

Development of a Health Promotion Model to Improve the Skill Levels of *Posyandu* Volunteers: A Systematic Literature Review

Kartini*, Siwi Pramutama, Elveira Gamelia

Universitas Jendral Soedirman, Indonesia

Email: kartini034@mhs.unsoed.ac.id*

Keywords

Posyandu Cadres, Public Health Volunteers, Health Promotion, Capacity Building, Health Literacy.

ABSTRACT

Posyandu cadres play a strategic role in supporting community-based primary health services in Indonesia. However, increasingly complex public health challenges require cadres to have broader competencies beyond basic technical skills. Health promotion has been widely recognized as an effective approach to strengthening the capacity and skills of public health volunteers, but studies integrating various components of health promotion into a comprehensive cadre development model are limited. This research aims to identify and synthesize health promotion components that contribute to improving the competence and skills of public health volunteers and develop a health promotion model to improve the skill level of *Posyandu* cadres. The Systematic Literature Review was conducted following the PRISMA guidelines. Literature searches were conducted using Publish or Perish linked to the Google Scholar database with keywords ("public health volunteers") AND ("health promotion") AND ("competencies" OR "skills") AND ("model" OR "framework") for publications between 2020 and 2025. An initial search yielded 200 articles. After selecting titles, abstracts, and full texts based on predetermined inclusion and exclusion criteria, 15 articles were selected for qualitative synthesis. Thematic analysis is used to identify the main components of health promotion related to cadre competency development. The findings point to six key components that contribute to improving the competence and skills of public health volunteers: leadership development, capacity building, health literacy, health communication, community empowerment, and organizational and health system support. These components were consistently identified across the reviewed studies as important factors influencing cadre effectiveness, community participation, and sustainability of health promotion programs.

INTRODUCTION

Posyandu is a form of Community Resource Health Efforts that have a strategic role in supporting the implementation of primary health services in Indonesia (Harsono & Pambudi, 2023). The existence of the *Posyandu* not only functions as a means of maternal and child health services, but also as a medium for community empowerment in an effort to improve the degree of health independently. In its implementation, *Posyandu* cadres play a role as the main driving force that bridges health services with the community. Cadres not only help the implementation of technical activities, but also function as communicators, educators, facilitators, and motivators in various health programs (Najmi & Karwati, 2025). So that the quality of cadre skills is an important factor that determines the success of the implementation of *Posyandu* and the effectiveness of various community-based health programs.

The development of increasingly complex public health problems requires *Posyandu* cadres to have broader abilities than just basic service technical skills (Amanda et al., 2026). Cadres are required to be able to carry out health communication, public education, assistance to target groups, identify health problems, and encourage changes in health behavior in the community. Adequate cadre skills contribute to increasing community participation in health programs and support the achievement of health development goals (Fahmy et al., 2022). However, the limited competence of cadres can be an obstacle in the implementation of health promotion and community empowerment so that it has an impact on the low quality of community-based health services (Ndu et al., 2022).

In the global context, health cadres or community health volunteers are an important component of the public health system, especially in developing countries. Public health volunteers have a significant contribution to improving healthy living behaviors, disease prevention, controlling health risk factors, and increasing public access to health services (Yow et al., 2024). However, research (Strkljevic et al., 2024) found that the effectiveness of the role of health volunteers is greatly influenced by the level of competence, skills, and capacity possessed. Therefore, competency development through training, mentoring, and capacity building is a need that continues to receive attention in various public health programs.

One of the approaches that is widely used in increasing the capacity of health cadres is health promotion. The health promotion approach not only focuses on improving knowledge, but is also geared towards building skills, strengthening individual abilities, and increasing community participation in managing the health problems faced (World Health Organization, 2024). Research (Herawati, 2024) shows that capacity building programs that are integrated with health promotion are able to increase the ability of cadres to support the control of non-communicable diseases. The results of (Li et al., 2023) the study show that health promotion interventions supported by training and strengthening health literacy can improve the ability of cadres to carry out education and community empowerment functions more effectively.

Research (Santoso et al., 2025) shows that improving the skills of cadres is not enough through training alone, but requires a more comprehensive and sustainable approach. Efforts to build cadre capacity need to be supported by various components that are integrated with each other, such as competency-based training, strengthening health literacy, mentoring, leadership development, organizational support, and community empowerment (Yang et al., 2025). The integration of these various components is believed to be able to strengthen the role of cadres in carrying out health promotion functions while improving their ability to face various health challenges at the community level. Research (Chaladkid et al., 2025) shows that the development of health volunteer leadership based on participatory learning is able to increase the effectiveness of the implementation of public health activities. The findings are in line with research (Aris et al., 2025) that confirms that capacity building through empowerment and continuous learning approaches can improve the ability of cadres to identify and solve various health problems in the community.

Although various interventions have been developed to improve the competence of cadres, the results of a literature search show that most research still focuses on the evaluation of training programs, increasing knowledge, or strengthening skills on specific health issues. Research that integrates various components of health promotion into a comprehensive cadre skills development model is still relatively limited. In fact, according to (Subhi et al., 2025) the

increase in the skill strata of cadres, it requires a systematic, planned, and sustainable approach so that cadres are able to adapt to changing needs of public health services. The limitations of this integrated model are one of the research gaps that are important to be studied further.

Based on these conditions, a study is needed that is able to identify and synthesize various components of health promotion that are effective in improving the competence and skills of community health volunteers. Through the Systematic Literature Review (SLR) approach, this study aims to analyze various health promotion models, strategies, and interventions that have been applied in the capacity development of public health cadres, then compile them into a comprehensive health promotion model as an effort to improve the skill strata of *Posyandu* cadres. The resulting model is expected to be a conceptual foundation for *Posyandu* managers, health centers, and stakeholders in designing a cadre development program that is more effective, sustainable, and in accordance with the needs of public health services.

METHOD

This study used the Systematic Literature Review (SLR) method to identify, evaluate, and synthesize various scientific evidence regarding health promotion strategies in developing the competencies and skills of community health volunteers. The SLR approach was chosen because it was able to provide a comprehensive overview of the findings of previous research and produce a synthesis of knowledge that can be used as a basis for developing a health promotion model to improve the skill strata of *Posyandu* cadres. The research process refers to the PRISMA guidelines which consist of the stages of identification, screening, feasibility assessment, and determination of articles included in the final synthesis. These stages are carried out systematically to ensure the transparency and validity of the article selection process.

Literature searches were conducted using the Publish or Perish application which is connected to the Google Scholar database. The search strategy uses a combination of keywords ("community health volunteers") AND ("health promotion") AND ("competency" OR "skills") AND ("model" OR "framework") from 2020-2025. These keywords were chosen to obtain articles that discuss health promotion, competency development, skills, models, and frameworks related to public health volunteers or health cadres. The initial search results resulted in 200 articles which were subsequently used as identification sources in the early stages of the research.

Inclusion and Exclusion Criteria

Table 1. Inclusion and Exclusion Criteria for Article Selection

Criteria Inclusion	Exclusion Criteria
Original research article	Duplicate article
Discuss community health volunteers, community health workers, or public health cadres	Articles that are not relevant to the research purpose
Reviewing health promotion, competency improvement, skills, training, capacity building, or cadre empowerment	Articles that do not discuss health promotion or the development of competencies and skills of public health cadres
Available in full-text form	Articles that are not available in full-text form
Published in English or Indonesian	Articles in languages other than English and Indonesian

Source: Authors' formulation based on research objectives and PRISMA 2020 guidelines, 2026

All articles obtained were then selected based on the title, abstract, and content of the article in accordance with the inclusion and exclusion criteria that had been set. Articles that passed the selection stage were then analyzed using thematic analysis techniques to identify health promotion components that contribute to improving the competence and skills of public health cadres. Components that have common characteristics are then grouped into the main theme as the basis for the preparation of a health promotion model. The data that was successfully extracted from each article included the author's name, year of publication, country of research, research objectives, research methods, forms of intervention or models used, as well as key findings related to the competency development of public health cadres. The results of the synthesis of all articles that meet the criteria are used to formulate a health promotion model that can be applied in an effort to improve the skill strata of *Posyandu* cadres.

PRISMA Flowchart

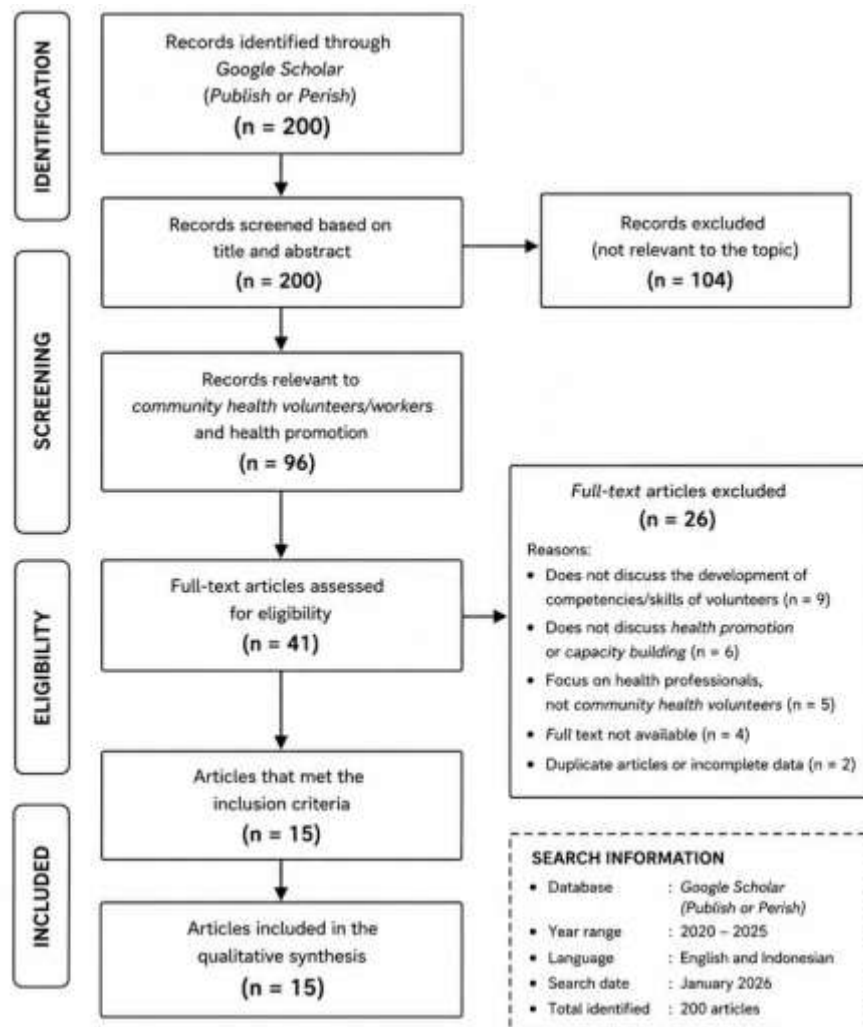


Figure 1. PRISMA Flowchart of Study Selection Process for Systematic Literature Review on Health Promotion Model for *Posyandu* Cadres

Source: Authors' documentation based on PRISMA 2020 guidelines, 2026

Based on the PRISMA diagram, the article selection process begins with the identification stage through a literature search using the Publish or Perish application which is connected to the Google Scholar database using the keywords ("community health volunteers") AND ("health promotion") AND ("competency" OR "skills") AND ("model" OR "framework"), which produces as many as 200 articles that are potentially relevant to the research topic. Furthermore, a screening stage was carried out based on titles and abstracts, so that 96 articles were obtained that were relevant to the theme of developing competencies and skills of community health volunteers through a health promotion approach, while 104 articles were eliminated because they were not in accordance with the focus of the research. At the eligibility stage, a full text review was carried out on 41 articles that met the initial criteria. The results of the evaluation showed that 26 articles had to be excluded from the selection process, consisting of articles that did not discuss the development of competencies or skills of cadres, health promotion, capacity building, health professionals and community health volunteers. Thus, as many as 15 articles were declared to meet all inclusion criteria and were used as the main source in the Systematic Literature Review (SLR) process to identify, analyze, and synthesize various health promotion components that contribute to improving the competence and skills of community health volunteers as the basis for developing a health promotion model in improving the skill strata of *Posyandu* cadres.

RESULT AND DISCUSSION

Results

Table 2. Summary of Studies on Health Promotion Model for Public Health Volunteers Competency Development (n=15)

No	Researcher	Focus	Key Findings
1.	(Chaladkid et al., 2025)	Cadre leadership development model	Participatory leadership increases the effectiveness of cadres in health promotion
2.	(Yow et al., 2024)	Involvement of young volunteers in health screening	Volunteers are able to increase the reach and participation of community health programs
3.	(Fahmy et al., 2022)	Capacity building for NCD prevention cadres	Capacity building to increase the competence of cadres in the prevention of non-communicable diseases
4.	(Nawsuwan et al., 2025)	Cadre intellectual empowerment model	Intellectual empowerment improves competence in solving public health problems
5.	(Ndu et al., 2022)	The challenges of health volunteers in Africa	Organizational support and ongoing training are important factors for cadre success
6.	(Desi et al., 2025)	Health volunteer competencies	Competence to improve communication skills and health education
7.	(Ogutu et al., 2024)	Factors that affect the performance of cadres in poor urban areas	Motivation, training, supervision, and organizational support affect the performance of health cadres
8.	(Massaguni et al., 2025)	Evaluation of community health promotion programs	Health promotion programs proven to increase public health awareness and behavior

9.	(Gachathi, 2024)	Cadre performance during the COVID-19 pandemic	Training, supervision, and support of the health system affect the performance of cadres in health services
10.	(Fatimah, 2025)	Development of stunting early detection skills	Strengthening the knowledge and skills of cadres to improve the ability to detect stunting early in the 3T area
11.	(Ounprasertsuk et al., 2025)	Operational effectiveness of health cadres in Thailand	Competence, motivation, and organizational support affect the effectiveness of the implementation of cadre duties
12.	(Sakeah et al., 2023)	Selection and role of community health volunteers in Ghana	The right selection process affects the quality of performance and the sustainability of the role of cadres in society
13.	(Sumasto et al., 2025)	Strengthening the role of <i>Posyandu</i> cadres in preventing non-communicable diseases through health promotion and capacity building	Increasing knowledge, health education skills, and the ability of cadres to carry out early detection and health promotion contribute to strengthening the role of cadres in the prevention of non-communicable diseases in the community
14.	(Bwana, 2024)	The role of Community Health Promoters in supporting community-based Universal Health Coverage (UHC)	Community Health Promoters play an important role in expanding access to health services, increasing health literacy, strengthening health promotion, and being a link between the community and the health service system in supporting the achievement of UHC
15.	(Poum, 2024)	Health literacy in the prevention and control of Dengue Hemorrhagic Fever among village health volunteers in Thailand	Health literacy is significantly related to the ability of cadres to prevent and control dengue, especially in the aspects of access skills, communication skills, media literacy skills, decision skills, and self-management skills

Source: Authors' synthesis from reviewed articles, 2026

Based on the results of the synthesis of 15 articles reviewed, it was found that the improvement of the skills of public health cadres was influenced by various factors that supported each other. Leadership development plays a role in improving the ability of cadres to mobilize the community and carry out health promotion activities more effectively. In addition, capacity building through training, education, and empowerment has been proven to increase the knowledge, skills, and abilities of cadres in dealing with various health problems in the community. Health literacy is also an important component because it helps cadres in understanding, accessing, communicating, and utilizing health information appropriately. On the other hand, motivation, supervision, and support from organizations and health systems contribute to the sustainability of cadres' performance in carrying out their duties. Communication and health education skills have also been proven to play a role in increasing community participation and the effectiveness of health message delivery. Overall, the results of the synthesis show that improving the skill strata of *Posyandu* cadres requires a comprehensive approach through the integration of leadership, capacity building, health

\

literacy, health communication, community empowerment, organizational support, and sustainable health promotion.

Cadre Leadership Development in Health Promotion

Leadership is one of the important factors in increasing the effectiveness of public health cadres. Cadres who have good leadership skills tend to be better able to mobilize the community, build participation, and coordinate various health activities at the community level. Leadership also plays a role in increasing the confidence of cadres to carry out their functions as educators, facilitators, and agents of social change. These findings show that the improvement of cadre skill strata is not only determined by technical ability, but also by the ability to lead and mobilize the community. Therefore, leadership development needs to be an important part of the health promotion model for *Posyandu* cadres (Chaladkid et al., 2025; Sakeah et al., 2023).

Capacity Building as a Basis for Improving Cadre Competence

Capacity building is the most common theme found in the articles reviewed. Capacity building is carried out through training, health education, mentoring, and various forms of continuous learning that aim to improve the knowledge and skills of cadres. The results of the study show that cadres who receive capacity building on a sustainable basis have better abilities in carrying out health promotion, early detection of diseases, health education, and assistance to target groups. These findings show that the improvement of cadre skills needs to be carried out systematically and sustainably in order to be able to adapt to the development of increasingly complex public health problems (Fahmy et al., 2022; Fatimah, 2025; Nawsuwan et al., 2025; Sumasto et al., 2025).

Health Literacy as a Support for Cadre Effectiveness

Health literacy is one of the important components in improving the quality of public health cadre services. Health literacy is not only related to the ability to understand health information, but also the ability to access, evaluate, communicate, and use that information in decision-making. Cadres who have good health literacy are better able to convey health information appropriately to the community and support changes in health behavior. In addition, the development of information technology requires cadres to be able to utilize various health information sources effectively so that health literacy is an increasingly important need in developing the capacity of *Posyandu* cadres (Bwana, 2024; Poum, 2024).

Health Communication in Increasing Community Participation

Health communication skills are a skill that is urgently needed by cadres because it is directly related to the process of delivering information and education to the community. The results of the synthesis show that effective communication is able to increase public understanding of health messages and encourage community participation in various health programs. Cadres who have good communication skills tend to find it easier to build relationships with the community and are able to convey health messages according to the needs of the target group. Therefore, strengthening communication skills needs to be one of

the main focuses in efforts to improve the skill strata of *Posyandu* cadres (Bwana, 2024; Massaguni et al., 2025; Nawsuwan et al., 2025).

Community Empowerment as a Health Promotion Approach

Health promotion basically does not only focus on improving individual abilities, but also aims to empower people to be able to manage their health problems independently. The results of the study show that cadres have an important role in the process of community empowerment through education, mentoring, and community organizing activities. The empowerment approach allows the community to be more actively involved in health activities and improve the sustainability of the programs implemented. Thus, community empowerment is one of the main components in the health promotion model because it is able to strengthen the role of cadres as a liaison between the community and the health service system (Desi et al., 2025; Poum, 2024; Yow et al., 2024).

Organizational and Health System Support for Cadre Performance

The success of cadres in carrying out their duties is not only influenced by individual abilities, but also by the support of the work environment and health system. The results of the synthesis show that motivation, supervision, mentoring, availability of resources, and support from health workers and the government affect the performance of cadres. Good organizational support allows cadres to gain access to the training, information, and resources needed to carry out health promotion activities. Therefore, the development of a health promotion model to improve the skill strata of *Posyandu* cadres needs to consider aspects of organizational and health system support so that the improvement in competencies that have been achieved can be maintained in a sustainable manner (Gachathi, 2024; Ndu et al., 2022; Ogutu et al., 2024; Ounprasertsuk et al., 2025).

Health Promotion Model to Improve the Skill Strata of *Posyandu* Cadres in Indonesia

Based on the results of the synthesis of 15 articles and adjusting to the direction of the transformation of *Posyandu* and Primary Service Integration (ILP) in Indonesia, the most suitable model does not only focus on cadre training, but uses the Community-Based Health Promotion Model approach that is integrated with the primary health service system, community empowerment, and sustainable capacity strengthening of cadres. The transformation of the current *Posyandu* puts cadres at the forefront of promotive and preventive services that serve the entire life cycle, ranging from pregnant women, toddlers, adolescents, productive age, to the elderly. In addition, cadres are also required to have competence in health education, early detection of diseases, monitoring of local areas, home visits, and management of public health data. The relevant models to be applied in Indonesia can be arranged in six main components that are integrated as follows:

1. *Posyandu* cadres no longer only play a role as implementers of health activities, but also as community movers. Therefore, leadership development needs to be carried out through community leadership training, strengthening coordination skills, decision-making, and the ability to mobilize community participation.
2. The cadre development model needs to follow the concept of Primary Service Integration implemented by the Ministry of Health. Capacity building does not only focus on maternal

and child health, but covers the entire life cycle, namely pregnant and postpartum women, infants and toddlers, adolescents, productive age, and the elderly.

3. The challenges of modern health services require cadres not only to understand health information, but also to be able to access, verify, and disseminate correct information to the public. In addition to health literacy, cadres need to have digital literacy through the use of social media.
4. Health communication is the core of health promotion because cadres function as conveyors of information to the community. Strengthening communication skills needs to be directed to, health counseling techniques, clean and healthy living behavior education, non-communicable disease counseling, health risk communication, and local cultural approaches.
5. An effective health promotion model should place the community as the subject, not the object of the health program.
6. The success of cadres is greatly influenced by strong system support. Therefore, the model in Indonesia needs to involve puskesmas as technical coaches, village governments as policy and funding supporters, health offices as competency developers, community leaders and local organizations, and ongoing supervision and mentoring systems.

CONCLUSION

Based on the results of the Systematic Literature Review of 15 articles that met the inclusion criteria, it can be concluded that improving the skill strata of *Posyandu* cadres requires a comprehensive and sustainable health promotion approach. The results of the synthesis show that there are six main components that play a role in improving the competence and effectiveness of public health cadres, namely leadership development, capacity building, health literacy, health communication, community empowerment, and organizational and health system support. The six components complement each other in forming the capacity of cadres who are not only able to carry out technical tasks of health services, but also play a role as educators, facilitators, motivators, and community mobilizers. Based on these findings, this study produced a Community-Based Health Promotion Model that integrates leadership development, lifecycle-based capacity building, health and digital literacy, health communication, community empowerment, and health system support as a strategy to improve the skill strata of *Posyandu* cadres in Indonesia. This model is expected to be a conceptual foundation in the development of more effective, adaptive, and sustainable cadre programs in supporting the transformation of primary health services. Based on the results of the systematic study that has been carried out, there are several suggestions that can be submitted for the development of *Posyandu* cadre capacity building programs in the future. First, *Posyandu* managers, health centers, and local governments need to develop cadre capacity building programs that not only focus on technical training, but also include leadership development, health and digital literacy, health communication, and community empowerment in a sustainable manner. Organizational support through supervision, mentoring, monitoring, and provision of resources also needs to be strengthened to maintain the sustainability of cadres' performance in carrying out public health tasks. Second, the implementation of the health promotion model produced in this study needs to be empirically tested on various characteristics of *Posyandu* and regions in Indonesia to determine its effectiveness in

improving the skill strata of cadres in the field. Third, further research is suggested to use a quantitative approach or mixed methods to test the relationship between model components and develop measurement instruments that can be used in the evaluation of *Posyandu* cadre development programs in a more objective and measurable manner, so that the results obtained can be the basis for improving policies and cadre development programs that are more effective and sustainable.

REFERENCE

- Amanda, R., Husain, F., & Wijayati, P. A. (2026). Evolusi *Posyandu* di Indonesia: Transformasi Layanan Kesehatan Berbasis Komunitas dari Era Orde Baru hingga Masa Kini. *Jurnal Pendidikan Sejarah*, 15(1), 116–142.
- Aris, A., Yusuf, A., Fitryasari, R., Suhariyati, S., Ubudiyah, M., Faridah, V. N., Kusumaningrum, A. T., & Sholikah, S. (2025). Improving Cadres' Capability in Early Detection of Mental Disorders; A Culture-Based Empowerment Model. *Health Education and Health Promotion*, 12(1), 73–78.
- Bwana, R. (2024). Community Health Promoters for Universal Health Coverage: The Promise of a New Future. Available at SSRN 4926655. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4926655
- Chaladkid, D., Jeerapattanatorn, P., & ... (2025). Developing a Volunteer Leadership Development Model for Village Health Volunteers: A Case Study of Community-Based Empowerment through Adult Learning. *วารสาร นวัตกรรม การ ...* <https://so02.tci-thaijo.org/index.php/jemri/article/view/279028>
- Desi, D., Dahliansyah, D., Suaebah, S., & ... (2025). Description Of Competency Levels of *Posyandu* Cadres in The Working Area of The Sungai Rengas Public Health Center, Kuburaya Regency. *Proceeding* <https://journal.poltekkesjambi.ac.id/index.php/ICoHPJ/article/view/1258>
- Fahmy, W. F. A., Haron, N., Lim, S. C., Jackson-Morris, A., & Mustapha, F. I. (2022). Building the capacity of community health volunteers for non-communicable disease prevention in low-income urban communities in Malaysia. *Journal of Global Health Reports*, 6.
- Fatimah, S. N. (2025). Empowering Community Health Volunteers: Enhancing Early Stunting Detection through Knowledge and Skill Development in Indonesia's 3T Regions. *Jurnal Riset Kualitatif Dan Promosi Kesehatan*. <https://journal.sinergi.or.id/index.php/jrkpk/article/view/894>
- Gachathi. (2024). *Profiling The Performance Of Community Health Volunteers In Health Service Delivery During The Covid-19 Pandemic In Nakuru* <http://ir.kabarak.ac.ke/handle/123456789/1604>
- Harsono, R. A., & Pambudi, S. S. I. (2023). Co-Production: Pendayagunaan *Posyandu* dalam Program Integrasi Pelayanan Kesehatan Primer di Tingkat Desa. *Jurnal Analis Kebijakan*, 7(1), 112–120.
- Herawati, T. (2024). Meningkatkan Pencegahan dan Pengendalian Penyakit tidak Menular Melalui Pendidikan Promosi Kesehatan. *Jurnal Pengabdian Dan Pemberdayaan Nusantara (Jppnu)*, 6(1), 102–109.
- Li, B., Huang, Y., Ling, C., Jiao, F., Fu, H., & Deng, R. (2023). The effect of community-based health education programs on health literacy in severely impoverished counties in Southwestern China: results from a quasi-experimental design. *Frontiers in Public Health*, 10, 1088934.

- Massaguni, M., Ambarwati, E. R., Multazam, A. M., & Renaldo, N. (2025). Community Health Promotion Program: Evaluating the Impact of Health Interventions in the Community. *International Journal of Community Service (IJCS)*, 4(1).
- Najmi, N. A., & Karwati, L. (2025). *Peran Kader Posyandu Dalam Pencegahan Stunting Melalui Program Bina Keluarga Balita*.
- Nawsuwan, K., Singweratham, N., Suriya, N., & Oupra, R. (2025). Solving area-based problems through intellectual empowerment: A model for developing village health volunteers' and public health officials' competencies in producing academic work. *Scientific Reports*, 15(1), 17537.
- Ndu, M., Andoniou, E., McNally, S., & ... (2022). The experiences and challenges of community health volunteers as agents for behaviour change programming in Africa: a scoping review. *Global Health* <https://doi.org/10.1080/16549716.2022.2138117>
- Ogutu, E. A., Ellis, A. S., Hester, K. A., Rodriguez, K., Sakas, Z., & ... (2024). Success in vaccination programming through community health workers: a qualitative analysis of interviews and focus group discussions from Nepal, Senegal and *BMJ Open*. <https://bmjopen.bmj.com/content/14/4/e079358.abstract>
- Ounprasertsuk, J., Wannapaschaiyong, P., & Tipwong, A. (2025). Assessing the operational effectiveness of village health volunteers in Thailand: A structural equation modeling analysis. *Health Promotion Perspectives*, 15(4), 360.
- Poum, A. (2024). Health Literacy in Preventing and Controlling Dengue Hemorrhagic Fever Among Village Health Volunteer, Pattani Province, Thailand. *International Journal of Public Health Asia Pacific*. <https://www.ijphap.com/index.php/home/article/view/83>
- Sakeah, E., Bawah, A. A., Asuming, P. O., Debpuur, C., Welaga, P., Awine, T., Anyorikyea, M., Kuwolamo, I., Oh, J., & Lee, H. S. (2023). Impact of community health interventions on maternal and child health indicators in the upper east region of Ghana. *BMC Pregnancy and Childbirth*, 23(1), 298.
- Santoso, B., Handayani, E., Widiyanti, S., Isnawati, M., Nabiha, P. I., Pujiastuti, R. S. E., Atifah, S. D. H., & Aeni, N. (2025). Peningkatan Keterampilan Kader Posyandu Melalui Pelatihan dan Asesmen Berbasis Kompetensi. *LINK*, 21(2), 186–195.
- Strkljevic, I., Tiedemann, A., Souza de Oliveira, J., Haynes, A., & Sherrington, C. (2024). Health professionals' involvement in volunteering their professional skills: a scoping review. *Frontiers in Medicine*, 11, 1368661.
- Subhi, I., Cahyati, W. H., & Zainafree, I. (2025). Service Strengthening Strategy Primary Through Engagement Health Cadres in The Community. *Journal of Creativity Student*, 8(2), 144–151.
- Sumasto, H., Setiyani, A., Wisnu, N. T., & ... (2025). Enhancing Posyandu Cadres' Role in Preventing Non-Communicable Diseases in Gonggang Village, Poncol District, Magetan Regency. *Frontiers in Community* <http://ficse.ijahst.org/index.php/ficse/article/view/106>
- World Health Organization. (2024). *Achieving well-being: A global framework for integrating well-being into public health utilizing a health promotion approach*. World Health Organization.
- Yang, S., Bai, C., Zhao, Y., Wang, J., Jin, H., Harris-Roxas, B., Liu, Y., Shen, F., Zhao, H., & Ma, L. (2025). Strengthening primary health care service competency: a scoping review of challenges, influencing factors, and enhancement strategies. *Frontiers in Public Health*, 13, 1732011.

Yow, K. S., Kwan, A. S. T., Huang, X., Lim, J. X., Lim, M. H., & ... (2024). *The Impact of Lay Volunteers on Community Health Screening Program Outcomes for Older Adults: A Mixed-Methods Evaluation*. papers.ssrn.com.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5164329