ASPI | Afarand Scholarly Publishing Institute; Turkey
ISSN: 2345-2897; Health Education and Health Promotion. 2024;12(4):617-622. 10.58209/hehp.12.4.617

Village Midwife Performance in Maternal and Child Health Services in Jambi Province, Indonesia

ARTICLE INFO

Article Type
Descriptive Study

Authors
Ruwayda R.*[1] *MKeb*
Hastono S.P.[1] *PhD*
Siregar K.N.[1] *PhD*
Martha E.[1] *PhD*
Nurdini L.[1] *MKM*

How to cite this article
Ruwayda R, Hastono SP, Siregar KN, Martha E, Nurdini L. Village Midwife Performance in Maternal and Child Health Services in Jambi Province, Indonesia. Health Education and Health Promotion. 2024;12(4):617-622.

[1]Department of Public Health, Faculty of Public Health, University of Indonesia, Jakarta, Indonesia

**Correspondence*
Address: Komplek Bukit Indah Number 7 RT 14 Telanaipura, Jambi City, 36122, Indonesia. Postal Code: 36122
Phone: +62 (813) 66427233
Fax: +62 (741) 445579
ruwayda831@gmail.com

Article History
Received: November 7, 2024
Accepted: December 6, 2024
ePublished: December 10, 2024

ABSTRACT

Aims The study aimed to analyze the determinants of village midwife performance in maternal and child health services.

Instrument & Methods This quantitative study employed a cross-sectional design. The population consisted of all village midwives in Muaro Jambi Regency, Jambi Province, with a sample of 171 midwives providing maternal and child health services. This study was conducted over a period of three months, from January to March 2024, with the data collection phase occurring between February and March 2024. The inclusion criteria required participants to have more than two years of experience as village midwives. The dependent parameter was the performance of the midwives in improving maternal and child health, while the independent parameters were supervision, training, and attitude.

Findings 101 midwives (59.8%) had never attended training, while 139 (81.3%) had received training, and 119 midwives (69.9%) exhibited a predominantly positive attitude. The significant parameters associated with the performance of village midwives in the univariate analysis were age, education level, length of service, incentives outside salary (all with p-value=0.0001), and supervision within the past year (p-value=0.001). In the multivariate analysis, the significant parameters were age (p-value=0.035) and education level (p-value=0.037).

Conclusion Considering the age and education level of midwives in the implementation and socialization of the Maternal and Child Health program enhancing the performance of village midwives is crucial.

Keywords Attitude; Community Health Workers; Midwifery; Training Support; Maternal Death; Child Health

CITATION LINKS

[1] Maternal death surveillance and response: Technical guidance: Information for action ... [2] Potential impact of midwives in preventing and reducing maternal and neonatal ... [3] Strengthening quality midwifery education for universal health coverage 2030 ... [4] Maternal mortality ... [5] Indonesia health profile ... [6] A framework for analyzing the determinants of maternal ... [7] Nursing and midwifery ... [8] Reducing maternal and newborn mortality in Nigeria-A qualitative study of stakeholders' perceptions about the performance of community health workers and the introduction of community midwifery ... [9] The commitment to a midwifery centre care model in Bangladesh: An interview study with midwives ... [10] The impact of community midwives on maternal ... [11] Why are they "unreached"? Macro and Meso determinants of health care access in hard ... [12] Assessing quality of care provided by Indonesian village midwives ... [13] The effects of Indonesia's 'midwife in the village' programme ... [14] The midwife's role in achieving the sustainable development goals ... [15] Leadership for evidence-based practice-Enforcing or ... [16] Factors affecting village midwives work performance in conducting early detection of high risk pregnancy in the ... [17] Factors that influence the performance of midwives in implementing standard antenatal services ... [18] Strengthening midwives' competencies for addressing maternal and newborn mortality in Tanzania ... [19] Knowledge and skills of coordinator midwives ... [20] Factors related to village midwife performance in efforts to reduce ... [21] Performance of village midwives in the health ... [22] The competency, financial compensation, supervision and performance ... [23] Mentoring Guidelines for ... [24] Leadership in nursing and midwifery: Activities and associated competencies ... [25] The effect of leadership style on midwives' performance ... [26] The influence of knowledge, motivation, leadership, and workload toward public ... [27] Mapping of WHO competencies for the maternal and newborn health ... [28] Identification of factors influencing core competence promotion ... [29] The behaviour change wheel: A new method for ...

Introduction

The goal of the maternal health care quality assurance system is to reduce the maternal mortality ratio (MMR) to fewer than 70 per 100,000 live births in order to attain Universal Health Coverage (UHC) by 2030. In Tanzania, among the 556 maternal deaths, 71.8% were attributed to a lack of knowledge and skills among health workers [1]. Numerous studies have shown that high-quality care can prevent two-thirds of maternal and newborn deaths, potentially saving 4.3 million lives annually [2, 3].

In 2020, low- and lower-middle-income nations accounted for about 95% of all maternal deaths, the majority of which were avoidable. Regions and sub-regions of the Sustainable Development Goals (SDGs) are used here. Approximately 87% (253000) of the anticipated global maternal fatalities in 2020 occurred in Sub-Saharan Africa and Southern Asia. The two regions with the largest overall reductions in maternal mortality ratios (MMRs) between 2000 and 2020 were Eastern Europe (from an MMR of 38 to 11) and Southern Asia (from an MMR of 408 to 134). Even though its MMR in 2020 was quite high, Sub-Saharan Africa also saw a significant 33% decrease in MMR between 2000 and 2020. Over this time, the MMRs of four SDG sub-regions were approximately halved: The MMR decreased by almost one-third in Eastern Africa, Central Asia, Eastern Asia, Northern Africa, and Western Europe [4].

In Indonesia, the maternal mortality rate is 305 per 100,000 births, primarily caused by eclampsia, bleeding, and infections, with 78% of these deaths occurring in healthcare facilities. The predetermined target is to reduce this rate to 183 per 100,000 births by 2024, and the 2030 Sustainable Development Goals (SDGs) aim for a reduction to 70 per 100,000 live births. Comparing current achievements to these targets, it is evident that the program's realization requires targeted interventions and policy adjustments to enhance health human resources [5]. Determinants of maternal mortality include direct causes such as obstetric complications like bleeding, eclampsia, and infection. Intermediate causes encompass reproductive health status, access to healthcare, and health-related behaviors. Indirect causes involve factors like education and employment status [6]. Midwives play a critical role in addressing public health challenges, requiring them to possess the competence to deliver safe, high-quality, and efficient health services throughout their lifespan [7].

A qualitative study in Nigeria demonstrated efforts to reduce maternal mortality by integrating midwives as community-based providers within the healthcare system. This integration aimed to enhance the quality of maternal and newborn care through active community involvement [8]. A study in Bangladesh identified a women-centered midwifery model of care that enhances continuity of care. However, challenges include limited community accessibility, insufficient prioritization of care standards, and inadequate community involvement and integration of healthcare systems to fully promote the benefits of midwifery care [9]. The demand for midwifery competence is expected to enhance the quality of maternal health services in the community. Studies in Pakistan have shown that community midwife programs can improve women's access to safe pregnancy and delivery services through effective communication and outreach [10]. Another study in India found that midwives played a key role in shifting the perspectives and cultural attitudes of remote communities regarding effective healthcare systems [11-15].

This study is considered important because it provides in-depth insights into the factors affecting the performance of village midwives. By understanding these determinants, policies and programs can be designed to enhance the capacity of midwives in delivering maternal and child health services. This could lower death rates and enhance general health by raising the standard of care given to expectant mothers and their unborn children. The findings of this study can serve as a basis for creating health policies that are more successful. The data obtained allows policymakers to identify areas that require special attention, whether in terms of training, resources, or infrastructure support. This will aid in the more efficient and targeted allocation of resources.

This research has aimed to analyze determinants of village midwife performance in maternal and child health services in Jambi Province, Indonesia.

Instrument and Methods

This cross-sectional descriptive study was carried out in Indonesia's Jambi Province's Muaro Jambi District. This research has been carried out for two months starting from February to March 2024. The sample size was calculated using the OpenEpi sample size calculator, based on a 7.5% performance prevalence of village midwives [16], a total population of 333, a 95% confidence level, and a 5% margin of error. The estimated sample size was 180. However, 9 samples were removed due to a considerable amount of missing information. Therefore, a total of 171 village midwives from Muaro Jambi District, Jambi Province, participated in the study. Inclusion criteria required participants to be village midwives with more than two years of experience. Exclusion criteria included retired midwives and those unwilling to participate. Participants were selected based on data from the Muaro Jambi District Health Office and village mapping. In villages with two midwives, one was chosen according to the inclusion criteria.

The study utilized a performance instrument for village midwives in the Maternal and Child Health

program provided by the Indonesian Ministry of Health. The questionnaire on the performance of village midwives was adapted from the research by Yunita *et al.* and consisted of 10 questions [16]. Responses were scored as either 1 for 'completed' or 0 for 'not completed'. The performance of the village midwives was categorized into two objective criteria; Good (if the respondent's score was equal to 6) and poor (if the score was less than 6). The questionnaire was validated, as all question items were deemed valid with a calculated r-value greater than 0.3. Reliability was also confirmed, with a Cronbach's alpha value exceeding 0.6, indicating high consistency. For assessing supervision, training, and attitudes, questionnaires were adapted from previous research. The supervision parameter was assessed using a questionnaire consisting of 5 indicator questions. Two objective criteria were used to evaluate supervision; 'ever' (if the respondent's score was equal to 4) and 'never' (if the score was less than 4). The training parameter was measured using a similar 5-question questionnaire, applying a Guttman scale with scores of 0 and 1. The same criteria ('ever' (score=4) and 'never' (score<4)) were applied to the training parameter. For the attitude parameter, a 7-question questionnaire was used, also employing a Guttman scale with scores of 0 and 1. Attitudes were classified as either 'positive' (if the respondent's score was equal to 5) or 'negative' (if the score was less than 5).

This study was conducted in February-March 2024 at Muaro Jambi Regency, Jambi Province and 2 Staff of Muaro Jambi district health office, trained previously using the instrument were enlisted. Before all respondents received a thorough explanation of the goals and procedures involved in data collection.

SPSS 20.0 was used for data entry and analysis. Frequency and percentages were calculated for categorical parameters including age, education level, marital status, length of service, use of official vehicles, training, rewards, supervision, and attitudes. Inferential statistics were investigated using the Chi-square test to determine the relationship between village midwifery and its general features. Statistical significance was defined as a p-value of less than 0.05. Additionally, binary logistic regression was used to find possible parameters that could affect village midwifery performance.

Prior to data collection, all participants signed an informed consent form, and the research ethics committee of Universitas Jambi, Indonesia, granted permission to perform this study (Number: 572/UN21.8/PT.01.04/2024).

Findings

The majority of midwives who participated in the study were aged 31-40 years (97 midwives, 56.7%), married (160 midwives, 93.6%), and held a Diploma 3 in midwifery (104 midwives, 60.8%). Most had been working for 11 years or more (104 midwives, 60.8%), did not use government vehicles (112 midwives, 65.5%), and did not receive compensation (112 midwives, 65.5%). Additionally, 101 midwives (59.8%) had never attended training, while 139 (81.3%) had received training, and 119 midwives (69.9%) exhibited a predominantly positive attitude (Table 1).

Table 1. Demographic characteristics of the participants

Characteristics	n (%)
Age	
20-30	36 (21.1)
31-40	97 (56.7)
≥41	38 (22.2)
Marital status	
Married	160 (93.6)
Unmarried	11 (6.4)
Educational level	
Bachelor of midwifery	67 (39.2)
Diploma in midwifery	104 (60.8)
Working duration	
1-10 years	67 (39.2)
≥11 years	104 (60.8)
Official vehicle	
Available	59 (34.5)
Not available	112 (65.5)
Incentives outside salary	
Yes	59 (34.5)
No	112 (65.5)
Midwifery clinical training	
Ever	68 (40.2)
Never	101 (59.8)
Supervision in 1 year	
Ever	139 (81.3)
Never	32 (18.7)
Attitude	
Good	119 (69.6)
Not good	52 (30.4)

The statistically significant parameters were age, education, length of employment, and supervision within the past year (Table 2).

Table 2. Factors associated with the performance of village midwives in MCH services

Parameter	Performance		p-value
	Good	Poor	
Age			
20-30	9 (25)	27 (75)	
31-40	55 (56.7)	42 (43.5	0.013*
≥41	9 (90)	1 (10)	
Education			
Bachelor of midwifery	50 (74.6)	17 (25.4)	0.014*
Diploma in midwifery	46 (44.2)	58 (55.8)	
Working duration			
1-10 years	22 (32.8)	45 (67.2)	0.168
≥11 years	74 (71.2	30 (28.8)	
Supervision in 1 year			
Ever	85 (61.2)	54 (38.8)	0.046*
Never	11 (34.4)	21 (65.6)	

*Binary logistic regression ≤0.05

According to the logistic regression analysis, significant parameters in the univariate analysis include age, education level, length of service, incentives outside salary, and supervision within the past year. In the multivariate analysis, the significant parameters were age and education level (Table 3).

Table 3. Binary logistic regression analysis for predicting the performance of village midwives

Parameters	Univariable analysis		Multivariable analysis	
	COR (95% CI)	p-value	aOR (95% CI)	p-value
Age				
20-30	1.00 (ref)	-	1.00 (ref)	-
31-40	27.000 (2.993-243.531)	0.075	14.609 (1.213-175.925)	0.035*
≥41	6.873 (0.838-56.386)	0.564	4.142 (0.126-135-688)	0.425
Marital status				
Married	1.00 (ref)	-	1.00 (ref)	-
Unmarried	4.577 (2.394-8.749	0.0001*	1.160 (0.246-5.464)	0.851
Educational level				
Bachelor of midwifery	1.00 (ref)	-	1.00 (ref)	-
Diploma in midwifery	3.708 (1.893-7.267)	0.0001*	0.426 (0.191-0.949)	0.037*
Working duration				
1-10 years	1.00 (ref)	-	1.00 (ref)	-
≥11 years	0.345 (0.218-0.545)	0.0001*	0.306 (0.006-16.807)	0.563
Official vehicle				
Available	1.00 (ref)	-	1.00 (ref)	-
Unavailable	1.219 (0.644-2.310)	0.543	0.814 (0.363-1.825)	0.617
Incentives				
Yes	1.00 (ref)	-	1.00 (ref)	-
No	0.341 (0.178-0.655)	0.001*	1.951 (0.873-4.357)	0.103
Midwifery clinical training				
Yes	1.00 (ref)	-	1.00 (ref)	-
No	0.801 (0.431-1.487)	0.481	1.062 (0.488-2.310)	0.880
Supervision in 1 year				
Ever	1.00 (ref)	-	1.00 (ref)	-
Never	3.005 (1.343-16.723)	0.007*	0.380 (0.142-1.020)	0.055
Attitude				
Good	1.00 (ref)	-	1.00 (ref)	-
Not good	0.648 (0.332-1.265)	0.204	1.208 (0.527-2.765)	0.655

COR: Crude odds ratio, aOR: Adjusted odds ratio, CI: Confidence interval, *p-value≤0.05

Discussion

This research has aimed to analyze determinants of village midwife performance in maternal and child health services in Jambi Province, Indonesia. There was no observed relationship between supervision and the performance improvement of village midwives. Various factors contributed to midwife performance. Research conducted at Puskesmas Pidie, Aceh, reveals that organizational factors significantly impact midwife performance, particularly compensation. Midwives who receive adequate compensation tend to perform better than those with insufficient compensation. Factors such as experience, demographics, motivation, satisfaction, and compensation levels greatly influence performance. Specifically, poor performance is likely in 99.8% of cases where experience, demographics, motivation, satisfaction, and compensation are lacking. Conversely, when midwives benefit from substantial experience, favorable demographics, strong motivation, high satisfaction, and good compensation, the likelihood of achieving good performance increases to 4.8% [17].

The majority of village midwives had not participated in midwifery clinical training. Despite evidence indicating that such training can enhance midwives' performance by improving their knowledge and practical skills to meet established standards, many had yet to benefit from it. To achieve meaningful improvements in midwifery practice, it is essential to provide ongoing training, strengthen capacity, and secure robust community support [18]. Research has conducted by the Australia Indonesia Partnership for Maternal and Neonatal Health (AIPMNH) in Nusa Tenggara Timur have revealed a low level of knowledge and skills among coordinator midwives (Bikor) prior to training. Notably, their skill levels do not significantly differ from those of junior midwives even 2-3 years post-training. Factors such as education and recent childbirth experience are found to influence the skill levels of Bikor. To address these gaps, it is crucial to enhance skills through Clinical Instruction (CI) training and regular clinical practice. While consistent practice can lead to skill improvement over the first 6 months, it is important to note that skills may decline after 2 years without ongoing training and support [19].

Research conducted in Tanah Datar District identifies several parameters associated with midwife performance: Length of service, supervision by coordinating midwives, motivation, and job satisfaction [20]. The suboptimal performance of midwifery services in South Aceh Regency can be attributed to insufficient guidance from the Health Office, as well as low levels of knowledge and motivation among midwives [21]. Research in Bangli Regency demonstrates a significant relationship between the performance of village midwives and factors such as competence, financial compensation, and supervision. Among these parameters, supervision has the most substantial impact, influencing midwife performance 25 times more than the other factors. Adiputri *et al.*'s research [22] in Semarang reveals that facilitative supervision lacked formal preparation, consisting only of an assignment letter and a checklist. Both Bikor and PMB had not

received specialized training or socialization related to facilitative supervision. Instead, Bikor was provided solely with a checklist by the Health Office as an assessment guideline, without a reference book for facilitative supervision. Additionally, orientation on the checklist for PMB was not conducted for all Bikors. Consequently, critical components of facilitative supervision, such as self-assessment by PMB and verification by Bikor in collaboration with PMB, were not implemented. As a result, follow-up supervision was solely based on Bikors' assessments. Supervision often took the form of unscheduled inspections without prior agreement on the implementation schedule with PMB, occurring during working hours at the Public Health Center.

To enhance the performance and professionalism of midwives, mentoring relationships are crucial for developing professional confidence. These relationships should be structured with clear duration and agreements. Mentors are responsible for listening, challenging, supporting, and guiding their mentees, fostering research, exploration, and reflective practice. While the mentored midwife retains responsibility for her practice and obligations, senior midwives or mentors play a key role in guiding less experienced colleagues to improve performance, service quality, and address areas of poor performance. Performance supervision can be conducted through supportive, statutory, and professional supervision methods [23].

Research conducted in Belgium examine the relationship between advanced midwifery practitioners' task performance and their competencies across various domains. The study found that certain tasks, such as research and clinical expertise, were performed inadequately. This underperformance was attributed to factors related to work organization, competency deficiencies, and insufficient leadership [24]. Research in Ethiopia express that autocratic leadership is the most common style among midwifery leaders and has a negative effect on midwives' performance. Democratic and laissez-faire leadership styles are associated with improved performance [25]. Research in Sudan indicates that supervision of midwives can significantly enhance service quality. It also aids in developing robust supervision systems, increases active engagement within the community, and strengthens the relationships between health facilities and midwives. Additionally, effective supervision can boost public trust in midwives [26-29].

Study limitation

The strict inclusion criteria may limit the generalizability of the study's findings. For instance, only midwives with more than two years of experience were included, potentially excluding insights into the performance of newer midwives or those with differing professional backgrounds. Additionally, participant selection based on Health Office data and village mapping could introduce bias if the data is incomplete or inaccurate, which may affect the overall representativeness of the sample.

Strength and recommendation

This research is highly relevant to the local context of Muaro Jambi, offering valuable insights for policy development and improved planning of public health programs in the region. The study also provides recommendations for fostering partnerships between the government, educational institutions, and health organizations to support training and professional development initiatives for village midwives.

Conclusion

Age and education level are key determinants of village midwives' performance in maternal and child health services.

Acknowledgments: The authors would like to thank all participants for their participation and cooperation throughout the study. They also thank the Faculty of Public Health of the University of Indonesia and the Health Polytechnic of the Jambi Ministry of Health for their support and assistance.

Ethical Permissions: Prior to data collection, all participants signed an informed consent form, and the research ethics committee of Universitas Jambi, Indonesia, granted permission to perform this study (Number: 572/UN21.8/PT.01.04/2024).

Conflicts of Interests: None declared.

Authors' Contribution: Ruwayda R (First Author), Introduction Writer/Original Researcher/Methodologist/Discussion Writer/Statistical Analyst (40%); Hastono SP (Second Author), Original Researcher/Discussion Writer (20%); Siregar KN (Third Author), Introduction Writer/Original Researcher/Discussion Writer (20%); Martha E (Fourth Author), Introduction Writer/Original Researcher/Discussion Writer (10%); Nurdini L (Fifth Author), Introduction Writer/Original Researcher/Discussion Writer (10%)

Funding/Support: None Funding.

References

1- WHO. Maternal death surveillance and response: Technical guidance: Information for action to prevent maternal death. Geneva: World Health Organization; 2013.

2- Nove A, Friberg IK, De Bernis L, McConville F, Moran AC, Najjemba M, et al. Potential impact of midwives in preventing and reducing maternal and neonatal mortality and stillbirths: A lives saved tool modelling study. Lancet Glob Health. 2021;9(1):e24-32.

3- WHO. Strengthening quality midwifery education for universal health coverage 2030: Framework for action. Geneva: World Health Organization; 2019.

4- WHO. Maternal mortality [Internet]. Geneva: World Health Organization; 2024 [cited 2024, April, 26]. Available from: https://www.who.int/news-room/fact-sheets/detail/maternal-mortality.

5- Kemenkes RI. Indonesia health profile 2021. Jakarta: Kementrian Kesehatan Republik Indonesia; 2022. [Indonesian]

6- McCarthy J, Maine D. A framework for analyzing the determinants of maternal mortality. Stud Fam Plann. 1992;23(1):23-33.
7- WHO. Nursing and midwifery [Internet]. Geneva: World Health Organization; 2024 [cited 2024, May, 3]. Available from: https://www.who.int/news-room/fact-sheets/detail/nursing-and-midwifery.
8- Okereke E, Ishaku SM, Unumeri G, Mohammed B, Ahonsi B. Reducing maternal and newborn mortality in Nigeria-A qualitative study of stakeholders' perceptions about the performance of community health workers and the introduction of community midwifery at primary healthcare level. Hum Resour Health. 2019;17(1):102.
9- Pappu NI, Öberg I, Byrskog U, Raha P, Moni R, Akhtar S, et al. The commitment to a midwifery centre care model in Bangladesh: An interview study with midwives, educators and students. PLoS One. 2023;18(4):e0271867.
10- Musaddiq T. The impact of community midwives on maternal healthcare utilization. Health Econ. 2022;32(3):697-714.
11- Nallala S, Ghosh U, Desaraju SS, Kadam S, Kadarpeta RR, Van Belle S. Why are they "unreached"? Macro and Meso determinants of health care access in hard to reach areas of Odisha, India. Int J Equity Health. 2023;22(1):2.
12- D'Ambruoso L, Achadi E, Adisasmita A, Izati Y, Makowiecka K, Hussein J. Assessing quality of care provided by Indonesian village midwives with a confidential enquiry. Midwifery. 2009;25(5):528-39.
13- Triyana M. The effects of Indonesia's 'midwife in the village' programme 10 years post-launch. Popul Stud. 2016;70(3):365-76.
14- Lindgren H, Bogren M, Osika Friberg I, Berg M, Hök G, Erlandsson K. The midwife's role in achieving the sustainable development goals: Protect and invest together-the Swedish example. Glob Health Action. 2022;15(1):2051222.
15- Harvey G, Kelly J, Kitson A, Thornton K, Owen V. Leadership for evidence-based practice-Enforcing or enabling implementation?. Collegian. 2020;27(1):57-62.
16- Yunita H, Kuntjoro T, Purnami CT. Factors affecting village midwives work performance in conducting early detection of high risk pregnancy in the antenatal care in south Bengkulu district. J Indones Health Manag. 2013;1(2):79-88. [Indonesian]
17- Mirdahni R, Kintoko Rochadi R, Arma AJA. Factors that influence the performance of midwives in implementing standard antenatal services in the work area of the Pidie Health Center. SERAMBI SAINTIA: JURNAL SAINS DAN APLIKASI. 2021;9(1):40-8. [Indonesian]
18- Mwakawanga DL, Rimoy M, Mwanga F, Massae AF, Mushy SE, Kisaka L, et al. Strengthening midwives' competencies for addressing maternal and newborn mortality in Tanzania: Lessons from Midwifery Emergency Skills Training (MEST) project. Midwifery. 2023;122:103695.
19- Asnawi A, Wungouw EE, Kerong IH, Butu Y, Labo I, impson L. Knowledge and skills of coordinator midwives and midwives in NTT. Australia Indonesia Partnership for Maternal and Neonatal Health; 2017. [Indonesian]
20- Yarnita Y. Factors related to village midwife performance in efforts to reduce neonatal mortality in Tanah Datar district. Glob Health J. 2020;3(3):100-8. [Indonesian]
21- Husna A, Besral B. Performance of village midwives in the health care guarantee program for the poor. KESMAS. 2009;4(1):18-23. [Indonesian]
22- Adiputri A, Wijaya IPG, Karmaya INM. The competency, financial compensation, supervision and performance of the village midwives in the Bangli regency. Public Health Prev Med Arch. 2014;2(1):76-80. [Indonesian]
23- International Confederation of Midwives [Internet]. Mentoring Guidelines for Midwives. Cent Mentor Excell. 2020;39:12. [cited 2020, Januari, 5]. Available from: https://internationalmidwives.org/resources/mentoring-guidelines-for-midwives/
24- Van Hecke A, Goemaes R, Verhaeghe S, Beyers W, Decoene E, Beeckman D. Leadership in nursing and midwifery: Activities and associated competencies of advanced practice nurses and midwives. J Nurs Manag. 2019;27(6):1261-74.
25- Fenta Kebede B, Aboye T, Dagnaw Genie Y, Tesfa TB, Yetwale Hiwot A. The effect of leadership style on midwives' performance, southwest, Ethiopia. J Healthc Leadersh. 2023;15:31-41.
26- Ma'rufi I, Ningtyias FW, Mardiyanti M. The influence of knowledge, motivation, leadership, and workload toward public health center midwives' performance in facilitative supervision of MCH program in Lumajang district. Health Notions. 2018;2(4):478-82.
27- WHO. Web appendix. Mapping of WHO competencies for the maternal and newborn health (MNH) professional based on previously published international standards. Geneva: World Health Organization; 2018.
28- Chen S, Wang R, Xu N, Zhang J, Liu Y, Cong S, et al. Identification of factors influencing core competence promotion among professional nurses and midwives: A qualitative study using the COM-B model. Nurse Educ Pract. 2023;69:103619.
29- Michie S, Van Stralen MM, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. Implement Sci. 2011;6(1):42.