



Training On 25 Basic Skills To Improve Knowledge And Service Practices For Posyandu Cadres At The Karangtengah Community Health Center

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Abstract

Posyandu (Integrated Health Post) plays a vital role in delivering community-based health services. The "25 Basic Skills for Posyandu Volunteers" training program is one initiative aimed at enhancing volunteer capacity. This study aimed to analyze the impact of the training on the knowledge, attitudes, and practices of Posyandu volunteers in the working area of the Karangtengah Community Health Center (Puskesmas), Cianjur Regency. A quasi-experimental design with a pretest-posttest approach and a control group was employed. The sample consisted of 124 volunteers, 62 in the intervention group and 62 in the control group who selected via purposive sampling. The intervention group participated in the "25 Basic Skills" training program, while the control group did not receive training during the study period. Knowledge and attitudes were measured using questionnaires, whereas practices were assessed using observation checklists. Data analysis involved the Wilcoxon Signed Rank Test, Mann-Whitney U Test, and multiple linear regression. Results showed that the mean knowledge score in the intervention group rose from 57.55 to 95.23, and the mean practice score increased from 13.81 to 21.34. The improvements in knowledge and practice within the intervention group were significantly greater than those in the control group, with delta differences of 36.39 points and 7.32 points, respectively ($p < 0.001$). Changes in attitude showed no significant difference between the groups ($p = 0.175$). the training influenced changes in knowledge ($B = 36.364$; $p < 0.001$) and practice ($B = 7.312$; $p < 0.001$) after controlling for age, education, and tenure as a volunteer. The "25 Basic Skills" training was effective in improving volunteer knowledge and practice but did not demonstrate a significant impact on attitudes

Keywords: Cadre Training, Posyandu, Knowledge, Attitude, Practice

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1. Introduction

Posyandu (Integrated Health Post) is a form of Community-Based Health Effort that aims to bring health services closer to the community and increase community participation in health care. In line with the transformation of primary health care, Posyandu services have evolved from previously focused on mothers and children to life-cycle-based services (Lubis et al., 2025; Nareswari & Herawati, 2025). These services cover pregnant women, infants and toddlers, school-age children, adolescents, those of productive age, and the elderly. This change has led to greater demands on the competency of cadres. Cadres play a role not only in weighing activities, but also in health education, growth and development monitoring, early detection of risk factors, health services for various age groups, recording, reporting, and community empowerment. Therefore, increasing the capacity of cadres is an important part of supporting the implementation of life-cycle-based Posyandu services. (Winandar et al., 2022).

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Integrated Health Post (Posyandu) cadres are the spearhead of community-based health services. Their competence in carrying out their duties is influenced by knowledge, attitudes, experience, training, availability of facilities, and support from health workers and the community. From Lawrence Green's perspective on health behavior, training can be positioned as an enabling factor supporting the development of healthy behaviors, while knowledge and attitudes are predisposing factors.

The Ministry of Health developed the 25 Basic Skills Training Program for Integrated Health Post (Posyandu) Cadres to improve the competency of cadres in providing health services according to a lifecycle approach. This program covers a variety of health service skills, from Posyandu management, care for infants and toddlers, pregnant and breastfeeding mothers, school-age and adolescents, to adults and the elderly. The Karangtengah Community Health Center (Puskesmas) in Cianjur Regency is one of





the areas that has implemented the training program in stages. This condition results in some cadres who have participated in training and cadres who have not. In this area, there are 83 active Posyandus with 430 cadres. A total of 120 cadres have participated in training in 2025, while 124 cadres participated in the program in 2026, and some have not received training. These differences in training status provide an opportunity to evaluate the effectiveness of the 25 Basic Skills Training Program by comparing changes in knowledge, attitudes, and practices between cadres who participated in the training and those who did not. Based on these conditions, this study aims to analyze the effect of the 25 Basic Skills Training Program for Posyandu Cadres on the knowledge, attitudes, and practices of cadres in the Karangtengah Community Health Center, Cianjur Regency.

2. Research Methods

The study used a quasi-experimental design with a pretest-posttest approach with a control group. The study was conducted in the Karangtengah Community Health Center, Cianjur Regency, in August 2026. The study population was Posyandu cadres in the Karangtengah Community Health Center work area. The sample consisted of 124 cadres, consisting of 62 cadres from the intervention group and 62 cadres from the control group. Respondents were selected using a purposive sampling technique. The intervention group participated in the 25 Basic Skills Training Program for Posyandu Cadres, which was implemented using a training module. The training was conducted face-to-face through interactive lectures, discussions, questions and answers, simulations, and practice. The training materials were supported by modules, the KIA Handbook, cadre handbooks, presentation media, educational videos, and Posyandu service simulation tools. The control group did not receive training during the study period and continued to carry out Posyandu activities as usual. Knowledge and attitudes were measured before and after the training, while practice was assessed using an observation sheet during Posyandu activities. The independent variable was participation in the 25 Basic Skills Training Program for Posyandu Cadres. The dependent variables consisted of cadre knowledge, attitudes, and practices. Age, education, and length of service as a cadre served as covariates in the multivariate analysis.

Knowledge was measured using a questionnaire regarding life cycle-based Posyandu services and 25 basic skills. Attitudes were measured using a Likert scale questionnaire, while practices were assessed using an observation sheet based on the basic skills of Posyandu cadres. Analysis of changes before and after the intervention was conducted using the Wilcoxon Signed Rank Test. Differences in score changes between the intervention and control groups were analyzed using the Mann-Whitney U Test. Multivariate analysis was conducted using multiple linear regression to determine the





effect of training after controlling for age, education, and length of service as a cadre. A p value <0.05 was considered significant. The study has obtained ethical approval from the Health Research Ethics Committee under Number 110.3/FIKES/PL/8/2026

3. Research Results and Discussion

The following are the results and discussion of the research conducted with the research informants:

a. Result

The study involved 124 Posyandu cadres, divided into an intervention group and a control group of 62 cadres each. The intervention group participated in the 25 Basic Skills Training Program, while the control group did not receive any training.

Table 1. Changes in Knowledge, Attitudes, and Practices of Cadres

Variables	Pre- Intervention	Post Intervention	Δ Intervention	Pre Control	Post Control	Δ Control	p
Knowledge	57.55	95.23	37.68	62.52	63.81	1.29	<0.001
Attitude	77.31	80.44	3.13	73.15	79.10	5.95	0.175
Practice	13.81	21.34	7.53	14.48	14.69	0.21	<0.001

The knowledge of the intervention group increased from 57.55 to 95.23, representing a 37.68-point increase. In the control group, knowledge only increased by 1.29 points. The difference in change between the two groups was statistically significant ($p < 0.001$). In terms of attitudes, the intervention group experienced an increase of 3.13 points, while the control group experienced an increase of 5.95 points. The difference in attitude change was not statistically significant ($p = 0.175$). The practice of cadres in the intervention group increased from 13.81 to 21.34, representing a 7.53-point increase. Meanwhile, the control group only experienced an increase of 0.21 points. The difference in practice change between the two groups was statistically significant ($p < 0.001$).

Table 2. Effect of Training on Changes in Knowledge and Practice

Variables	B	p-value	R ²
Delta of knowledge	36,364	<0.001	0.776
Delta attitude	Not significant	>0.05	-
Delta practice	7,312	<0.001	0.890

After controlling for age, education, and length of service as a cadre, training remained a significant predictor of changes in knowledge and practice. Training increased the average knowledge score by 36.364 points ($p < 0.001$) and the practice score by 7.312 points ($p < 0.001$). The model explained 77.6% of the variation in knowledge change and 89.0% of the variation in practice change.





b. Discussion

1) Cadre Training and Knowledge

The results of the study showed that the training had a strong influence on improving the knowledge of cadres. The increase in knowledge scores in the intervention group was significantly greater than in the control group. These results indicate that providing structured material through the 25 Basic Skills Training Program was able to improve cadres' understanding of life-cycle-based Posyandu services. This increase in knowledge occurred because the training provided a focused learning process that was aligned with the cadres' task needs (Anderson & Krathwohl, 2001). The material was provided not only in the form of information delivery but also through discussions, simulations, and practice. This combination enabled cadres to understand the material while connecting it to Posyandu service situations (Haris et al., 2022). The results of the multivariate analysis showed that the effect of training on changes in knowledge remained significant after controlling for age, education, and length of service as a cadre. This indicates that the training made a strong contribution to increasing knowledge.

2) Cadre Training and Attitude

Unlike knowledge, training did not show a significant difference in attitude change between the intervention and control groups. Although attitudes improved in the intervention group, the increase was smaller than in the control group. Attitude is an aspect of behavior that is influenced not only by knowledge but also by experience, social environment, motivation, beliefs, and value formation processes (Ajzen, 2020). Therefore, providing training in a relatively short period of time can more easily produce knowledge increases than attitude changes. The increase in attitudes in the control group also indicates that attitude change can occur through cadres' experiences in Posyandu activities or exposure to information from the environment. Thus, attitude change likely requires a more sustained process than knowledge change.

3) Cadre Training and Practice

The results of the study showed that training had a very strong influence on cadre practice. The increase in practice scores in the intervention group was significantly greater than in the control group. These findings indicate that training not only improves understanding but also helps cadres apply skills in service activities. The use of simulation and practice methods is an important component of the training. Cadres have the opportunity to practice the skills needed in Posyandu services so that the learning process does not stop at the knowledge





aspect. Regression results showed that the effect of training on changes in practice remained significant after age, education, and length of service as a cadre were controlled. The B coefficient of 7.312 indicates that participation in training is associated with a higher increase in practice scores compared to the group that did not participate in training.

4) Implications For Posyandu Services

The study's findings imply that improving cadre competency through training is a crucial component in supporting the implementation of lifecycle-based Posyandu services. Community health centers (Puskesmas) need to ensure that cadres receive equal opportunities to participate in training. However, the results for the attitude variable indicate that training alone is insufficient to produce changes across all behavioral domains. Therefore, training needs to be accompanied by regular coaching and supervision. This approach can help cadres maintain their knowledge and skills while strengthening their motivation and attitudes in carrying out their duties.

4. Conclusion

The 25 Basic Skills Training Program for Integrated Health Post (Posyandu) Cadres significantly improved the knowledge and practice of cadres in the Karangtengah Community Health Center (Puskesmas) work area in Cianjur Regency. The increase in knowledge and practice in the intervention group was significantly greater than in the control group. The training did not demonstrate a significant impact on changes in cadre attitudes. After controlling for age, education, and length of service as a cadre, participation in the training remained a significant factor influencing the increase in knowledge and practice.

5. Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare that there are no conflicts of interest regarding the publication of this article. All authors contributed to the study, participated in the preparation of the





manuscript, approved the final version, and agree to be accountable for all aspects of the work. The research was conducted independently without any financial, personal, or institutional relationships that could have influenced the study's design, data collection, analysis, interpretation, or reporting.

Statement of informed consent

Written informed consent was obtained from all participants prior to their participation in this study. Participants were informed about the study objectives, research procedures, potential risks and benefits, confidentiality of the collected data, and their right to withdraw from the study at any time without any consequences. All participants voluntarily agreed to participate and provided written informed consent before the interviews were conducted.

References

- Apriliyani, D., Noviardhi, A., Nur Subandriani, D., Gizi, J., & Kesehatan Kemenkes, P. (nd). Pregnant Mothers In Stunting Prevention Program Effect Of Education With E-Booklets On Exclusive Breast Milk And Supplementary Foods (Mp-Asi) On Knowledge And Attitude Of Pregnant Mothers In Stunting Prevention Program .
- Arisandi, T., Yamin, A., & Purnama, D. (2023). Overview of Intentions and Factors Contributing to Smoking Cessation among Heads of Families. *MAHESA: Malahayati Health Student Journal* , 3 (8), 2502–2519. <https://doi.org/10.33024/mahesa.v3i8.10818>
- Atmojo, JT, Widiyanto, A., Tri, R., Andriani, H., & Ningrum, N. (nd). *HEALTH PROMOTION* .
- Ayu Rahayu Paneo, & Sri Ayu Rahayu S. Paneo. (2025). The Activeness of Integrated Health Post Cadres in Efforts to Improve Infant and Toddler Health in Takalar Regency (Vol. 8, Number 2). <http://journal.unpacti.ac.id/index.php/JPP>
- Betty Betty, & Gita Ayuningtyas. (2023). *EARLY DETECTION OF NON-COMMUNICABLE DISEASES (NCDs) WITH BLOOD PRESSURE, BLOOD SUGAR, URIC ACID, AND CHOLESTEROL CHECKING IN SAWAH BARU VILLAGE* .
- Dyah Muliawati, Ery Fatmawati, & Bingar Hernowo. (2024). Increasing the Capacity of Cadres Through Training on the Role of Integrated Health Posts (Posyandu) as a Source of Information on Maternal and Child Health. *JOURNAL OF EMPOWERMENT* , 5 , 266–276.
- Fahmi Reza. (nd). *PSYCHOLOGICAL FUNCTIONS* (2) . <https://doi.org/10.13140/RG.2.2.19413.13284>
- Firyaal Ayu Pratiwi, Rr Vita Nurlatif, Wahyuningsih, & Teguh Irawan. (2025). Transformation of Integrated Health Posts (Posyandu) through Integration of Primary Services (ILP): A Qualitative Study at the Community Health Center in Pekalongan City. *International*





- Journal of Educational and Life Sciences , 3 (8), 2607–2614.
<https://doi.org/10.59890/ijels.v3i8.122>
- Hamidah, S., Mudlikah, S., Emiliana, E., & Ekawati, R. (2026). Effective Communication of BMI Examination, ANC in Pregnant Women and Education on Early Initiation of Breastfeeding (IMD), Exclusive Breastfeeding to Prevent Stunting. Indonesian Journal of Community Dedication in Health (IJCDH) , 6 (1), 32–37.
<https://doi.org/10.30587/ijcdh.v6i1.10847>
- Health Behavior and Health Education . (nd).
- Irma Yunawati, Mk., Weni Kurdanti, M., apt Besse Hardianti, Mk., Citra Dewi Gunawan, D., Tri Mei Khasana, M., Hernianti, M., Devillya Puspita Dewi, M., Gz, S., Yunita Indah Prasetyaningrum, M., Nurul Annisa, M., Kuntari Astriana, Mk., Gizi Suherman, M., & Syamsopyan, Ms. (nd). NUTRITION PROGRAM MANAGEMENT THEORY AND PRACTICE PUBLISHER CV. EUREKA MEDIA AKSARA .
- Jaya, H., Syokumawena, S., Kumalasari, I., & Rosnani, R. (2023). Application Of The Health Belief Model (Hbm) Theory In Breast Cancer Prevention Behavior With Breast Self-Examination (SADARI). Journal of Medicine and Health: Scientific Publication of the Faculty of Medicine, Sriwijaya University , 10 (3), 325–334.
<https://doi.org/10.32539/jkk.v10i3.22149>
- Kadar ¹, KS, Mulyana ², AS, Indargairi ³, I., & Dexter, R. (nd). Cultural-Based Diabetes Self-Care Management Education for People with Type 2 Diabetes Mellitus: Empowering Community Health Workers (Kaders) Program Evaluation. In Indonesian Contemporary Nursing Journal (Vol. 8, Number 1).
- Kusrini, ARR, Natalio, R., & Sinaga, ES (2025). Posyandu in the era of transformation of primary service integration and its interventions. JOURNAL of Public Health Concerns , 5 (5), 269–275. <https://doi.org/10.56922/phc.v5i5.1310>
- Lianto, L. (2019). Self-Efficacy: A Brief Literature Review. Journal of Motivation Management , 15 (2), 55–61. <https://doi.org/10.29406/jmm.v15i2.1409>
- M. Suhron, Elis Agusriyanti, M. Hasinuddin, & Eny Susanti. (2025). Efforts to Increase Motivation of KURABA (Toddler Home Visits) Cadres Using a Teleposyandu Approach at Posyandu Mawar, Bangkalan District. STRADA: Jurnal Ilmiah Kesehatan , 14 (1), 68–74. <https://doi.org/10.30994/sjik.v14i1.1223>
- Neni San Agustina Siregar, Sari, WA, Adawiyah, R. Al, & Mukodri, DML (2025). Assisting Posyandu Cadres in Meeting the Nutritional Needs of Pregnant Women and Preventing Stunting in Toddlers. SEWAGATI: Indonesian Journal of Community Service , 4 (2), 54–64. <https://doi.org/10.56910/sewagati.v4i2.2226>
- Nuraisyah, F., Purnama, JS, Nuryanti, Y., Agustin, RD, Desriani, R., & Putri, MU (2021). Education on Non-Communicable Disease Prevention in the Elderly to Improve Quality of Life. PengabdianMu: Scientific Journal of Community Service , 6 (4), 364–368.
<https://doi.org/10.33084/pengabdianmu.v6i4.1845>
- Parmin, S., Utama, AS, Rio Pratamansyah, M., & Alpia, F. (2023). Empowerment and Development of Integrated Health Posts (Posyandu) Towards a Healthy Community in





- Muara Sugih Village, Banyuasin Regency 2023. *Journal of Cendikia Service* , 2 (7), 99–104. <https://doi.org/10.5281/zenodo.10027694>
- Paunno, M., & Janwarin, LM (2022). Efforts to Increase the Role of Posyandu Cadres in the Implementation of Five Integrated Programs Through the Implementation of the Five Table System. *JOURNAL OF COMMUNITY SERVICE CREATIVITY (PKM)* , 5 (5), 1331–1338. <https://doi.org/10.33024/jkpm.v5i5.5537>
- Purbowati, R., Haru Setiawan, Lusiani Tjandra, Masfufatun, Putu Oky Aritania, & Noer Kumala Indahsari. (2024). Screening and Counseling on Anemia for Youth Posyandu Cadres in Mojo Surabaya. *Journal of Community Service (JUDIMAS)* , 2 (2), 267–275. <https://doi.org/10.54832/judimas.v2i2.269>
- Putu, N., Akper, W., Booth, W., & Cimanuk, J. (nd). STUDY OF CADRE KNOWLEDGE LEVEL ABOUT THE “FIVE TABLE SYSTEM” AT POSYANDU MORO KREMBANGAN TAMBAK ASRI SURABAYA .
- Ririh Jatmi Wikandari, Umi Rosidah, & Qurrotu A'yuni Auliya. (nd). 65.+Production_Ririh+Jatmi+Wikandari . 3 . Retrieved June 7, 2026, from <https://jurnalpengabdianmasyarakatbangsa.com/index.php/jpmmba/index>
- Sani Fitriyani, Prihartono Aksan Halim, Iman Nurrachman, Candra Mecca, & Ai Susi Susanti5. (2024). Effective Health Communication Counseling for Integrated Health Post Cadres in Maleer Village, Batununggal District, Bandung City . 04 .
- Susilowati Umi. (2012). The Effect Of Health Education On Cadre Knowledge About Posyandu Cadre Duties . IV .
- Ungvarsky, & Janine. (2020). PRECEDE–PROCEED model . EBSCO Research Startes.
- van Weel, C., Hartman, T.O., Rouleau, K., Bazemore, A., Westfall, J., Russell, G., Kidd, M., Howe, A., Phillips, R.L., Li, D., & Goodyear-Smith, F. (2020). The declaration of astana and what it means for the global role of NAPCRG and WONCA. In *Annals of Family Medicine* (Vol. 18, Number 2, pp. 189–190). *Annals of Family Medicine, Inc.* <https://doi.org/10.1370/afm.2524>
- Winandar, A., Muhammad, R., Darimi, M., & Gunawan, G. (2022a). Analysis of Health Cadre Behavior in the Implementation of Integrated Health Posts (Posyandu) to Monitor Toddler Growth in the Working Area of Jeumpa Health Center, Bireuen Regency, 2022. *PubHealth Journal of Public Health* , 1 (3), 170–177. <https://doi.org/10.56211/pubhealth.v1i3.165>
- Winandar, A., Muhammad, R., Darimi, M., & Gunawan, G. (2022b). Analysis of Health Cadre Behavior in the Implementation of Integrated Health Posts (Posyandu) to Monitor Toddler Growth in the Working Area of Jeumpa Health Center, Bireuen Regency, 2022. *PubHealth Journal of Public Health* , 1 (3), 170–177. <https://doi.org/10.56211/pubhealth.v1i3.165>

