: Protocol for a randomized controlled trial. *BMC Public Health*. 2019; 19(1):1421.
6. South Sudan (SSD). Demographics, Health & Infant Mortality [Internet]. [cited 2025 Jan 26]. Available from: <https://data.unicef.org/country/ssd/>
7. Ministry of Health. Indonesian Health Survey (SKI) in Figures. Health Development Policy Agency. Jakarta, 2023.
8. Idris IO, Tapkigen J, Kabutaulaka G, Ayeni GO, Ayomoh FI, Obwoya JG. Are children on track with their routine immunization schedule in a fragile and conflict-prone state of South Sudan? A community-based cross-sectional study. *BMC Pediatr* [Internet]. 2022; 22(1):1-19. Doi: <https://doi.org/10.1186/s12887-022-03213-5>
9. WHO. State of Inequality Childhood Immunization. Vol. 9, Journal of pediatric nursing. Switzerland, 2016, 136p.
10. Prinja S, Gupta M, Singh A, Kumar R. Effectiveness of planning and management interventions for improving age-appropriate immunization in rural India. *Bull World Health Organs*. 2010; 88(2):97-103.
11. Rogers KM. Immunization Noncompliance: Gauging the Cause, Effect, and Management in the School Setting. *NASN Sch Nurses*. 2019; 34(3):140-144.
12. Siddiqi DA, Ali RF, Munir M, Shah MT, Khan AJ, Chandir S. Effect of vaccine reminder and tracker bracelets on routine childhood immunization coverage and timeliness in urban Pakistan (2017-18): A randomized controlled trial. *BMC Public Health*. 2020; 20(1):1-14.
13. Xu J, Cui Y, Huang C, Dong Y, Zhang Y, Fan L, *et al*. Prevalence and factors associated with pentavalent vaccination: A cross-sectional study in Southern China. *Infect Dis Poverty* [Internet]. 2023; 12(1):1-13. Doi: <https://doi.org/10.1186/s40249-023-01134-8>
14. Wang J, Qiu L, Bai S, Zhao W, Zhang A, Li J, *et al*. Prevalence and serotype distribution of nasopharyngeal carriage of *Streptococcus pneumoniae* among healthy children under 5 years of age in Hainan Province, China. *Infect Dis Poverty* [Internet]. 2024; 13(1):1-11. Doi: <https://doi.org/10.1186/s40249-024-01175-7>
15. Wu D, Liu P, Song D, Wang H, Chen S, Tang W, *et al*. Implementing the free HPV vaccination for adolescent girls aged below 14 in Shenzhen, Guangdong Province of China: experience, challenges, and lessons. *Infect Dis Poverty* [Internet]. 2023; 12(1):1-11. Doi: <https://doi.org/10.1186/s40249-023-01149-1>
16. Wang J, Wang Y, Xu R, Zhang T, Jiang Y, Wang Y, *et al*. 13-Valent pneumococcal conjugate vaccines vaccination innovative strategy in Weifang City, China: A case study. *Infect Dis Poverty* [Internet]. 2023; 12(1):1-8. Doi: <https://doi.org/10.1186/s40249-023-01165-1>
17. Cintyamina U, Azizatunnisa' L, Ahmad RA, Mahendradhata Y. Scaling up public health interventions: Case study of the polio immunization program in Indonesia. *BMC Public Health*. 2021; 21(1):1-12.
18. Morgan CJ, Saweri OPM, Lame N, Peach E, Melepia P, Au L, *et al*. Strengthening routine immunization in Papua New Guinea: A cross-sectional provincial assessment of front-line services. *BMC Public Health*. 2020; 20(1):1-10.
19. WHO. Geneva. 2013 [cited 2025 Jan 28]. Service availability and readiness assessment (SARA): An Annual monitoring system for service delivery. Available from: [https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-\(sara\)](https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-(sara))
20. Siddiqi DA, Abdullah S, Dharma VK, Khamisani T, Shah MT, Setayesh H, *et al*. Assessment of vaccination service delivery and quality: A cross-sectional survey of over 1300 health facilities from 29 districts in Sindh, Pakistan conducted between 2017–18. *BMC Health Serv Res* [Internet]. 2022; 22(1):1-13. Doi: <https://doi.org/10.1186/s12913-022-08098-9>