

EMPOWERING MOTHERS THROUGH “MY VILLAGE MY HOME” IN AN EFFORT TO ACHIEVE COMPLETE ROUTINE IMMUNIZATION STATUS FOR TODDLERS

Fariani Syahrul¹, Arief Hargono¹ and Ardy Farmalarissa Annis²

¹ Department of Epidemiology, Biostatistics, Population Studies and Health Promotion, Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia, Indonesia

² Faculty of Medicine Alumni, Universitas Airlangga, Indonesia

* Corresponding autor email : fariani.s@fkm.unair.ac.id

Abstract

Background. The completion of routine immunization for toddlers is an important indicator of both child health and the achievement of the SDGs. However, immunization coverage in various regions remains suboptimal. Challenges remain in many regions, particularly related to family involvement and awareness among mothers as primary caregivers. The My Village My Home (MVMH) approach offers a community-based strategy that emphasizes maternal empowerment through simple recording, participatory monitoring, and social support from cadres and the community. The **objective** of this study was to map scientific evidence on the effectiveness of maternal empowerment through MVMH in increasing the achievement of complete routine immunization of toddlers. **Method.** This study used a scoping review design. Data sources were literature from PubMed, Scopus, Google Scholar, and national portals. Inclusion criteria were articles published between 2010 and 2025, written in English or Indonesian, and accessible in full. While exclusion criteria were not original research. There were 8 articles that met the criteria. **Result.** All reviewed studies demonstrate that MVMH and its adaptations consistently improve immunization awareness, knowledge, attitudes, and coverage. In Surabaya, Indonesia, immunization coverage increased significantly from 78.81% to 95.77% following MVMH implementation. In India, pilot communities achieved >80% coverage versus 49–69% in control districts. Across six countries, MVMH strengthened community accountability, improved defaulter tracking, and fostered shared responsibility between health workers and communities. **Conclusion and Suggestion.** MVMH is a promising, low-cost, and adaptable community empowerment tool. Sustainability of MVMH requires ongoing training, community engagement, multi-sectoral support, and integration into existing immunization systems.

Key words : immunization, toddlers, empowering mother's, my village my home

1. INTRODUCTION

Immunization is one of the most effective and cost-efficient public health interventions for preventing vaccine-preventable diseases (VPDs). Globally, millions of child deaths per year can be prevented through comprehensive immunization programs. However, Complete Basic Immunization (*Imunisasi Dasar Lengkap*) coverage remains a major challenge in many developing countries, including Indonesia.

The completion of routine immunization for toddlers is an important indicator of both child health and the achievement of the Sustainable Development Goals (SDGs). However, immunization coverage in various regions remains suboptimal. Challenges remain in many regions, particularly related to family involvement and awareness among mothers as primary caregivers. Data from 2025 shows that only four provinces achieved the target of $\geq 90\%$ complete immunization coverage¹, while East Java recorded measles immunization coverage of 68.66%. This low coverage contributes to measles and rubella outbreaks in 31 provinces². The My Village My Home approach offers a community-based strategy that emphasizes

maternal empowerment through simple recording, participatory monitoring, and social support from cadres and the community. The My Village My Home (MVMH) tool, introduced by USAID–MCHIP, provides a visual representation of each child’s immunization status within a village, enabling mothers and cadres to track progress collectively. This participatory approach fosters ownership, accountability, and empowerment among caregivers.

In Indonesia, MVMH is known as "Rumah Imunisasi" (Immunization House) or "Desaku Rumahku" (My Village My Home) and has been implemented in various cities, including Surabaya, as an effort to increase community participation in achieving complete routine immunization. Various local adaptations have also been developed, such as "KampungKu-RumahKu" in Tegal Regency and "My Board in the Village" in Malang Regency.

The objective of this study was to map scientific evidence on the effectiveness of maternal empowerment through My Village My Home in increasing the achievement of complete routine immunization of toddlers.

2. METHODOLOGY

2.1 Research Design and Framework

This study used a scoping review design. A scoping review was conducted following the Arksey & O’Malley (2005) framework, comprising five stages: identifying the research question, identifying relevant studies, study selection, charting the data, collating, summarizing, and reporting results. This study used a scoping review because the research question was broad and exploratory, focusing not only on whether My Village My Home (MVMH) is effective, but also on how it has been implemented, who was involved, and what outcomes were reported across different contexts.

2.2 Search Strategy and Selection Process

Databases searched: PubMed, Scopus, Google Scholar, and national portals. Keywords: “My Village My Home,” “maternal empowerment,” “community-based intervention,” “child immunization.” Inclusion criteria: published between 2010–2025, English or Indonesian language, Full-text accessible, and focused on MVMH or its local adaptations. Exclusion criteria: irrelevant to immunization and non-original research.

The document selection process followed the PRISMA framework consisting of identification, screening, eligibility, and inclusion stages.

The complete selection process is presented in Figure 1.

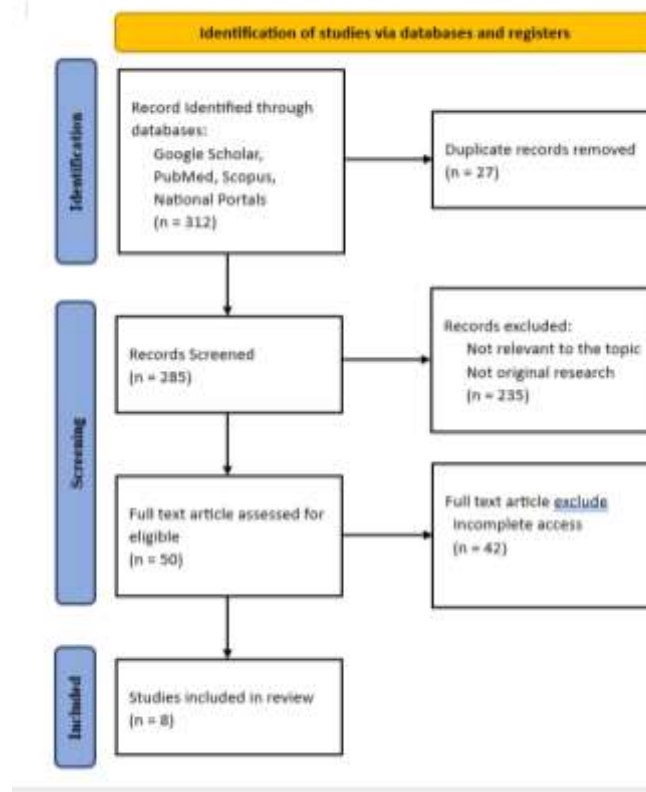


Figure 1. PRISMA Flow Diagram of Literature Selection Process.

3. RESULTS & DISCUSSION

3.1 Article Characteristics

The scoping review identified 8 eligible documents for inclusion in the final analysis. Overall, these studies covered MVMH implementation in seven countries: Indonesia (four studies), India, Malawi, Zimbabwe, Nigeria, Tanzania, and Timor-Leste. The publication years ranged from 2015 to 2024, with various study designs ranging from retrospective cohort, cross-sectional, to multi-country program evaluation reports. Table 1 presents author & year, location, design, population and key findings.

Table 1. Characteristics and Key Findings of Articles Reviewed in the Scoping Review

No.	Author / Year	Country / Location	Study Design	Key Findings
1	Hargono et al. (2019)	Surabaya, Indonesia	Observasional Kohort Retrospektif	Mean Complete Basic Immunization (CBI) coverage increased from 78.81% (2017) to 95.77% (2018) following MVMH implementation. The difference was statistically significant ($p=0.019$).
2	Nurwitasari et al. (2020)	Surabaya, Indonesia	Kohort Retrospektif	The majority of cadres (80–90%) and mothers of children under

No.	Author / Year	Country / Location	Study Design	Key Findings
				two years of age had good knowledge and attitudes toward MVMH. Among trained cadres, a higher proportion of mothers were familiar with MVMH (90% vs. 50%).
3	Syahrul et al. (2019)	Surabaya, Indonesia	Observasional Kohort Retrospektif	MVMH media was available at all integrated health posts. Cadres and mothers had good knowledge and attitudes. Training improved mothers' understanding of MVMH.
4	Jain et al. (2015)	India & Timor-Leste	Field Action Report (pre-post)	CBI coverage in Indian pilot communities reached >80% for all antigens vs. 49–69% in the same districts. In Timor-Leste, the number of infants identified and immunized increased significantly.
5	Shimp, JSI (2021)	Zimbabwe, Malawi, Nigeria, Tanzania, Timor-Leste, India	Multi-Country Program Evaluation Report	MVMH increases DTP1 coverage, reduces dropout rates, and promotes shared community responsibility. In Zimbabwe, 82% of VHWs reported reaching more children.
6	Social Norms/MCSP (2018)	Malawi (Dowa & Ntchisi)	Deskriptif Program	Nearly 100% immunization coverage in communities with well-implemented MVMH. A house-to-house survey showed that 76.8% of infants were up-to-date and very few had not yet started immunization.
7	Naimah et al. (2023)	Malang, Indonesia	Pre-Post Test	Cadre knowledge improved from 19% in the good category to 76% following 'My Board in the Village' training. All 21 cadres were able to use the immunization monitoring board.
8	Alimah et al. (2024)	Kabupaten Tegal, Indonesia	Cross-Sectional Kuantitatif	The 'KampungKu-RumahKu' media significantly improved cadre performance ($p=0.021$), perceptions ($p=0.001$), attitudes ($p=0.009$), motivation ($p=0.000$), and reduced workload burden ($p=0.000$).

3.2 MVMH Working Mechanism in Maternal Empowerment

MVMH operates as a community-level visual communication tool that displays each child's immunization data transparently and openly to all community members. The tool takes the form of a large poster placed in public spaces—such as integrated health posts (*posyandu*), village offices, or community halls—and is updated periodically by cadres or local health workers.

Each row in the poster represents one child, with columns indicating the type and date of vaccine administration. If a child has not received a particular immunization, the column remains empty ("missing bricks"), providing a clear visual signal for cadres, mothers, and village heads to take follow-up action. This mechanism creates positive social pressure while fostering collective responsibility within the community.

In the context of maternal empowerment, MVMH provides several key benefits: (1) improving mothers' understanding of the immunization schedule and its importance; (2) motivating mothers to bring their children to the integrated health post on time; (3) facilitating two-way communication between mothers, cadres, and health workers; and (4) encouraging mothers to remind and support one another within the community.

This scoping review confirms that MVMH is an effective empowerment strategy for increasing maternal participation in immunization programs. Empowerment in this context does not only mean the provision of information, but also encompasses strengthening mothers' capacity to make informed decisions regarding their children's health.

Health behavior theory—particularly the Health Belief Model—explains that individual health actions are influenced by perceptions of susceptibility (perceived susceptibility), disease severity (perceived severity), the benefits of action (perceived benefits), and barriers (perceived barriers). MVMH directly influences these perceptions by making immunization status concretely visible and comparing it with other children in the same community.

Social Learning Theory is also relevant here: when mothers see their neighbors' children who have received complete immunization (documented in MVMH), this creates role models and social norms that encourage them to adopt similar behaviors. This process is reinforced by the role of cadres and village heads as change agents who actively conduct home visits and provide motivation.

3.3 Impact of MVMH on Immunization Coverage

All reviewed studies demonstrate a positive impact of MVMH on improving immunization coverage. In Surabaya, Indonesia, Hargono et al. (2019) reported an increase in complete routine immunization coverage from 78.81% to 95.77% following MVMH implementation, with a statistically significant difference ($p=0.019$) based on the Wilcoxon Signed Ranks Test.

In India, Jain et al. (2015) found that communities using MVMH achieved >80% coverage for all antigens, far higher than the overall district coverage of only 49–69%. In Timor-Leste, the number of infants identified and receiving Penta3 immunization increased substantially (from 147 to 185) following the introduction of the UI (Uma Imunizasaun) tool.

In Malawi, have reported that communities with optimal MVMH implementation achieved nearly 100% immunization coverage, with a house-to-house survey across 130 villages showing only a small proportion of children had not yet started immunization. In

Zimbabwe, the JSI evaluation showed improved DTP1 coverage in the majority of the 16 target districts between 2018 and 2019.

3.4 Impact of MVMH on Knowledge and Attitudes

Studies conducted in Indonesia consistently demonstrate that MVMH has a positive influence on the knowledge and attitudes of integrated health post cadres and mothers of toddlers. Nurwitasari et al. (2020) found that the majority of cadres in the MVMH-trained group had good knowledge (80%) and good attitudes (85%), compared to the untrained group.

Naimah et al. (2023) reported an increase in the proportion of cadres with good knowledge from 19% to 76% following "My Board in the Village" training, an MVMH adaptation in Malang Regency. Meanwhile, Alimah et al. (2024) in Tegal Regency found significant differences in cadre perceptions ($p=0.001$), attitudes ($p=0.009$), and motivation ($p=0.000$) between groups using and not using the "KampungKu-RumahKu" media.

Qualitatively, mothers across various countries reported increased understanding of the immunization schedule, greater confidence in asking health workers questions, and a sense of responsibility for the immunization status of children in their communities. In Malawi, one mother was even able to accurately explain the effectiveness of the measles vaccine.

3.5 The Role of Cadres in MVMH Implementation

Health cadres (village health workers/VHW) are key actors in the successful implementation of MVMH. The reviewed studies consistently emphasize the importance of comprehensive cadre training, regular mentoring, and supportive supervision.

In Zimbabwe, all 17 VHWs (100%) have tracked defaulters, updated their ZEPI registers, and understand how to use child health cards. Eighty-two percent of VHWs reported that they are now able to reach more children thanks to the use of MVMH.

In Surabaya, Syahrul et al. (2019) found that MVMH availability at integrated health posts reached 100%, and the majority of cadres had adequate funding sources for MVMH operations. However, variation remained in the frequency of data updates and home visits.

The role of village heads (VH) has also been proven crucial in supporting MVMH implementation. In Zimbabwe, 67% of village heads stated that one of their duties was to ensure there were no "missing bricks" in the MVMH. In Malawi, many village heads proposed mild sanctions for families who did not comply with the immunization schedule as a form of community commitment.

3.6. Key Success Factors for MVMH Implementation

Based on the synthesis of the 8 reviewed articles, several key factors that determine the success of MVMH implementation can be identified.:

- a. Quality cadre training: Well-trained cadres are able to operate MVMH optimally, conduct defaulter tracking, and communicate effectively with mothers. Research in Surabaya, Malang, and Tegal consistently demonstrates that training improves cadre knowledge, attitudes, and performance.

- b. Community leader support: Active involvement of village heads, traditional leaders, and religious figures creates a sense of collective responsibility and social legitimacy for the immunization program.
- c. Integration with existing systems: The most effective MVMH implementation is one that is integrated with existing immunization recording systems (cohort books, maternal and child health cards, facility registers), rather than operating as a standalone tool.
- d. Ongoing supervision and monitoring: Regular supervision visits and periodic data review meetings ensure that the MVMH is updated consistently and accurately.

3.7. Challenges and Limitations

Although the evidence supports the effectiveness of MVMH, several important challenges warrant attention. First, data quality and denominators: in Timor-Leste and Zimbabwe, data quality issues posed a barrier to accurately measuring the impact of MVMH. Inaccurate denominators can produce misleading coverage figures.

Second, sustainability: the majority of studies reported implementation over a limited timeframe. Shimp (2021) emphasizes that MVMH implementation needs to be carried out at a larger scale and over a longer period to measure full impact and ensure sustainability.

Third, cadre incentives: both in Malawi and across various locations in Indonesia, cadres frequently report a lack of adequate incentives. This can affect motivation and consistency in updating MVMH, particularly in communities with high workloads.

Fourth, study design: the majority of reviewed studies used observational or before-after designs without rigorous control groups, making it difficult to definitively attribute causality between MVMH and improvements in immunization coverage.

Implications for Policy and Practice

Based on the findings of this scoping review, several important implications can be formulated for immunization program policy and practice:

- a. Cadre capacity strengthening: Comprehensive, sustained cadre training programs equipped with supportive supervision must be a core component of MVMH implementation.
- b. Multi-sector integration: Active cross-sector engagement—including village government, education, and community organizations—will strengthen community ownership of the immunization program.
- c. Strong monitoring and evaluation system: Development of an M&E system capable of tracking MVMH data quality, immunization coverage, and implementation processes in real-time is necessary for continuous learning and improvement.
- d. Further research: Quasi-experimental studies and randomized controlled trials with more rigorous designs are needed to strengthen the causal evidence for MVMH effectiveness.

4. CONCLUSION

My Village My Home (MVMH) and its various adaptations have been proven to be an effective, low-cost, and adaptable community empowerment tool for improving complete routine

immunization coverage among toddlers across diverse global contexts. By displaying immunization data visually and transparently at the community level, MVMH motivates mothers, cadres, and community leaders to actively monitor, track, and ensure that every child receives immunization according to schedule.

The success of MVMH depends greatly on the quality of cadre training, community leadership support, continuity of supervision, and integration with existing health service systems. Contextually appropriate local adaptations strengthen the acceptance and effectiveness of this tool across various settings.

To maximize the potential of MVMH in achieving national and global immunization targets, strong policy commitment, investment in evidence-based community empowerment, and further research with more rigorous methodology are required. This scoping review is expected to serve as a foundation for policymakers, health practitioners, and researchers in developing, implementing, and evaluating sustainable community-based immunization programs.

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REFERENCES

- Hargono A, Artanti KD, Syahrul F, Megatsari H, Wulandari RD, Nurwitasari A, Pramesti KA. My Village My Home: Community Empowerment to Increase Immunization Coverage. *Indian Journal of Forensic Medicine & Toxicology*. 2019;13(4):541–546.
- Nurwitasari A, Syahrul F, Megatsari H, Wulandari RD, Hargono A, Chalidyanto D, Pathak YV. The Role of "My Village My Home" in the Knowledge and Attitudes of Integrated Health Post Cadres and Mothers. *Jurnal Berkala Epidemiologi*. 2020;8(1):1–7.
- Syahrul F, Megatsari H, Wulandari RD, Hargono A, Artanti KD. The Evaluation of My Home My Village Method to Support the Complete Basic Immunization Programme in Surabaya, Indonesia. *Indian Journal of Public Health Research & Development*. 2019;10(10):1691–1696.
- Jain M, Taneja G, Amin R, Steinglass R, Favin M. Engaging Communities With a Simple Tool to Help Increase Immunization Coverage. *Global Health: Science and Practice*. 2015;3(1):117–125.
- Shimp L. Improving Immunization through Increased Community Ownership: My Village, My Home. JSI Immunization Center. October 21, 2021.
- Social Norms/MCSP. My Village My Home (MVMH) in Malawi. The Communication Initiative Network. 2018. Available at: <https://socialnorms.comminit.com/content/my-village-my-home-mvmh-malawi>
- Naimah, Triningsih RW, Mas'udah EK. Development of Rumah Imunisasi Using My Board in the Village. *Jurnal Idaman*. 2023;7(2):111–118.
- Alimah U, Sariatmi A, Fatmasari EY. Effectiveness of the "Kampungku-Rumahku" Media as a Supporting Tool for Immunization Recording and Monitoring in Tegal Regency. *Jurnal Ilmu Kesehatan Masyarakat*. 2024;20(1):29–38.