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**Obstacles And Challenges In Implementing Immunization In Coastal Communities**Achmad Hilal^{1*}, Rahmat Pannyiwi²^{*1} D.III Midwifery Study Program, University of East Indonesia, Indonesia² Faculty of Military Medicine, Republic of Indonesia Defense University, Indonesia*Correspondent Author: Achmad Hilal, email: fhasranoldua@gmail.com**ABSTRACT**

Immunization is an effective promotive and preventive measure in preventing infectious diseases. However, immunization coverage in some coastal areas is still suboptimal. Geographical, social, and cultural conditions, as well as limited access to health services, are factors that influence immunization implementation. This study aims to identify obstacles and challenges to immunization implementation in coastal communities. This study used quantitative methods with a descriptive analytical design and a *cross-sectional approach*. The research sample was mothers who have toddlers in coastal area X. Data were collected using questionnaires and analyzed univariately and bivariately. The results showed that the main obstacles to immunization implementation include access to health services, maternal knowledge, perceptions of immunization, and family support. The conclusion of this study is that the implementation of immunization in coastal communities still faces various obstacles that require integrated interventions.

Keywords: Immunization, Obstacles, Challenges, Coastal Communities



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**1. Introduction**

Immunization is one of the most effective and efficient public health interventions for preventing vaccine-preventable infectious diseases. Immunization programs aim to protect individuals and communities from dangerous diseases and reduce morbidity and mortality, particularly among infants and young children.

Although the immunization program has been implemented nationally, immunization coverage in some regions has not yet reached targets, particularly in coastal areas. Coastal communities have different social, economic, and geographic characteristics than urban or inland areas. This often presents challenges in the implementation of health services, including immunization.

Coastal areas generally have limited transportation access, long distances to health facilities, and environmental conditions that are affected by weather and seasons. Furthermore, community education levels and knowledge about immunization vary, which can impact acceptance of immunization programs.

Social and cultural factors also play a role in determining immunization success. Negative perceptions, traditional beliefs, and lack of family support can hinder mothers from bringing their children for immunization. Therefore, understanding the obstacles and challenges to immunization implementation in coastal communities is crucial as a basis for planning appropriate interventions.

2. Research Methods**a. Types and Design of Research**

This research uses a quantitative method with a descriptive analytical design and a cross-sectional approach.

b. Location and Time of Research

The research was conducted in the coastal community area X in May–August 2025.

c. Population and Sample

The research population was all mothers who had toddlers in coastal area X. The sample was taken using a purposive sampling technique.

d. Inclusion criteria:

- 1) Mothers who have toddlers
- 2) Living in coastal areas
- 3) Willing to be a respondent

e. Exclusion criteria:

- Mothers who did not complete the questionnaire completely.

f. Research Variables

- Dependent variable: Implementation of immunization
- Independent variables:





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- 1) Access to health services
- 2) Mother's knowledge about immunization
- 3) Perceptions of immunization
- 4) Family support

g. Research Instruments

The research instrument was a structured questionnaire regarding respondent characteristics, obstacles, and challenges in implementing immunization.

h. Data analysis

Data were analyzed univariately and bivariately using the Chi-Square test with a significance level of $p < 0.05$.

i. Research Ethics

The research was conducted by paying attention to the principle of *informed consent*, anonymity, and confidentiality of respondent data.

3. Research Results And Discussion

a. Research Result

- 1) Respondent Characteristics

Table 1
Distribution of Respondent Characteristics
Characteristics Frequency (n) Percentage (%)

Mother's Age

< 25 years	14	23.3
25–35 years	31	51.7
> 35 years	15	25.0

Education

Base	26	43.3
Intermediate	22	36.7
Tall	12	20.0

Total	60	100
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- 2) Access to Health Services

Table 2
Distribution of Access to Health Services
Service Access Frequency (n) Percentage (%)

Difficult	35	58.3
Easy	25	41.7
Total	60	100





3) Mother's Knowledge about Immunization

Table 3**Distribution of Mothers' Knowledge**

Knowledge	Frequency (n)	Percentage (%)
Not enough	28	46.7
Enough	20	33.3
Good	12	20.0
Total	60	100

4) Mothers' Perceptions of Immunization

Table 4**Distribution of Perceptions on Immunization**

Perception	Frequency (n)	Percentage (%)
Negative	32	53.3
Positive	28	46.7
Total	60	100

5) Family Support

Table 5**Distribution of Family Support**

Family Support	Frequency (n)	Percentage (%)
Less supportive	34	56.7
Support	26	43.3
Total	60	100

6) Obstacles to Immunization Implementation

Table 6**Relationship between Constraining Factors and Immunization Implementation**

Constraint Factors	Incomplete Immunization	Complete Immunization	p- value
Difficult access	26	9	
Easy access	11	14	0.003
Lack of knowledge	22	6	
Good/sufficient knowledge	15	17	0.002
Negative perception	25	7	
Positive perception	12	16	0.001





Constraint Factors	Incomplete Immunization	Complete Immunization	p- value
Lack of support	24	10	
Good support	13	13	0.004

Square test, $p < 0.05$

b. Discussion

Research results show that access to health services is a major obstacle to immunization implementation in coastal communities. Long distances to health facilities, limited transportation, and geographical conditions affected by weather are factors that hinder mothers from bringing their children for immunization. These conditions result in many toddlers not receiving complete and timely immunizations.

Mothers' knowledge about immunization also plays a crucial role in the success of immunization programs. Research shows that most mothers lack knowledge about the benefits and schedule of immunizations. This lack of knowledge can lead to mothers being hesitant or afraid of the side effects of immunizations, leading to delays or refusals to vaccinate their children.

Negative perceptions of immunization pose a particular challenge in coastal communities. Some mothers still believe myths or misinformation about immunization, such as the belief that immunizations can cause illness or dangerous side effects. These negative perceptions can hinder immunization uptake even when access to services is readily available.

Family support, particularly from husbands and other family members, also influences mothers' decisions about immunizing their children. Mothers who lack family support tend to have difficulty taking their children to health facilities or feel uncertain about making decisions about immunization.

The results of this study align with the concept of health behavior, which states that a person's behavior is influenced by predisposing, supporting, and reinforcing factors. Therefore, efforts to increase immunization coverage in coastal communities require a comprehensive approach, taking into account factors such as access, knowledge, perception, and family support.

The implications of this study indicate the need for specific strategies in implementing immunization in coastal areas, such as mobile immunization services, increasing health education, and involving community leaders and families in supporting immunization programs.

4. Conclusion And Suggestions

a. Conclusion





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Immunization implementation in coastal communities still faces various obstacles and challenges, particularly related to access to health services, maternal knowledge, perceptions of immunization, and family support. These factors are significantly related to immunization completeness.

b. Suggestion

1) For the Health Department

Develop immunization service strategies that reach coastal areas, such as mobile immunization.

2) For Health Workers

Improve education and effective communication to the public regarding the importance of immunization.

3) For Communities and Families

It is expected to provide support to mothers in implementing toddler immunization.

4) For Further Researchers

It is recommended to conduct qualitative research to explore socio-cultural factors in more depth.

References

1. Arikunto, S. (2019). *Research Procedures: A Practical Approach*. Jakarta: Rineka Cipta.
2. Fitriani, S. (2017). *Health Promotion*. Yogyakarta: Graha Ilmu.
3. Green, L. W., & Kreuter, M. W. (2016). *Health Promotion Planning*. New York: McGraw-Hill.
4. Hidayat, AAA (2018). *Health Research Methodology*. Jakarta: Salemba Medika.
5. Hilal, A., Herman, H., W, RR, Asrianto, A., Jabir, MA, & Betan, AB (2024). Efforts to Protect Themselves from Health Risks for Scavenger Groups at Final Waste Disposal Sites in Makassar City. *Sahabat Sosial: Journal of Community Service*, 3(1), 17–24. <https://doi.org/10.59585/sosisabdimas.v3i1.510>
6. Ministry of Health of the Republic of Indonesia. (2019). *Immunization Implementation Guidelines*. Jakarta: Ministry of Health of the Republic of Indonesia.
7. Ministry of Health of the Republic of Indonesia. (2020). *Indonesian Health Profile*. Jakarta: Ministry of Health of the Republic of Indonesia.
8. Machfoedz, I. (2018). *Quantitative Research Methodology*. Yogyakarta: Fitramaya.
9. Notoatmodjo, S. (2019). *Health Promotion and Health Behavior*. Jakarta: Rineka Cipta.
10. Orenstein, W. A., & Ahmed, R. (2017). Simply put: Vaccination saves lives. *PNAS*, 114(16), 4031–4033.
11. Pratiwi, C., Yulis, DM, Djunaedi, D., & Pannyiwi, R. (2023). The Effect of Diet Therapy and Physical Activity on Blood Sugar Levels in Diabetes Mellitus Patients in the





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- Inpatient Ward of Luwuk Banggai Regional Hospital. Barongko: *Journal of Health Sciences*, 2(1), 138–153. <https://doi.org/10.59585/bajik.v2i1.218>
12. Pannyiwi, R., & Ali, A. (2025). Analysis of Drug Abuse Prevention Programs and Risk Factors in Adolescents: A Mixed Study Method in Sidenreng Rappang Regency. *JIMAD: Multidisciplinary Scientific Journal*, 2(2), 153–162. <https://doi.org/10.59585/jimad.v2i2.859>
 13. Santrock, J. W. (2017). *Life-Span Development*. New York: McGraw-Hill.
 14. Sugiyono. (2019). *Quantitative, Qualitative, and R&D Research Methods*. Bandung: Alfabeta.
 15. Sunanto, S., Pannyiwi, R., & Rahmat, RA (2025). The Effect of Night Shift Work on Nurse's Fatigue and Work Concentration in the Emergency Department. *International Journal of Health Sciences*, 3(4), 606–613. <https://doi.org/10.59585/ijhs.v3i4.867>
 16. UNICEF. (2019). *Immunization in Remote Areas*. New York: UNICEF.
 17. Wawan, A., & Dewi, M. (2018). *Theory and Measurement of Health Behavior*. Yogyakarta: Nuha Medika.
 18. World Health Organization. (2018). *Immunization Coverage*. Geneva: WHO.
 19. World Health Organization. (2019). *Global Vaccine Action Plan*. Geneva: WHO.
 20. World Health Organization. (2020). *Barriers to Immunization*. Geneva:
 21. WHO.Yuliana, R. (2017). Factors influencing immunization coverage. *Journal of Public Health*, 12(1), 45–52.

