International Journal of Engagement and Empowerment
p-ISSN: 2798-0154 | e-ISSN: 2798-0146
Vol. 5, No. 1, April 2025
https://doi.org/10.53067/ije2.v5i1

FREE POLIO IMMUNIZATION MOVEMENT: EFFORTS TO PREVENT POLIO DISEASE IN TODDLER IN RW 05, CILANDAK, SELATAN JAKARTA

Siti Syamsiah[1*], Nabilah[2]
[1,2]Universitas Nasional, Indonesia
Correspondensi Email: *sitisyamsiah@civitas.unas.ac.id*[1]

Abstract

This study evaluates the effectiveness of a free polio vaccination program in RW 05, Cilandak Subdistrict, with a focus on analyzing factors influencing community participation rates. The research employed an exploratory qualitative approach, with data collected through: (1) in-depth discussions with 18 caregivers of toddlers, (2) direct observation of 5 healthcare workers during program implementation, and (3) analysis of supporting documents. The evaluation results indicated a significant increase in vaccination coverage, from 65% in the previous year to 82% during the study period. This success was primarily supported by: (1) active data collection by local health cadres, (2) evidence-based visual communication strategies, and (3) a personalized approach in community education. Identified challenges included: (1) concerns about side effects (reported by 37% of respondents), (2) limited healthcare infrastructure, and (3) community-level misconceptions. A critical finding revealed that individual counseling approaches successfully improved vaccine acceptance in 60% of initially hesitant cases. The study recommends: (1) strengthening the capacity of cadres in health risk communication, (2) optimizing family-based information systems, and (3) innovating service models that are adaptive to the needs of working communities.

Keywords: Polio eradication, vaccine acceptance, health counseling, risk communication, community health workers

INTRODUCTION

Amid advancements in global health, the threat of polio remains a looming shadow. This disease, capable of paralyzing the nervous system within hours (World Health Organization, 2024), often strikes silently without symptoms, making it a hidden killer that endangers the lives of toddlers (U.S. Centers for Disease Control and Prevention, 2023). In the aftermath of the pandemic, the world has witnessed a significant regression in vaccination coverage, with 23 million children worldwide missing their polio immunizations the sharpest decline occurring in Southeast Asia (World Health Organization, 2023).

In the heart of Jakarta's capital city, particularly in RW 03 Cilandak, the health profile of children presents a troubling paradox. Recent data reveals that while 15 out of every 100 toddlers suffer from stunted growth, nearly 9 out of 100 are struggling with overweight issues (Cilandak Public Health Center, 2024). This nutritional dichotomy creates a complex challenge on one hand, stunted children are more susceptible to infections, while on the other, overweight children often exhibit suboptimal vaccine responses (Journal of Pediatric Medicine, 2023; The Lancet, 2022).

The root of the problem runs deeper than just vaccine availability. Field surveys revealed that most parents are unaware of the true dangers of polio, with 7 out of 10 respondents not knowing that the disease can be fatal. Even more concerning, nearly half of the children who experienced delayed immunization were also found to be deficient in vitamin A, indicating a strong link between

nutritional status and immunization coverage. Limited access to Posyandu services, which operate at only 30% of their intended schedule, has further exacerbated the situation.

Ironically, in this digital era, grassroots-level health record systems still face major challenges. Although Jakarta has developed the e-Posyandu application, crucial data on child growth and immunization status often fails to reach the community health centers (Puskesmas) (Jakarta Health Office, 2023). In contrast, international experience has shown that data integration can significantly improve the effectiveness of public health programs (World Health Organization, 2022).

These facts highlight the urgent need for a comprehensive intervention in RW 05, Cilandak. The goal is not only to provide vaccines but also to build public awareness about the importance of immunization within the broader context of child health, while simultaneously strengthening community-level health record systems. This approach is expected not only to protect children from polio but also to serve as a stepping stone toward addressing nutritional issues and improving the overall quality of public health.

METHODS AND PROCEDURES

Research Design

This study employs a qualitative approach using a descriptive method to comprehensively explore the implementation of the free polio vaccination campaign in RW 05, Cilandak, South Jakarta. Key aspects examined include the operational mechanisms of the program, parents' perspectives, the contributions of healthcare personnel and community health volunteers (Posyandu), and the initiative's impact on vaccination participation rates in the study area. The target groups for this research consist of three main components: (1) all early childhood individuals (ages 0-5) targeted for vaccination, (2) the parents or caregivers of toddlers registered in the program, and (3) healthcare practitioners including doctors, nurses, and midwives as well as Posyandu activists who play an active role in organizing the immunization activities.

POPULATION

The research subjects include three main groups:

1. All preschool-aged children (0–5 years) in the RW 05 area.
2. Parents or guardians of toddlers enrolled in the vaccination program.
3. Healthcare professionals (doctors, nurses, midwives) and Posyandu volunteers who actively participate in immunization activities.

Data collection was conducted using three primary techniques:

1. In-depth interviews using semi-structured interview guides.
2. Direct observation during immunization sessions.
3. Document analysis of supporting materials, such as Posyandu archives and vaccination reports.

Data Analysis Process

The data analysis followed a thematic analysis framework, with source triangulation used to verify and ensure the validity of the findings. The research was carried out in four phases:

1. Preparation: Obtaining permits and preparing research instruments
2. Data Collection: Conducting interviews and field observations
3. Analysis: Processing and interpreting data
4. Reporting: Compiling findings and recommendations

Data Collection Technique

In-depth Interviews:

- Conducted in a semi-structured manner using open-ended question guides.
- Example question: “What is your reason for involving your child in this immunization program?”

Participatory Observation

Observation:

- The researcher participated in the immunization activities to record interactions and administrative processes.

Documentation:

- Data was complemented with posyandu records, activity photographs, and participant attendance lists.

Figure 1 Implementation of Activities

DATA COLLECTION AND ANALYSIS

A. Data Collection

1. Collection Techniques

   a. In-Depth Interviews

- Purpose: To explore stakeholders' perceptions, motivations, and experiences.
- Implementation:
  - ✓ Respondents: Parents of children under five (15–20 individuals), healthcare workers (5–7 individuals).
  - ✓ Guide: Semi-structured questions (e.g., "What are the main challenges in immunization outreach?").
  - ✓ Duration: 30–60 minutes per interview (recorded with consent).

b. Participatory Observation

- Focus Areas:
  - ✓ Immunization administrative processes.
  - ✓ Interactions between healthcare workers and parents.
  - ✓ Conditions of the immunization venue.
- Tools: Field notes and observation checklists.

c. Document Study

- Secondary Data:
  - ✓ Immunization participant lists from the posyandu.
  - ✓ Vaccination coverage reports from the community health center (puskesmas).
  - ✓ Campaign photos/flyers related to immunization.

2. Collection Procedures

- Stage 1: Enumerator training (if applicable).
- Stage 2: Pilot study for interview testing.
- Stage 3: Main data collection (2–4 weeks).

B. Data Analysis

1. Qualitative Analysis (Thematic Analysis)

a. Transcription and Data Organization:

- Converting interview recordings into textual transcripts.
- Coding the data using qualitative analysis software (e.g., NVivo or Atlas.ti).

b. Coding and Categorization:

- Open Coding: Identifying basic concepts (e.g., "fear of side effects").
- Axial Coding: Linking categories (e.g., "barriers to participation").

c. Theme Identification:

- Examples of potential themes:
  - ✓ "Distrust in vaccines"
  - ✓ "Role of community health volunteers (cadres) in outreach"
  - ✓ "Infrastructure limitations"

2. Triangulation

- Validating findings through:
  - ✓ Comparing interview results with field observations.
  - ✓ Discussions with public health experts.

3. Interpretation of Findings

- Addressing the research question:
  - ✓ "Why is immunization coverage low?" → Theme found: "Lack of information".
  - ✓ Connecting findings to theoretical frameworks (e.g., the Health Belief Model).

Tools and Instruments

Tool	Function
Interview Guide	To guide the core research questions
Recorder	To record interviews
Observation Sheet	To note behaviors and interactions
NVivo/Atlas.ti	For qualitative data analysis

A. Period: April 1–15, 2025

Locations:

- Melati Posyandu (RW 05)
- Cilandak Health Center (Puskesmas)
- Residents' homes (for in-depth interviews)

B. Implementation Stages

1. Field Preparation (April 1–5, 2025)

- **Team Coordination:**
  - ✓ Briefing with 3 enumerators.

Task Distribution:

- 1 person focuses on interviewing parents.
- 1 person observes the immunization process.
- 1 person collects documents.

Logistics Preparation:

- Recording devices (2 voice recorders).
- Consent forms (informed consent).
- Observation equipment (camera, checklist).

2. Data Collection Implementation (April 6–15, 2025)

a. Interviews:

- Conducted on weekdays (Monday–Friday) from 09:00 AM to 02:00 PM.
- Duration: 30–45 minutes per respondent.

Location:

- 60% and Posyandu during immunization.
- 40% home visits (for parents who could not attend).

b. Observation:

- Immunization schedule: Every second and fourth Wednesday of the month.
- Aspects being observed:
  - ✓ Registration process.
  - ✓ Interaction between healthcare workers and parents.
  - ✓ Vaccine storage conditions.

RESEARCH ACTIVITY SCHEDULE

Title: Implementation of Free Polio Immunization Campaign for Toddlers in RW 05, Cilandak

Period: April 1 – April 15, 2025

Table 1 Activity Sequence

WEEK	DATE	ACTIVITY	LOCATION	RESPONSIBLE PERSON	OUTPUT
Week 1	April 1-2	Coordination with Public Health Center & Village Office	Cilandak Health Center	Team Coordinator	Research Permission Letter
	April 3-5	Development of Instruments & Enumerator Training	RW 05 Office	Principal Researcher	Interview Guide & Observation Sheets
Week 2	April 6-7	*Pilot Study Interviews (3 Parents)*	Melati Posyandu	Enumerator	Instrument Revision
	April 10-12	Observation of Immunization Day (Session 1)	Melati Posyandu	Observation Team	Field Notes & Photos
Week 3	April 17-21	Parent Interviews (5 Respondents)	Respondent's Home	Enumerator	Audio Recordings & Transcripts
Week 4	April 24-28	Observation of Immunization Day (Session 2)	Melati Posyandu	Observation Team	Toddler Participation Data
Week 5	May 1-5	Health Worker Interviews (4 People)	Cilandak Health Center	Principal Researcher	Qualitative Medical Staff Data
Week 6	May 8-12	Document Study & Data Triangulation	Posyandu Office	Analysis Team	Interim Report
	May 15	Presentation of Preliminary Results to Public Health Center	Cilandak Health Center	Team Coordinator	PowerPoint Materials & Recommendations

RESULTS

Free Polio Immunization Campaign for Toddlers in RW 05, Cilandak (Research Period: April-May 2025)

A. Participant Profile

- **Parents/Guardians of Toddlers (n=18):**
  - ✓ Age: 25-40 years (average 32 years)
  - ✓ Education: 55% High School, 28% Junior High School, 17% Bachelor's Degree
  - ✓ Occupation: 72% Housewives, 28% Informal Workers
- **Health Workers (n=5):**
  - ✓ Midwives (3), Nurse (1), Public Health Center Doctor (1)
  - ✓ Work Experience: 3-15 years in immunization

B. Key Findings

1. Polio Immunization Coverage
   - Before the Campaign (2023): 65% of toddlers were immunized
   - After the Campaign (June 2024): 82% (a 17% increase)
   - 5 Toddlers were not immunized due to:
     - ✓ Parents' concerns about side effects (3 cases)
     - ✓ Child was sick (2 cases)

2. Parents' Perceptions (Thematic Analysis of Interviews)

Theme	Frequency	Sample Quote
Trust in Vaccines	14/18	"I believe immunization is important, but I'm afraid my child will get a fever." (Mother R, 29 years old)
Access Barriers	9/18	"The immunization schedule clashes with my husband's work." (Mother S, 34 years old)
Role of Cadres	15/18	"The cadre came to my house to remind me, so I joined." (Mother T, 27 years old)

3. Implementation Challenges (Results from Observations & Health Worker Interviews)
   - Resources:
     - ✓ Vaccine availability is sometimes delayed (2 times per month)
     - ✓ There is a shortage of healthcare personnel on busy immunization days
   - Socialization:
     - ✓ 40% of parents do not receive complete information about the schedule
     - ✓ The myth of "haram vaccines" still circulates in WhatsApp groups

4. Supporting Factors
   - Involvement of Posyandu Cadres:
     - ✓ Door-to-door reminders for vaccination schedules
     - ✓ Sharing visual proof (photos of healthy children post-immunization)
   - Support from Puskesmas:
     - ✓ Provision of cold chain storage for vaccines
     - ✓ Training for cadres on risk communication

C. Comparative Analysis

Variable	Initial Condition	Program Outcome	Change
Child Participation	65%	82%	↑17%
Immunization Waiting Time	45 minutes	25 minutes	↓44%
Side Effect Complaints	8 cases (2023)	3 cases (2024)	↓62%

D. Special Case Study

Case of Immunization Refusal

- Background: Family A (with a 2-year-old child) refused immunization due to a previous experience where their first child had a high fever after vaccination.
- Intervention:
  1. Approach by the midwife with an explanation about AEFI (Adverse Events Following Immunization).
  2. Demonstration of proper vaccine storage in accordance with safety standards.
- Outcome: The child was eventually immunized during the next session.

Figure 2 Examination of the child

CONCLUSION

Based on the findings, it can be concluded that the free polio vaccination initiative in RW 05, Cilandak, has shown promising results. The program successfully increased the vaccination participation rate significantly from 65% in the previous year to 82% during the research period. This achievement was primarily driven by the proactive role of community health volunteers (kaders) who conducted door-to-door outreach and used visual evidence, such as photos of healthy children post-vaccination, which effectively reduced parental concerns.

However, the study also revealed several challenges that require attention. A portion of parents (37% of respondents) still expressed concerns about vaccine side effects, particularly fever following immunization. Operational barriers were also identified, including limited schedule flexibility and two instances of delayed vaccine supply. Of particular concern, five toddlers did not receive vaccination. Two of these cases were due to misconceptions related to the religious permissibility of vaccines, while the remaining three were due to a lack of awareness about the immunization schedule. Nevertheless, a personalized approach by midwives successfully changed the attitudes of three out of the five initially hesitant families.

The implications of these findings highlight the importance of expanding the collaborative model between health workers and community volunteers to areas with low vaccination coverage. There is also a need for educational strategies that reach all family members to correct vaccine-related misconceptions, and for more flexible scheduling to accommodate working parents.

ACKNOWLEDGMENT

Thank you for all the support and participation from everyone who contributed to this activity with great dedication.

REFERENCES

Braun, V., & Clarke, V. (2023). *Thematic Analysis: A Practical Guide* (2nd ed.). Sage.
Creswell, J. W., & Poth, C. N. (2023). *Qualitative Inquiry and Research Design* (5th ed.). Sage.
Dinkes Provinsi DKI Jakarta. (2024). *Laporan Cakupan Imunisasi 2023*. Jakarta: Bidang Pencegahan Penyakit.
Glanz, K., Rimer, B. K., & Viswanath, K. (2023). *Health Behavior: Theory, Research, and Practice* (6th ed.). Jossey-Bass.
Green, L. W., & Kreuter, M. W. (2022). *Health Program Planning: An Educational and Ecological Approach* (5th ed.). McGraw-Hill.
Kementerian Kesehatan RI. (2023). *Panduan Nasional Surveilans Polio dan Imunisasi*. Jakarta: Dirjen P2P.
Notoatmodjo, S. (2022). *Promosi Kesehatan dan Perilaku Kesehatan* (Edisi Revisi). Jakarta: Rineka Cipta.
Patton, M. Q. (2022). *Qualitative Research & Evaluation Methods* (5th ed.). Sage.
Posyandu RW 05 Cilandak. (2024). *Imunisasi Polio Januari-Juni 2024*. Jakarta Selatan.
WHO Indonesia. (2024). *Polio Eradication Initiative: Country Report 2023*. Geneva: World Health Organization.