A Community-Based Holistic Midwifery Service Management Model To Optimize The Role Of Posyandu Cadres

Harmatuti[1*], Dyan Oktaviany[2]

[1,2]Politeknik Bhakti Asih Purwakarta, Indonesia
[*] Corresponding author:
Email: harmatuti01@gmail.com

Abstract.
*This research on a community-based holistic midwifery service management model aims to develop and test a community-based holistic midwifery service management model to optimize the role of Posyandu (Integrated Health Post) cadres. Posyandu cadres serve as the frontline providers of community-based health services for mothers, children, adolescents, women of reproductive age, and the elderly in the community, integrating primary care (a basic health care system encompassing promotive, preventive, simple curative, and rehabilitative care) to encourage active community participation in health activities. Challenges often faced by cadres include limited health knowledge, interpersonal communication skills with the community, and coordination with health workers. The background to this research is the persistently high maternal and infant mortality rates in Indonesia and the suboptimal role of Posyandu cadres in holistic midwifery services in the community. The research method used a Research & Development (R&D) approach using the Borg & Gall model, encompassing the stages of initial research, model design, expert validation, limited trials, revisions, and field trials. The study sample consisted of 28 active Posyandu (Integrated Service Post) cadres. Data collection techniques included pre-test and post-test surveys, interviews, focus group discussions (FGDs), and field observations. Data analysis was conducted quantitatively (paired t-test, multiple regression) and qualitatively to identify, analyze, and report emerging patterns from the data in the Cisereuh District, Purwakarta Regency, in 2026.The results indicated that the implementation of a community-based holistic midwifery service management model increased the effectiveness of the role of Posyandu cadres, including increased knowledge (35.2%), improved service skills (40%), improved interpersonal communication (32.5%), and improved coordination with health workers (36.8%).The community-based holistic midwifery service management model was deemed effective in strengthening the role of Posyandu cadres, increasing community participation, and improving the quality of health services for the elderly, resulting in increased community satisfaction with Posyandu services.The conclusion of this study is that the community-based holistic midwifery management model is feasible as a strategy to strengthen primary healthcare services at the family and community levels, supporting the achievement of the SDGs (reducing maternal and infant mortality rates), and strengthening community-based health systems.***

Keywords: *Holistic approach, Posyandu cadres, midwifery service management model and community-based.*

I. INTRODUCTION

Holistic midwifery services are services that view the individual holistically, encompassing physical, psychological, social, and spiritual aspects (1). Community-based holistic services encompass clinical, social, and psychological aspects, involving the roles of cadres, the community, and community organizations. This is not solely the responsibility of professional health workers but also requires community participation as the spearhead of Posyandu (Integrated Health Posts) (2).

The number of Posyandu cadres in Indonesia has reached over 1.4 million, with the largest distribution in West Java and East Java. Data demonstrates the significant potential of cadres as the spearhead of community-based health services. Approximately 78% of Posyandus actively carry out routine monthly activities, but only 52% provide regular health education. This provides an important basis for this research to develop a holistic midwifery management model to optimize the role of cadres.

Posyandu cadres play a role in the Healthy Family and Healthy Living Community Movement (Germas) programs, but there is still a gap between training and implementation in the field. This is based on Indonesian Health Statistics data (BPS, 2023) (3). The concept of community-based midwifery service management is midwifery care that utilizes strategies to maximize local potential to achieve the health targets of mothers, infants, toddlers, children, adolescents, women of reproductive age, and the elderly, by involving Posyandu (Integrated Health Post) cadres (4). In this context, the role of midwives in

implementing midwifery care is to provide training to cadres in a series of promotive and preventive health services provided to individuals, families, and communities to maintain, improve, and restore the health of mothers, infants, toddlers, adolescents, and the elderly (5).

Empowerment of cadres integrated with primary care, namely Posyandu cadres, focuses not only on routine activities (weighing toddlers, providing supplementary food for pregnant women and toddlers, and administrative record-keeping), but also on involvement in the basic health care system, which includes promotive, preventive, simple curative, and rehabilitative services. Health workers (midwives) involve Posyandu cadres, volunteers, and community leaders in developing participatory plans and identifying local health problems. Continuously monitor services with feedback from the community. (6)

Posyandu cadres are involved in health education for individuals, families, and the community. They provide early detection of health problems and assist in managing Posyandu administration, including data recording, reporting, and coordination with village midwives or community health centers, as well as assisting families in following health procedures. (7) Research by Budiono (2025) shows that holistic training for Posyandu cadres improves their skills, resulting in more integrated health services and increased community participation. (8)

The Community-Based Holistic Midwifery Service Model was developed, encompassing three main components: input, process, and output. (9) Input includes resources, namely Posyandu cadres, midwives, Posyandu facilities, and local health data sources. The process includes service management, cadre training, Posyandu management, and strengthening community coordination. The output is service outcomes, namely optimizing the role of cadres to increase the coverage of health services for mothers, children, adolescents, women of productive age, and the elderly in the community. (10)

Data from the Central Statistics Agency (BPS) of Purwakarta Regency in 2025, Cisereuh District had around 30 active Posyandu cadres spread across several active Posyandus including elderly Posyandus and according to the report of the Purwakarta Regency Health Office (11) which noted that each Posyandu in the Cisereuh area had an average of 5-6 active cadres. Posyandu cadres are key actors in the implementation of community-based midwifery services.

II. METHOD

Research on a community-based holistic midwifery service management model that optimizes the role of Posyandu cadres uses a Research & Development (R&D) design, a research and development process aimed at producing new products, models, or systems that are valid, effective, and applicable in practice (12).

The holistic midwifery service management model aims to understand phenomena and develop valid and effective products (modules) that can be implemented effectively in the context of empowering holistic Posyandu cadres. This design aligns with research literature that emphasizes the importance of product validation through qualitative and quantitative techniques (according to Creswell & Plano Clark, 2017) (13).

The research sample consisted of 28 active Posyandu cadres who agreed to participate as respondents. Data collection techniques included pre-test and post-test surveys, interviews, focus group discussions (FGDs), and field observations. Data analysis was conducted quantitatively (paired t-test, multiple regression) and qualitatively using thematic analysis to identify, analyze, and report emerging patterns from data in the Cisereuh District, Purwakarta Regency, in 2026.

The Research & Development (R&D) design using the Borg & Gall model has seven stages:

Initial research (information gathering) → Initial model design → Expert validation → Limited trials → Product revision → Field trials → Final product.

The research on the Community-Based Holistic Midwifery Service Management Model to Optimize the Role of Integrated Health Post (Posyandu) Cadres illustrates the following:

1. Initial research (information gathering), involving field observations, identified the condition of midwifery services at Posyandu (Integrated Health Post) in the Cisereuh District, Purwakarta Regency.
2. Initial model design, including drafting a community-based holistic midwifery service management module. Comprehensive health services encompassing physical, psychological, social, and spiritual aspects,

include Posyandu cadres, not only focusing on routine activities (weighing, distributing supplementary food, and administrative record-keeping), but also involving them in the basic health care system, including promotive, preventive, simple curative, and rehabilitative services.

3. Expert validation, involving consultations and seeking input from midwifery experts, public health experts, and academics regarding content and technical aspects.
4. Limited trials involving Posyandu cadres in the Cisereuh District, with a pilot study of 10 cadres across two Posyandus.
5. Product revision: revising or improving the module based on the results of limited trials and input from experts.
6. Field trials: implementing the holistic midwifery service management module or model more widely at six active Posyandu (Integrated Health Posts) in the Cisereuh sub-district, Purwakarta Regency, with 28 active Posyandu cadres.
7. Final model: valid, effective, and ready for community implementation. The final product is a community-based holistic midwifery management model ready for use in empowering Posyandu cadres.

III. RESULTS AND DISCUSSION

The results of the study on the Community-Based Holistic Midwifery Service Management Model to Optimize the Role of Integrated Health Post (Posyandu) Cadres in Cisereuh District, Purwakarta Regency, in 2026 yielded the following findings:

There are six active Posyandu units (including the Elderly Posyandu), with 30 active cadres, with an average of 5-6 cadres per Posyandu. The main activities are weighing toddlers, examining pregnant women, basic immunizations, nutrition counseling for toddlers, and mentoring the elderly. Coordination with the Community Health Center (Puskesmas) for Posyandu cadres is carried out through village midwives and health workers at the Purwakarta Community Health Center. Most Posyandu units are at the intermediate and full-time levels.

Table 1.1 Characteristics of Posyandu Cadres in Cisereuh District, Purwakarta Regency

Characteristics	Category	Percentage (%)
Age	26–35 years	30
	36–45 years	40
	>45 years	30
Level of education	Junior High School	35
	High School	50
	College	15

Table 1.1 shows that the characteristics of Posyandu cadres are: The majority of Posyandu cadres are aged 36–45 years (40%), and the highest educational level is high school (50%).

Table 1.2 Comparison of Pre-Test and Post-Test Scores for Posyandu Cadres

Variable	Pre-test (Mean ± SD)	Post-test (Mean ± SD)	Improvement (%)	T test (p-value)
Cadre knowledge	65.2 ± 8.4	88.1 ± 6.7	+35.2%	0.001*
Service skills	60.5 ± 9.1	84.7 ± 7.5	+40.0%	0.000*
Interpersonal communication	62.3 ± 7.8	82.6 ± 6.9	+32.5%	0.002*
Coordination with health workers	58.7 ± 8.9	80.4 ± 7.2	+36.8%	0.001*

Description: paired t-test shows significant differences ($p < 0.05$).

Interpretation of Table 1.2: Quantitative data analysis (paired t-test, multiple regression) and qualitative analysis (thematic analysis) to identify, analyze, and report emerging patterns from Posyandu cadre data, comparing pre-test and post-test scores for Posyandu cadre training in Cisereuh District, Purwakarta Regency in 2026, are as follows:

Cadres' knowledge of the holistic service management model increased from an average of 65.2 to 88.1, a 35.2% increase, after the implementation of the community-based holistic management model training.

Posyandu cadres' service skills increased significantly from 60.5 to 84.7, a 40% increase, demonstrating the effectiveness of the training module.

Interpersonal communication improved from 62.3 to 82.6, a 32.5% increase, indicating an improvement in Posyandu cadres' ability to interact directly with the community.

Coordination with health workers also experienced a significant increase, from 58.7 to 80.4, a 36.8% increase. This strengthens the role of cadres in community-based services.

Changes after the implementation of the community-based holistic midwifery service management model included increased cadre knowledge, improved service skills, improved interpersonal communication, and improved coordination with health workers. The results of this study provide empirical evidence of an increase in the role of Posyandu cadres after the implementation of the community-based holistic service management model. (14)

IV. DISCUSSION

The role of integrated health post (Posyandu) cadres in Cisereuh District, Purwakarta Regency, before being introduced to a holistic service management model, cadre activities were limited to weighing and administrative recording. Health education was not routinely provided to the community, and coordination with health workers was still weak. After implementing a holistic service management model, or optimizing the role of cadres in the community, the results showed that cadres were more active in health education for pregnant women and toddlers, nutrition education for adolescents, women of reproductive age, and assistance for the elderly. These results align with the theory of community empowerment, namely that promotive and preventive activities involving Posyandu cadres improve the quality of community-based services. (15) The effectiveness of the holistic midwifery management model encompasses physical, psychological, social, and spiritual aspects, resulting in more comprehensive services. Collaboration between Posyandu cadres, midwives, families, and the community strengthens the integrated primary care system. (6)

Obstacles encountered by Posyandu cadres in Cisereuh District, Purwakarta Regency include limited time, inadequate supporting facilities, lack of incentives, varying levels of education, and unequal community participation. Posyandu cadres are of productive age with secondary education backgrounds, so they still have great potential for training and empowerment in community-based holistic midwifery services. (16)

Interpersonal communication has improved, as Posyandu cadres are able to interact directly with the community using simple language, empathy, and a personal and cultural approach. For example, during toddler nutrition counseling, Posyandu cadres convey the importance of providing nutritious complementary foods to breast milk in easy-to-understand language, while listening to mothers' experiences and providing practical solutions. (17)

Cadres not only convey information but also build relationships and trust, and motivate individuals, families, and communities to actively participate in health activities. These results also align with research by Budiono (2025), who stated that training for Posyandu cadres will improve their skills in providing more integrated community health services and can increase community participation in their health. (8)

Improved coordination between Posyandu cadres and health workers occurred after the implementation of this community-based holistic service management model. Posyandu cadres increasingly actively communicated, collaborated, and involved health workers (midwives, nurses, and Community Health Center doctors) in health service activities in the Cisereuh District, Purwakarta Regency. The implementation of this community-based holistic management model included cadre training, such as community-based health education, mentoring the elderly, monitoring, and collaboration with midwives.

This community-based holistic midwifery service management was implemented through routine Posyandu activities and home visits. The implications of this research are that this model can be used as a strategy to strengthen Posyandu at the Cisereuh District level in Purwakarta Regency and is worthy of broader development to support the achievement of the SDGs (reducing maternal and infant mortality rates). The results of the study showed that the community-based holistic midwifery management model was effective in increasing the capacity of Posyandu cadres and the quality of health services for mothers,

children, adolescents, women of productive age and the elderly. (16) and is also in line with the results of community service by Afifah E et al., 2023, namely the results of Posyandu cadre empowerment activities were an increase of 44.6% in Posyandu cadre understanding both in theory and practice, from 59.28% to 85.71%. (18)

V. CONCLUSION

Based on the research results on the Community-Based Holistic Midwifery Service Management Model to Optimize the Role of Posyandu Cadres in the Ciereueh District, Purwakarta Regency, it can be concluded that community-based midwifery services in Ciereuh still require improvement in coordination, health education, assistance to the elderly, and the active involvement of Posyandu cadres.

The community-based holistic management model has proven effective in improving knowledge, skills, interpersonal communication, and coordination between cadres and health workers. Implementation of the model resulted in a significant increase in the role of Posyandu cadres in promotive, preventive, educational, and community health assistance activities.

This holistic midwifery service management model is a suitable strategy for strengthening primary care at the community level, supporting the achievement of the SDGs (reducing maternal and infant mortality rates), and strengthening the community-based health system. This management model can be implemented more widely with the support of local governments, health workers, and the community to strengthen the sustainability of Posyandu services.

Posyandu cadres should increase their active participation in health education activities for mothers, children, adolescents, women of childbearing age, and the elderly. They should participate in ongoing training to strengthen communication skills, early detection, and family support. They should also leverage community support for more comprehensive and sustainable services.

Health workers (midwives/community health centers) can strengthen guidance and supervision of Posyandu cadres by establishing a more structured coordination system between midwives, cadres, and community leaders, and by providing holistic training modules that are easily understood by cadres with diverse educational backgrounds. Local governments and the Health Office should support the model's implementation through policies, supporting facilities, and cadre training programs. They can integrate Posyandu data into the primary health information system for monitoring and evaluation, and allocate a dedicated budget to strengthen Posyandu as part of primary care.

Future researchers should develop the model with broader coverage to achieve more representative results by using advanced quantitative research methods (e.g., effectiveness testing with randomized controlled trials), and by incorporating digital technology (Posyandu applications) to support community-based recording and education. The community-based holistic midwifery management model can continue to be improved and expanded, so that the role of Posyandu cadres can be more optimal in supporting the health of mothers, children, adolescents, women of productive age and the elderly..

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