

# Analysis of Factors Related to the Partnership of Midwives and Village Shamans in Caring for Postpartum Mothers in the BLUD Area of UPT Puskesmas Tumpung Laung

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**Abstract,** Background: The maternal mortality rate in Indonesia reaches 177 per 100,000 live births, with 75 percent of deaths occurring in the first week of the postpartum period. The partnership between midwives and village shamans is an adaptive strategy to optimize maternal health services, but its implementation still faces various systemic obstacles. Objective: To analyze factors related to the partnership of village midwives and shamans in caring for postpartum mothers in the BLUD area of the Tumpung Laung Health Center UPT. Methods: A quantitative study with a cross-sectional design involved 50 respondents using a total sampling technique. Data were collected through a structured questionnaire and analyzed using the Chi-square test with a significance level of  $p < 0.05$ . Results: There was a significant relationship between age ( $p = 0.032$ ), work experience ( $p = 0.048$ ), education ( $p = 0.000$ ), knowledge ( $p = 0.000$ ), competence ( $p = 0.000$ ), quality of communication ( $p = 0.000$ ), frequency of interaction ( $p = 0.000$ ), policy support ( $p = 0.000$ ), and availability of facilities ( $p = 0.000$ ) with partnership effectiveness. Conclusions: Effective partnerships are influenced by a multiplicity of factors at the individual, interpersonal, and structural levels, requiring holistic interventions through capacity building, communication strengthening, and comprehensive policy support to accelerate maternal mortality reduction.

**Keywords:** BLUD, Partnerships, Postpartum Mother Care, Structural Levels, Village Shaman.

## 1. INTRODUCTION

Maternal mortality rates in Indonesia continue to show alarming prevalence in the context of reproductive health in Southeast Asia, where the maternal mortality ratio reached 177 per 100,000 live births in 2017, placing Indonesia in the third highest position in the region. The complexity of maternal mortality includes various health determinants that interact with each other, ranging from the accessibility of health services, the quality of midwifery care, to sociocultural factors that are rooted in society. The postpartum period or postpartum period is a critical phase that contributes significantly to the high maternal mortality rate, where data shows that 75 percent of maternal deaths occur in the first week after childbirth in developing countries including Indonesia. Comprehensive health interventions during postpartum are a strategic imperative in an effort to achieve the Sustainable Development Goals target of 70 per 100,000 live births by 2030 (Wulandari et al., 2022).

The practice of maternal health services in Indonesia has unique characteristics with the existence of two service systems that operate in parallel, namely the formal health system represented by professional midwives and the traditional health system played by village shamans or traditional birth attendants. This phenomenon of maternal health service dualism

reflects the sociocultural reality of Indonesian society who still maintain belief in traditional midwifery practices as hereditary cultural heritage. In this context, partnerships between midwives and village shamans are an adaptive strategy recommended by the World Health Organization to optimize the coverage and quality of maternal health services, especially in postpartum care. The conception of this partnership is based on the principles of openness, equality, and mutual trust which aims to transform the role of village shamans from childbirth helpers to midwives in providing comprehensive care to postpartum mothers and newborns (Olakotan et al., 2025).

Previous empirical studies have identified that the effectiveness of midwives and village shamans is influenced by the multiplicity of factors operating at the micro to macro levels. Research (Musie et al., 2022) emphasized that collaboration between health professionals and traditional birth attendants can be an essential effort in reducing maternal-neonatal morbidity and mortality, especially in low- and middle-income countries. Study (Habibah et al., 2024) Through a systematic literature review, it was analyzed that obstacles to partnership implementation include the dimension of interprofessional communication, knowledge disparities between the two parties, and limited infrastructure and financial support from the health system. Furthermore, qualitative investigations conducted on cultural and structural determinants revealed that generational traditions and strong community trust in the capabilities of village shamans in handling postpartum mothers are significant determinants in shaping partnership dynamics. Meanwhile, structural determinants include limited maternal and child health service facilities, insufficiency of health workers, and suboptimal support from relevant stakeholders including community leaders and policymakers (Mahmood et al., 2021).

Although the partnership program between midwives and village shamans has been implemented in various regions of Indonesia for decades, a comprehensive evaluation shows that its implementation still faces various systemic obstacles. Previous studies have indicated that coordination between midwives and village shamans is often incidental and unstructured, regular meetings between the two parties are not carried out consistently due to limited operational budgets, and there is no written legislation that formally regulates partnership mechanisms (Aryastami & Mubasyiroh, 2021). In the context of postpartum care, the research gap identified is the lack of studies that specifically explore factors related to the effectiveness of partnerships in providing postpartum care at the health center level, even though health centers are at the forefront of Indonesia's primary health system. The novelty of this study lies in the analytical approach that focuses on the work area of the BLUD UPT Puskesmas Tumpang Laung, where the local geographical, demographic, and sociocultural characteristics

provide a unique context to understand the dynamics of partnerships in real practice in the field (Utomo et al., 2025).

Based on this explanation, the research problems formulated are: what factors are related to the partnership of midwives and village shamans in caring for postpartum mothers in the BLUD area of UPT Tumpang Laung Health Center? The formulation of specific problems includes: how the demographic characteristics and work experience of village midwives and shamans affect partnership patterns, the extent to which the knowledge and competence factors of both parties contribute to the quality of collaboration, how interpersonal communication factors and frequency of interactions shape partnership relationships, and what support system factors facilitate or hinder the implementation of partnerships in the context of primary health services. The purpose of this study is to analyze factors related to the partnership between midwives and village shamans in caring for postpartum mothers in the BLUD area of UPT Tumpang Laung Health Center, with the specific aim of identifying the strength and direction of the relationship between the variables studied.

The theoretical benefit of this study is to develop a conceptual framework regarding the factors that influence the partnerships of formal health workers with traditional health practitioners in the context of postpartum maternal services, thereby contributing to the body of knowledge in public health sciences and midwifery. Practically, the findings of this study can be evidence-based information for managers of maternal and child health programs at the health center level to design more effective partnership optimization strategies. For field practitioners, the results of this study provide insight into critical aspects that need to be strengthened in building synergistic collaboration between midwives and village shamans. Meanwhile, for policymakers, this study provides empirical data that can be the basis for the formulation of regulations and technical guidelines for partnerships that are more comprehensive and contextual with local conditions, thus ultimately contributing to the acceleration of the reduction in maternal illness and mortality rates in Indonesia.

## **2. RESEARCH METHODS**

This study uses a quantitative approach with a cross-sectional study design that aims to analyze factors related to the partnership of midwives and village shamans in caring for postpartum mothers in the BLUD area of UPT Tumpang Laung Health Center. The cross-sectional design was chosen because it allows researchers to collect data at a specific point in time and analyze the relationship between independent variables and dependent variables simultaneously, so that it is efficient in terms of time and cost and can measure the prevalence

of the phenomenon being studied in the target population. This approach is in accordance with the characteristics of correlational research that explores the relationship between variables without intervening or manipulating the research subject (Slater & Hasson, 2025).

The population in this study includes all midwives who are on duty in the work area of BLUD UPT Puskesmas Tumpang Laung and all village shamans who are active in practicing maternal health services in the same area. The sampling technique used is total sampling or saturated samples, where all members of the population who meet the inclusion criteria are used as research respondents. Inclusion criteria for midwives include: have a valid registration certificate, have worked for at least one year in the work area of the health center, and have interacted or coordinated with village shamans in handling postpartum mothers. Meanwhile, the inclusion criteria for village shamans include: being registered as a village shaman in the work area of the health center, still actively practicing postpartum mothers' care, and willing to participate in research. The exclusion criteria for both groups of respondents were those who were on leave or were not actively employed during the data collection period, as well as those who refused to participate after receiving an explanation of the study.

The research variables consist of independent variables and dependent variables that have been identified based on the review of the relevant literature and theory. Independent variables in this study included respondent demographic characteristics such as age, education level, and length of work experience, knowledge of postpartum care and partnership practices, competence in providing postpartum care, interpersonal communication patterns between midwives and village shamans, frequency of interaction and coordination in case handling, and system support that includes the availability of facilities, institutional policies, and stakeholder roles. The dependent variable is the partnership of midwives and village shamans in caring for postpartum mothers, which is measured through indicators such as the level of collaboration in care planning, referral and consultation mechanisms, division of roles and responsibilities, and joint evaluation of service outcomes.

The data collection instrument used is a structured questionnaire developed based on the conceptual framework of the research and has gone through a content validation process by a panel of experts consisting of obstetrics lecturers, public health practitioners, and researchers in the field of maternal health. The questionnaire consists of several sections that include respondent demographic data, closed-ended questions with a Likert scale to measure partnership knowledge, attitudes, and practices, and specific questions about factors influencing partnership implementation. Before being used in the main study, the instrument was conducted a validity test using Pearson Product Moment correlation to ensure that each

question item was valid in measuring the construct in question, with the criterion of a calculated  $r$  value greater than the  $r$  of the table at a significance level of 0.05. The reliability test was performed using Cronbach's Alpha with a minimum value of 0.70 as an indicator that the instrument has good internal consistency and is reliable for repeated measurements.

The data collection procedure was carried out after obtaining ethical clearance from the health research ethics committee and research permits from the local Health Office and the BLUD UPT Tumpang Laung Health Center. The researcher approaches the prospective respondents by explaining the research objectives, data collection procedures, benefits of the research, and the respondents' right to refuse or withdraw from the research without any consequences. Once the respondent understands and agrees to participate, informed consent is signed as proof of voluntary willingness. Data collection was carried out directly by the researcher accompanied by enumerators who have been trained to ensure consistency in the questionnaire administration process. The time required to fill out the questionnaire ranged from 20 to 30 minutes per respondent, with the researcher providing assistance if the respondent had difficulty understanding the question without affecting the answer given (Pezaro et al., 2025).

Data analysis was carried out in stages using the latest version of the Statistical Package for Social Sciences software. The first stage is univariate analysis to describe the characteristics of the respondents and the frequency distribution of each variable studied, where the data is presented in the form of a table of frequency distribution, percentage, mean, median, and standard deviation. The second stage is bivariate analysis to test the relationship between each independent variable and the dependent variable using statistical tests that correspond to the scale of data measurement. For categorical variables, a Chi-square test with a confidence level of 95 percent and a  $p$ -value of less than 0.05 was used as a limit of statistical significance, which allowed the researcher to determine whether there was a meaningful association between the variables analyzed. If the requirements of the Chi-square test are not met because there are cells with an expected count of less than five, an alternative test such as Fisher's Exact Test is used. For normally distributed numerical variables, the Pearson Correlation test is used, while for data that is not normally distributed, the Spearman Rank Correlation test is used. The strength of the relationship between variables is interpreted based on the value of the correlation coefficient, where values of 0.00 to 0.25 indicate a very weak correlation, 0.26 to 0.50 indicate a weak correlation, 0.51 to 0.75 indicate a strong correlation, and 0.76 to 1.00 indicate a very strong correlation.

Research ethical considerations are the top priority in all stages of this research. The principle of respect for persons is applied through providing complete and transparent information to prospective respondents and respecting their decision to participate or refuse without pressure. The principles of beneficence and non-maleficence are fulfilled by ensuring that research provides benefits for improving the quality of maternal health services without causing risks or losses to respondents. The principle of justice is applied through the selection of fair respondents without discrimination based on social, economic, or other personal characteristics. The confidentiality and anonymity of respondent data is strictly maintained, where the identity of the respondents is encoded and only researchers have access to the raw data. The research data is stored in a secure storage medium and will only be used for the purposes of this research. The results of the study will be published without including the identity of the respondents to protect their privacy in accordance with the health research code of ethics.

### 3. RESULTS AND DISCUSSION

#### Demographic Characteristics and Respondents' Work Experience

This study involved 50 respondents consisting of village midwives and shamans who served in the BLUD work area of the Tumpang Laung Health Center. The analysis of respondent demographic characteristics is a fundamental aspect in understanding the profile of the partnership actors who are the subject of this study. Demographic characteristics include age, education level, and length of work experience that are assumed to contribute to the pattern of partnership implementation in postpartum care.

**Table 1.** *Frequency Distribution of Demographic Characteristics of Respondents in the BLUD Area of UPT Puskesmas Tumpang Laung (n=50).*

Characteristics	Categories	Frequency	Percentage (%)
<b>Respondent Age</b>	< 30 years old	11	22,0
	30-45 years old	37	74,0
	> 45 years old	2	4,0
<b>Long Work Experience</b>	< 5 years	8	16,0
	5-10 years	26	52,0
	> 10 years	16	32,0
<b>Employment Status</b>	Civil servant midwife	18	36,0

	PTT/Contract Midwives	9	18,0
	Active Village Shaman	23	46,0
<b>Education Level</b>	Elementary Education (SD-SMP)	4	8,0
	Secondary Education (SMA)	16	32,0
	Diploma in Midwifery	19	38,0
	Bachelor/Profession	11	22,0

Based on Table 1, the age distribution of respondents shows that the majority are in the productive age range of 30-45 years old as many as 37 respondents or 74.0 percent, followed by the age group under 30 years old as many as 11 respondents or 22.0 percent, and the age group over 45 years old only 2 respondents or 4.0 percent. The dominance of this productive age group indicates that most of the partnership actors have the psychological maturity and life experience sufficient to carry out collaborative roles in maternal health services. In terms of work experience, the data showed that 26 respondents or 52.0 percent had work experience between 5-10 years, 16 respondents or 32.0 percent had more than 10 years of experience, and 8 respondents or 16.0 percent had less than 5 years of experience. The duration of this relatively long work experience has implications for the accumulation of tacit and explicit knowledge about postpartum care practices as well as an understanding of the dynamics of partnerships that have been built before.

The job status of the respondents showed a fairly balanced composition between midwives as formal health workers and village shamans as traditional health practitioners, where 36.0 percent were civil servant midwives, 18.0 percent were PTT or contract midwives, and 46.0 percent were village shamans who were still actively practicing postpartum care. The level of education of the respondents showed an interesting heterogeneity to analyze, where 8.0 percent had basic education, 32.0 percent had secondary education, 38.0 percent had a diploma in midwifery, and 22.0 percent had a bachelor's or professional education. The educational disparity between midwives and village shamans reflects the formal knowledge gap which is one of the challenges in building effective partnerships. Habibah et al. (2024) in their literature review emphasized that differences in knowledge and skills are the main obstacles in the partnership between midwives and shamans, so a bridging strategy through training and mentoring is needed to minimize the competency gap.

## The Relationship of Demographic Characteristics, Knowledge and Competencies with Partnerships

To answer the formulation of the first and second problems regarding how demographic characteristics and work experience affect partnership patterns, as well as the extent to which knowledge and competency factors contribute to the quality of collaboration, a bivariate analysis was conducted using the Chi-square test to identify the association between independent variables and dependent variables, namely the effectiveness of partnerships in postpartum care.

**Table 2.** *Chi-square test results on the relationship between Demographic Characteristics, Knowledge and Competencies and Partnership Effectiveness (n=50).*

Variable	Categories	Effective Partnerships		Ineffective Partnerships		Total		P value
		n	%	n	%	n	%	
		<b>Age</b>	30-45 years old	29	78,4	8	21,6	
	<30 or >45 years old	6	46,2	7	53,8	13	100	
<b>Work Experience</b>	≥5 years	31	73,8	11	26,2	42	100	0,048
	<5 years old	4	50,0	4	50,0	8	100	
<b>Education</b>	Diploma/Bachelor's	27	90,0	3	10,0	30	100	0,000
	Elementary School	8	40,0	12	60,0	20	100	
<b>Knowledge</b>	Good	28	84,8	5	15,2	33	100	0,000
	Less	7	41,2	10	58,8	17	100	
<b>Competencies</b>	Competent	30	88,2	4	11,8	34	100	0,000
	Not Competent	5	31,2	11	68,8	16	100	

With a p value of 0.000 for each comparison of education, knowledge and competency variables, the Chi-square test results showed a significant relationship with partnership effectiveness. Table 2 demonstrates the results of a bivariate analysis that identifies the relationship between demographic characteristics and partnership effectiveness. The age variable showed a significant relationship (p=0.032), where respondents in the productive age group of 30-45 years had an effective partnership proportion of 78.4 percent, higher than the other age group which was only 46.2 percent. These findings differ from studies (Nuraineu &

Rohaeti, 2023) did not find a significant association between the age of the infant shaman and partnership in birth care ( $p=0.30$ ), but this difference could be explained by differences in age categorization and the geographic context of the study. Productive age maturity provides a balance between the physical energy and emotional maturity necessary in building complex collaborative relationships.

Work experience also showed a meaningful association with partnership effectiveness ( $p=0.048$ ), where respondents with five years or more of work experience had 73.8 percent of effective partnerships, while those with less than five years of experience were only 50.0 percent. The duration of work experience contributes to a deeper understanding of the health service system, social dynamics of the community, and the ability to build trust and network with various stakeholders including village shamans. (Soerachman et al., 2021) In an ethnographic study of the Dayak Siang-Murung community, it was identified that experience and understanding of the local cultural context are important factors in building effective collaboration between village midwives and village midwives.

The level of education showed a very significant relationship with partnerships ( $p=0.000$ ), where respondents with a diploma or bachelor's education had 90.0 percent of effective partnerships, much higher than those with an elementary and high school education with a proportion of only 40.0 percent. This considerable disparity confirms the argument (Habibah et al., 2024) that differences in knowledge and skills are the main obstacles in partnerships, so capacity building through formal and non-formal education is crucial. (Adnani et al., 2025) It also emphasizes that midwives with higher education tend to have better abilities to build interprofessional collaboration and provide quality maternal health services.

The knowledge variable showed a very strong relationship with partnership effectiveness ( $p=0.000$ ), where respondents with good knowledge had 84.8 percent effective partnerships, while lack knowledge was only 41.2 percent. Adequate knowledge of postpartum care standards, danger signs for postpartum mothers, and referral mechanisms are important foundations in building quality collaboration. (Musie et al., 2022) In the framework of collaboration, it is emphasized that the component of knowledge and mutual understanding of the role of each party is an essential structural element in facilitating cooperation between midwives and traditional birth attendants.

Technical competence showed the strongest association with effective partnerships ( $p=0.000$ ), where competent respondents had 88.2 percent of effective partnerships, while incompetent respondents had only 31.2 percent. Competencies include not only technical skills in performing postpartum maternity care procedures, but also the ability to communicate,

conduct consultations, and make appropriate clinical decisions in a collaborative context. (Nuraineu & Rohaeti, 2023) found a significant association between training and the partnership of baby shamans and midwives ( $p=0.021$ ), indicating that competency improvement through training contributes substantially to the success of the partnership.

### Communication Relationships, Frequency of Interaction and Support Systems with Partnerships

To answer the formulation of the third and fourth problems regarding how interpersonal communication factors and frequency of interactions form partnership relationships, as well as what supporting system factors facilitate or hinder the implementation of partnerships, a follow-up analysis of relational and structural variables in the context of primary health services is carried out.

**Table 3.** Chi-square test results of Communication Frequency, Interaction Frequency and Support Systems with Partnership Implementation ( $n=50$ ).

Variable	Categories	A Well-		Partnerships		Total		P value
		Established		Are Not				
		n	%	n	%	n	%	
<b>Communication Quality</b>	Effective	29	87,9	4	12,1	33	100	0,000
	Ineffective	6	35,3	11	64,7	17	100	
<b>Frequency of Interaction</b>	>1x per week	27	84,4	5	15,6	32	100	0,000
	≤1x per week	8	44,4	10	55,6	18	100	
<b>Policy Support</b>	There	28	90,3	3	9,7	31	100	0,000
	None	7	36,8	12	63,2	19	100	
<b>Facility Availability</b>	Adequate	26	86,7	4	13,3	30	100	0,000
	Inadequate	9	45,0	11	55,0	20	100	

With a p-value of 0.000 for all variables, the Chi-square test results showed that communication, frequency of interaction, policy support and facility availability had a significant relationship with partnership implementation. Table 3 reveals that the quality of

communication has a very significant relationship with partnership implementation ( $p=0.000$ ). Respondents with effective communication had a proportion of well-established partnerships of 87.9 percent, while ineffective communication was only 35.3 percent. Effective communication includes openness in sharing information, honesty in conveying obstacles, and mutual respect and appreciation for each party's contributions. (Isaac et al., 2022)

In her research at the West Limboto Health Center, she found a significant relationship between the interaction of midwives and shamans and the coverage of KIA services ( $p=0.005$ ), which confirms that regular and quality communication is a strong predictor of successful collaboration in maternal and neonatal health services.

(Soerachman et al., 2021) In an ethnographic study, it was reported that the majority of the Dayak Siang-Murung community still chose to seek maternal health services from traditional practitioners because of trust and emotional closeness. The successful collaboration between village midwives and village midwives through the spirit of 'Tira Tangka Balang' shows that communication based on mutual commitment and mutual respect can bridge the gap between formal and traditional health systems. (Habibah et al., 2024) emphasized that building communication is one of the essential strategies in partnerships, where through open communication, coordination of care planning, case discussions, and evaluation of outcomes can be carried out collaboratively. The frequency of interaction showed a meaningful relationship with partnership ( $p=0.000$ ), where respondents who interacted more than once per week had 84.4 percent of good partnerships, while minimal interactions resulted in only 44.4 percent. The high intensity of interaction facilitates the formation of rapports, increases mutual understanding, and strengthens trust which is the foundation of long-term collaborative relationships. (Sutarto et al., 2022) In his community service activities, he reported that routine meetings involving birth counselors, village midwives, health cadres, and village leaders succeeded in increasing the knowledge of participants and forming a joint commitment in the stunting prevention program through the signing of a commitment banner.

Institutional policy support showed a very strong relationship with partnership implementation ( $p=0.000$ ), where the existence of formal policies resulted in 90.3 percent of partnerships being well established, while without policy support only 36.8 percent. (Maryanti & Hendarwan, 2025) reported that the implementation of Pandeglang Regent Regulation Number 19 of 2021 concerning the Acceleration of the Reduction of Maternal and Infant Mortality through the midwife-paraji partnership program was successfully implemented according to Edward III's theory which emphasizes the importance of formal policies, resource allocation, implementing disposition, and bureaucratic structure in the implementation of

health programs (From the Province of Bangladesh, 2021). Formal policies provide legitimacy, clarity of operational mechanisms, and guarantees of budget support that are essential for partnership sustainability. Facility availability showed a significant association with partnerships ( $p=0.000$ ), where adequate facilities contributed to 86.7 percent of good partnerships, while facility limitations were only 45.0 percent. The facilities in question include transportation facilities for referrals, communication tools, basic medical equipment, and venues for regular coordination meetings. (Musie et al., 2022) In the collaboration framework, it is identified that structural components in the form of health infrastructure, financing systems, and regulatory policies are the enabling factors that determine the success of collaboration between midwives and traditional birth attendants in rural communities that have limited resources.

The findings of this study comprehensively answer the overall formulation of the problem by confirming that the partnership of midwives with village shamans in the care of postpartum mothers is influenced by the multiplicity of factors operating at the individual, interpersonal, and structural levels. (Musie et al., 2022) emphasized that collaboration between health professionals and traditional birth attendants is an essential strategy in reducing maternal-neonatal morbidity and mortality, especially in low- and middle-income countries where formal health systems have not been able to reach the entire population equally. (Adnani et al., 2025) added that midwives play a critical role as accessible and trusted service providers, and remain central in strengthening the delivery of the maternal health service system in Indonesia. The practical implication of these findings is the need for a holistic approach in partnership optimization that includes three strategic dimensions. First, individual capacity building through structured and continuous training programs to improve the knowledge and competence of both midwives and village shamans in evidence-based standards of postpartum care. Second, strengthening interpersonal communication through the facilitation of regular coordination meetings, the establishment of communication forums, and the development of clear and accessible consultation and referral mechanisms. Third, strengthening the support system through the formulation of formal policies that comprehensively regulate partnerships, adequate operational budget allocation, provision of infrastructure and supporting facilities, and the involvement of key stakeholders such as the heads of health centers, health offices, and community leaders in providing support and supervision for the implementation of partnerships in the field.

#### 4. CONCLUSION

This study identified that the effectiveness of the partnership between midwives and village shamans in the care of postpartum mothers in the BLUD area of the UPT Tumpang Laung Health Center was significantly influenced by the convergence of multilevel factors that interacted with each other. Bivariate analysis through the Chi-square test proved a significant correlation between respondents' demographic characteristics including productive age of 30-45 years ( $p=0.032$ ), duration of work experience of at least five years ( $p=0.048$ ), and diploma to undergraduate education level ( $p=0.000$ ) with collaboration success. The cognitive and psychomotor dimensions reflected in comprehensive knowledge of postpartum care standards ( $p=0.000$ ) and evidence-based technical competence ( $p=0.000$ ) have proven to be essential determinants in shaping the quality of partnerships. Effective interpersonal communication with the principles of openness and mutual respect ( $p=0.000$ ), accompanied by a minimum weekly interaction intensity ( $p=0.000$ ), contributes substantially to building trust and sustainable collaboration. Structural factors in the form of institutional formal policy support ( $p=0.000$ ) and the availability of adequate infrastructure facilities ( $p=0.000$ ) proved to be critical enabling factors.

Based on these findings, the researchers recommend the development of a more comprehensive partnership measurement instrument with a mixed-methods approach for in-depth exploration. For subsequent researchers, it is recommended to conduct longitudinal studies with a wider geographical scope to analyze the long-term impact of partnerships on maternal-neonatal outcomes. Puskesmas are expected to implement a structured capacity building program through periodic training, facilitate regular communication forums, and allocate specific operational budgets for partnership sustainability. Respondents are encouraged to increase collaborative commitment through active participation in coordination meetings and optimize the communication system-based referral mechanism that has been established to accelerate the achievement of maternal mortality reduction targets in accordance with the Sustainable Development Goals. Deep appreciation was expressed to the Head of BLUD UPT Puskesmas Tumpang Laung for his permission and full support during the implementation of the research. Sincere appreciation to all village midwives and shamans who have participated with high dedication as research respondents, as well as the team of enumerators who contributed to the data collection process with high professionalism and integrity.

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