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Midwives Motivation and the Use of Partograph

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Abstract

Background: Maternal Mortality Rate (MMR) is one of the indicators used to assess public health status. In 2023, the highest number of maternal deaths occurred during labor, accounting for 38.94%, highlighting the need for proper management through the use of a partograph as a monitoring tool during childbirth. However, there are challenges in its usage, one of which is the motivation of midwives. Purpose: This study aims to determine the relationship between midwives' motivation and the use of partograph at Fajar Bulan Community Health Center, West Lampung Regency. Method: This study employed a quantitative descriptive research design with a cross-sectional approach. The sampling technique used was Total Sampling, involving 67 midwives. Bivariate analysis was conducted using Spearman's rank correlation test. Result: The obtained p-value is $0.00 < \alpha (0.05)$, indicating a significant relationship between midwives' motivation and the use of partographs. Additionally, the correlation coefficient is 0.474, which signifies a moderate or sufficient relationship in a positive direction. This means that the higher the midwives' motivation, the higher the use of partographs at Fajar Bulan Community Health Center, West Lampung Regency. Conclusion: Midwives' motivation is a factor related to the use of partograph at Fajar Bulan Community Health Center, West Lampung Regency. It is recommended to improve services related to the use of partograph as a monitoring tool during labor.

Keywords: midwife, motivation, partograph, labor

INTRODUCTION

Maternal Mortality Rate (MMR) is one of the indicators used to assess the level of public health. According to the WHO (World Health Organization), in 2024, MMR worldwide 2020 reached around 287,000 people, of which almost 800 women died from preventable causes related to pregnancy and childbirth. The high mortality rate shows that maternal health is a crisis problem in many parts of the world, and the large number of deaths caused by preventable factors emphasizes the need to increase access to quality health services (WHO, 2024). Maternal mortality refers to all cases of death that occur during pregnancy, childbirth, and the postpartum period caused by factors related to the process, not due to other factors such as accidents or unforeseen events. Based on data from the Indonesian Health Profile in 2023, it was 4,460 people. This figure shows an increase in the maternal mortality rate when compared to the 2022 MMR, which was 3,572 people (Ministry of Health, 2024).

According to data from the Lampung Health Profile in 2023, the maternal mortality rate 2023 in Lampung province reached 105 per 100,000 live births. This figure shows an increase in the number of maternal deaths from 2022, which was 96 per 100,000 live births (Lampung Provincial Health Office, 2024). Based on data from the Lampung Health Profile in 2023, the number of maternal deaths in West Lampung in 2023 was 5. This figure shows an increase in the maternal mortality rate in 2022 by 2 people (Lampung Provincial Health Office, 2024). The highest incidence of maternal deaths in 2023 occurred during childbirth, which was 38.94 percent according to the Indonesian Population Thematic Analysis.

One of the important steps in handling labor is to use a partograph. By using a partograph correctly and consistently, midwives can record the progress of labor, the condition of the mother and fetus, care provided during labor, and other information. Thus, midwives can identify labor

complications early and make timely decisions. In the use of partographs, there are obstacles, one of which is the motivation of midwives. Midwives do not use partographs to monitor the progress of labor because they do not have a good motivation to work. The results of a study in China recommend an accurate partograph so that it can optimize decision making on maternal and neonatal outcomes (Sun et al., 2024)

The partograph is an effective tool to monitor the progress of labor. When used effectively, partograph can prevent obstructed labor, which is a major cause of maternal and neonatal mortality, especially in developing countries (Margo S. Harrison, Jennifer B. Griffin, Elizabeth M. McClure, Bonnie Jones, Katelin Moran, 2016). The rate of partograph use by obstetric health workers in Ethiopia was estimated at 59.95% (95% CI: 46.8–73.09) (Ayenew & Zewdu, 2020). In a study in public health institutions in Southwestern Ethiopia, only 43% of obstetric health workers routinely used partographs (Abate et al., 2023). Research shows the rate of partograph use is 68.9% among midwives in public health institutions (Hagos et al., 2020). Although 64% of respondents reported routine use of the partograph, actual use was only 29%, well below the WHO standard (Abate et al., 2023). Barriers to partograph use: unavailability of the partograph in the delivery room was reported as a major barrier, staff shortages and high workloads hindered effective use of the partograph (Tilahun et al., 2021), and lack of training and knowledge on partograph use were significant barriers (Tilahun et al., 2021).

Partial use of part of the use in public health facilities varies with daily use, ranging from 32.8% to 71.7%. For example, in the Ilu ABA Bor zone, Ethiopia, it was used by 32.8% of participants, while 71.7% was achieved in the Wolaita zone in Ethiopia (Tesfaye et al., 2024). The majority was 51 (94.4%). In Africa, 279 partographs were analyzed, the average use of the partograph was 20% correct and 80% below standard or not recorded (Mabasa et al., 2024) Based on a preliminary study conducted at the Fajar Bulan Health Center, West Lampung Regency, in October and November 2024 there were 14 deliveries with 10 partographs that were not filled in completely and 4 partographs filled in completely. This shows that there is a lack of midwife motivation in using the partograph optimally. With the incomplete filling of the partograph, the data needed to make clinical decisions are not recorded properly, which increases the risk of complications in handling labor. Based on the background above, the author is interested in conducting further research at the Fajar Bulan Health Center, West Lampung Regency, regarding "The Relationship between Midwives' Motivation in Using Partographs."

METHOD

Quantitative research is descriptive, with a cross-sectional approach used to describe the conditions of the subject or object that is the focus of the research. This study was conducted to determine the motivation of midwives in using partographs, namely external and internal motivation. The population in the study. The population and sample of this study were 67 midwives in the Fajar Bulan Health Center Work Area, West Lampung Regency, using the total sampling technique. The research instrument used in this study was a midwife motivation questionnaire taken from a study entitled 'Factors Related to the Work Motivation of Health Workers in the Outpatient Unit of the Cijaku Health Center, Lebak Regency' in 2021 by Mia Rahmawati. Furthermore, the Checklist for the use of partographs has been tested by expert judgment by asking for help from the Lecturer of the Midwifery Department, Faculty of Nursing and Health Sciences, Muhammadiyah University of Semarang. In this study, there are two types of analysis, namely univariate analysis and bivariate analysis. Univariate analysis is used to see the frequency distribution of age, education, and length of service. This bivariate analysis uses the Spearman Correlation Test, which is done by comparing the p-value to the significance level ($\alpha = 0.05$). If the p-value is smaller than α ($p < 0.05$), then the statistical test results are considered significant, meaning there is a relationship between the variables being tested.

RESULT & DISCUSSION

This study was conducted in the working area of Fajar Bulan Health Center, West Lampung Regency. The population in this study were all midwives working at Fajar Bulan Health Center. The sampling technique in this study used Total Sampling, which was 67 midwives. Use of partographs At Fajar Bulan Health Center, West Lampung Regency, in October and November 2024 there were 14 deliveries with 10 partographs that were not filled in completely and 4 partographs that were filled in completely. This shows that there is a lack of midwife motivation in using partographs optimally.

Table 1. Univariate Frequency Distribution

	Frequency	Presentation
Age		
<26 years	5	7,5%
26-35 years	44	65,7%
36-45 years	8	11,9%
>45 years	10	14,9%
Education		
Diploma 3	47	70,1%
Diploma 4	12	17,9%
Bachelor	7	10,4%
Profession	1	1,5%
Work		
<6 years	9	13,4%
6-10 years	21	31,3%
>10 years	37	55,2%
Motivation		
High	41	61,2%
Middle	26	38,8%
Low	0	0%
Use of partograph		
Correct and complete	56	61,2%
Incomplete	11	38,8%

Based on the analysis results, most respondents were aged between 26 and 35 years, namely 44 respondents (65.7%) who were included in the adult category, meaning that at that age, a person already has a more mature understanding and mindset. As a person gets older, the experience and information they get will also increase, so that it will affect their knowledge because the ability to search, receive, absorb, and apply information is different in their age category. This shows that age plays a role in the understanding and skills of midwives, including recording labor using a partograph. As they get older, midwives gain more experience in handling labor, so they become more skilled in searching, receiving, absorbing, and applying information.

The next characteristic of respondents is education; midwifery education in Indonesia consists of Diploma 3, Diploma 4, profession, and professional education levels. According to Law Number 4 of 2019 concerning Midwifery, which regulates the authority to practice midwifery for each midwife education qualification, namely midwives who graduated from D3 education can only practice midwifery in health care facilities. Based on the results of the analysis, some respondents had a final education of D3 (70.1%), This shows that the majority of respondents can only provide services in health care facilities. Most respondents have not been able to continue their education to a higher level due to being constrained by relatively expensive costs and time constraints that make it difficult to find time to continue their education. These results are in line with the Tigray, Ethiopia study of 198 midwives, 73.3% used a partograph to monitor the progress of labor. Diploma education (AOR = 3.8, CI = 2.2-6.2), receiving maternal neonatal emergency training (AOR = 5.6, CI 1.1-28.5), being between 20 and 29 years old (AOR = 0.1, CI = 0.01-0.50), and male health care provider (AOR = 0.37, CI = 0.44-0.95) were factors significantly associated with partograph use. The use of partograph in this study was below the WHO recommendation. Special emphasis and interventions should be given to improve the use of the partograph (Hailu et al., 2018)

Based on the results of the study, most respondents had high motivation (61.2%), while the rest had moderate motivation (38.8%) and there were no respondents with low motivation. High motivation in midwives can contribute to improving the quality of health services and can also encourage midwives to comply with standard operating procedures (SOPs) such as the use of partographs. From the results of the questionnaire, it was found that the wage or salary factor had the lowest value in midwife motivation. This shows that most respondents feel that the wages they receive are not in accordance with their expectations or the workload they are undertaking. Officers with more than 5 years of work experience are 4.93 times more likely to use partographs than those with less than 1 year of experience (Markos et al., 2020). The results of Gebreslassie's study showed that 83% of 406 midwives had used partographs to monitor labor. In addition, the use of partograph was statistically associated with female gender (AOR=2.09, 95%CI= (1.11, 3.93), age group 20-25 (AOR=0.25, 95%CI= (0.07, 0.88), being a diplomat midwife (AOR=0.01, 95%CI= (0.00, 0.28)) and having met the requirements of pre-service training (AOR=0.01, 95%CI= (0.02, 0.05)). The utilization of partograph

by participants was generally good. However, most of them used it inappropriately. Age, gender, education level, year of qualification from pre-service training were variables that showed an association with the utilization of partograph. Providing training in the workplace on partograph is recommended to improve the utilization of partograph (Gebreslassie et al., 2019).

TABLE 2. Analysis of the Relationship between Midwives' Motivation and the Use of Partographs

Motivation	Use of partograph		
	N	P-Value	Nilai r
	67	0,000	0,474

Based on Table 2, the results of the p-value are $0.00 < \alpha (0.05)$, which means that there is a significant relationship between midwife motivation and the use of partographs. In addition, there is a correlation coefficient value of 0.474, which indicates a moderate or sufficient level of relationship with a positive direction. This means that the higher the midwife's motivation, the higher the use of partographs. Conversely, the lower the midwife's motivation, the lower the use of partographs. Thus, it can be said that H_a is accepted and H_0 is rejected. These results indicate a fairly significant positive relationship between midwife motivation and the use of partographs. It can be stated that H_a is accepted and H_0 is rejected. Barriers and incentives that influence the use of partographs in maternal health services in Nigeria. Maternal mortality is still a major concern in this country, so it is very important to evaluate the factors that shape the use of important tools such as partographs (Elendu et al., 2024). In addition to motivation, several other factors also play a role in increasing the use of midwife participants. The Ethiopian study showed that midwives were given training courses to use it compared to those who had not trained. Monitoring and guidance clearly increase participant use (Mezmur et al., 2017) (Tilahun et al., 2021). Midwives who receive regular supervision are more likely to use party personality effectively.

According to the Big Indonesian Dictionary (KBBI), motivation is an effort that can encourage a person or a group of people to do something because they want to achieve the desired goal or feel satisfied with their actions. It can be said that midwife motivation is the drive that drives midwives to provide optimal midwifery services, such as in caring for pregnant women, childbirth, and postpartum. Herzberg's motivation theory, also known as the two-factor theory, distinguishes between internal and external factors. External factors, such as working conditions, relationships between colleagues, wages and others, if not met can cause dissatisfaction. Meanwhile, internal factors, such as responsibility, recognition, and development of self-potential, directly increase satisfaction and motivation. This shows that midwives who have great responsibility for the health of mothers and babies will be more motivated and lack of incentives or poor relationships with colleagues can reduce midwife motivation. Thus, these two factors need to be considered to create a work environment that supports and motivates midwives in using partographs effectively. This is in line with the results of the study that high motivation can encourage midwives to be more disciplined and careful in carrying out standard procedures, including recording and monitoring labor using a partograph by completing all the necessary information, making it easier to monitor the labor process. Based on research conducted by (Rahayu, 2020), most respondents showed good motivation related to responsibility, recognition, and the work itself. This study shows that responsibility, recognition, and the work itself are related to midwives' motivation in using partographs where these three factors are included in internal motivational factors. Other studies have found that the best strategy for optimal use of this tool is a partograph or/and displayed in the delivery room, manager commitment and the availability of a partograph to increase the motivation of health workers to monitor labor (Kourouma et al., 2020).

Abate found in her study that 64% of respondents reported that they routinely used a partograph to monitor the progress of labour, actual partograph use in the study area was quite low (29%) and fell below the WHO standard by one third. In this study, level of specialization (MSc/specialist) (AOR = 3.52, 95% CI = 1.03, 11.98), partograph training (AOR = 3.63, 95% CI = 1.45, 9.09), number of staff assigned per shift (> 2) (AOR = 2.12, 95% CI = 1.58, 4.11), having good knowledge (AOR = 1.68, 95% CI = 1.21, 3.02) and good attitude towards partograph utilization (AOR = 2.00, 95% CI = 1.25, 5.31) were significantly associated with partograph utilization at $p < 0.05$ (Abate et al., 2023). Some factors that influence the use of partographs include training, health workers who receive training on partographs are 7.83 times more likely to use them routinely than those who do not receive training (Tilahun et al., 2021). Good knowledge of partograph increases the likelihood of its use by 5.84 times (Tilahun et al., 2021). Midwives who receive supervision four times a year are 18 times more likely to use partograph than those who do not receive supervision (Hagos et al., 2020). A higher number of

staff per shift (>2) increases the likelihood of partograph use by 2.12 times. A positive attitude towards partograph increases the likelihood of its use by 2.00 times (Haile et al., 2020).

Another study found that most midwives partially filled the partograph, partograph is useful for monitoring fetal and maternal development and labor (89.0%) and to avoid maternal labor complications in the labor ward. Some of the reasons for not filling the partograph by midwifery service providers include lack of knowledge and skills in using the partograph (56.4%), high workload (21.8%), lack of supervisory support (19.2%) and low staff motivation (2.6%). This study recommends increasing routine supervision to ensure that the partograph is filled in a timely manner. Hospital managers can be encouraged to increase the number of midwifery service providers to improve efficiency in the hospital and emphasize on training programs so that midwifery service providers have the relevant skills to complete the partograph during labor. (Muthusi et al., 2019). Zelellw's study said that respondents believed that partographs were an important tool used to reduce maternal and fetal mortality and morbidity and to prevent prolonged and obstructed labor, and postpartum hemorrhage. Excessive workload, lack of skills and competence, negligence, lack of motivation, and lack of infrastructure and resources hindered the use of partographs (Zelellw & Tegegne, 2018). Factors such as partograph training [adjusted odds ratio (AOR) = 3.63, 95% CI: 2.57-5.25], good knowledge of partograph (AOR = 2.63, 95% CI: 1.62-4.26), good attitude towards partograph (AOR = 1.95, 95% CI: 1.35-2.82), availability of partograph (AOR = 0.89, 95% CI: 2.24-6.61), and being in the midwife profession (AOR = 0.09, 95% CI: 1.78-5.25) were significantly associated with partograph use. Conclusion: The pooled prevalence of partograph use in Ethiopia is low. Partograph training, good knowledge of partograph, good attitude towards partograph, availability of partograph in health facilities, and midwife profession were significantly associated with partograph use (Ayele et al., 2025).

CONCLUSION

The study conducted at Fajar Bulan Health Center, West Lampung, aims to determine the relationship between midwife motivation and the use of partographs, which are very important tools in monitoring the progress of labor. The results showed that the majority of midwives at the health center were early adults, had a final D3 midwifery education, were experienced, had high motivation to use partographs and used partographs well. This indicates that midwives at Fajar Bulan Health Center have realized the importance of using partographs in providing maternal and infant health services. Based on bivariate analysis, there was a significant positive relationship between midwife motivation and the use of partographs. Midwives who have high motivation tend to be more consistent and careful in using partographs. This shows that motivation is a strong factor that encourages midwives to use partographs effectively.

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