THE INFLUENCES OF AGE, TRAINING, AND WORK MOTIVATION ON WORK EXPERIENCE IN MATERNAL EMERGENCY MANAGEMENT IN THE NORTH KALIMANTAN BORDER AREAS

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ABSTRACT

Background: Maternal mortality rate (MMR) in the border areas was disproportionately high in Indonesia. MMR can be reduced with the experience of midwives in maternal emergency management. The hypothesis was that age, training, and work motivation were important factors that affected the experience of midwives. This study aimed to determine the effect of age, training, and work motivation on the experience of managing maternal emergencies among midwives working in the border areas.

Subjects and Method: This was a cross-sectional study conducted in North Kalimantan border areas. A sample of 105 midwives was selected for this study. The dependent variable was the experience of the midwife. The independent variables were age, training in maternal emergency, and work motivation. The data were collected by questionnaire, and analyzed using multiple logistic regression.

Results: Experience of midwives enhanced with age ≥ 35 years (OR= 1.88; 95% CI= 2.07 to 20.94; p= 0.001), training in maternal emergency (OR= 2:04; 95% CI= 2.09 to 28.39; p= 0.002), and higher work motivation (OR= 1.79; 95% CI= 1.93 to 18.72; p= 0.002).

Conclusion: A midwife's experience improves with age, training in maternal emergency, and work motivation.

Keywords: age, training, work motivation, experience, maternal emergency,

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BACKGROUND

Maternal death according to (WHO) is death during pregnancy or within 42 days after termination of pregnancy, due to all causes related to or aggravated by pregnancy or its management, but not due to accident/injury.

The main causes of maternal death in Indonesia are hypertension in pregnancy and post-partum bleeding so that optimal management is needed to prevent maternal and infant mortality (Strategic Plan of the Ministry of Health, 2015). Several diseases that cause maternal death can be detected early and anticipated so that their manifestations will not get worse starting from pregnancy to the puerperium. However, other causes of maternal death are difficult to detect, even in women with heart disease, it is not recommended to get pregnant (Danu et al., 2015). The midwifery care management system is one of the factors that allegedly causes maternal death, especially in the detection of high risk pregnant women who are not optimal. The ability of the management and implementation of the MCH program is expected to provide the best service.

Quality services are determined by the human resource (HR) factor. An important factor that needs to be considered is that the experience of the midwife is one of the benchmarks for the quality of these human resources. Experience related to handling maternal emergencies based on the main tasks of the midwife function, administrative and coaching activities that support the success of the tasks carried out is one of the factors that affect the performance of midwives (Kemenkes RI, 2013).

The factors that influence the experience and performance of midwives according to Sri (2014) are motivation, supervision and performance, while another opinion stated by Kusuma (2016) argues that leadership, number of human resources, work atmosphere and motivation also affect the performance of midwives so that they can increase the experience of midwives in emergency management. According to Sri (2014) explained that midwives who have good performance motivation provide good performance outcomes and tend to increase, and midwives with good motivation can improve performance because the effectiveness of performance depends on the motivation embedded in the soul so that it can reduce the incidence of morbidity and mortality in both mother and child. and child. Agustina (2014) argues that leadership style, work environment, incentives and skills have an effect on improving the performance and experience of midwives. Based on the data above, the researcher is interested in taking the title "The Influence of Age, Training and Work Motivation on Maternal Emergency Management at the North Kalimantan Border".

SUBJECTS AND METHOD

1. Study Design
This study is an observational analytic study with a cross-sectional design. The research was conducted in North Kalimantan in 2021.

2. Population and Sample
The population in this study were all midwives on the border of North Kalimantan. Sampling was done by using purposive sampling technique. The subjects used were 105 midwives on the border of North Kalimantan.

3. Variable
The dependent variable is the experience of the midwife. The independent variables are age, training, and work motivation.

4. Operational Definition of Variables
Midwife experience is the experience possessed by midwives in carrying out their duties in accordance with the responsibilities given to handling emergencies, with low and high categories.

Age is the age of the research subject at the time the research data was collected with categories <35 years and > 35 years.

Training is training that must be carried out to improve performance, one of which is for handling material emergencies

Work motivation is the whole process of giving motives or encouragement in work that can influence someone to take an action, with low and high categories.

5. Data Analysis

Univariate analysis was conducted to see the frequency distribution and the percentage of the characteristics of the research subjects. Bivariate analysis was conducted to study the relationship between the experience of the midwife and the independent variable using the chi-square. Multivariate analysis was performed using multiple logistic regression.

6. Instrument

Overall variable data is measured using a questionnaire.

7. Research Ethics

Research ethics include research approval (informed consent), anonymity, confidentiality and ethical clearance. Research ethics number is No. 006/KEPK-FIKES UBT/VII/2021.

RESULTS

1. Sample Characteristics

The results of the study of the research subjects were 105 midwives on the border of North Kalimantan. The frequency distribution of the research subject characteristics shows that most respondents have an age of <35 years, namely 58 respondents or 55.2%, most of the respondents participated in the training, namely 80 respondents or 76.2%, most respondents have high work motivation, namely 58 respondents. or 55.2% and the last characteristic of most respondents with high pawn experience is 69 respondents or 65.7%.

Table 1. Sample characteristics (categorical data)

Characteristics	Category	Frequency (n)	Percentage (%)
Age	< 35 years	58	55.2
	≥ 35 years	47	44.8
Training	Not join	25	23.8
	Join	80	76.2
Working motivation	Good	51	48.6
	Low	47	44.8
	High	58	55.2
Midwife experience	Low	36	34.3
	High	69	65.7

1. Bivariate Analysis

The results of the bivariate analysis with the chi square test are as follows: Based on Table 2 shows that the analysis of the relationship between age and experience of the midwife with a p value < 0.001 and OR = 9.64. Midwives aged 35 years were 9.64 times more likely to have experience of a material emergency than midwives aged < 35 years. Analysis of the relationship between training and experience of midwives with p value = 0.002 and OR = 4.21,. Midwives who attended training were 4.21 times more likely to have experience in maternal emergencies compared to midwives who did not attend training.

Table 2. Bivariate Analysis

Variable Group	Midwife experience				Total		OR	p
	Low		High					
	N	%	N	%	N	%		
Age								
< 35 years	31	53.4	27	46.6	58	100	9.64	<0.001
≥ 35 years	5	10.6	42	89.4	47	100		
Training								
Not joining	15	60.0	10	40.0	25	100	4.21	0.002
Joining	21	26.3	59	73.8	80	100		
Working motivation								
Low	26	55.3	21	44.7	47	100	5.94	<0.001
High	10	17.2	48	82.8	58	100		

2. Multivariate Analysis

Multivariate analysis was carried out by statistical tests using multiple logistic regression to determine the effect of age, training, work motivation and resources on the experience of midwives. The results of the multiple logistic regression test are shown in table 3 with the following details:

Table 3 Analysis of the effect of age, training, skills, leadership style, motivation and resources on the experience of midwives

Midwife Experience	OR	95% CI		p
		Lower Limit	Upper Limit	
Age	1.88	2.07	20.94	0.001
Training	2.04	2.09	28.39	0.002
Working motivation	1.79	1.93	18.72	0.002
N observation= 105				
-2 log likelihood= 92.57				
Nagelkerke R²= 0.46				

N observation= 105
-2 log likelihood= 92.57
Nagelkerke R^2= 0.46

The results of the multivariate analysis showed that there was an effect of age on the experience of the midwife. Midwives with age 35 years had a higher probability of having experience (OR=1.88; 95% CI=2.07 to 20.94; p=0.001).

The results of the multivariate analysis showed that there was an effect of training on the experience of the midwife. Midwives who participated in the training had a higher probability of having experience (OR= 2.04; 95% CI= 2.09 to 28.39; p= 0.002).

The results of the multivariate analysis showed that there was an effect of work motivation on the experience of the midwife. Midwives who received high work motivation had a higher probability of having experience (OR=1.79; 95% CI=1.93–18.72; p=0.002).

DISCUSSION

1. The influence of age on the experience of the midwife

Based on the results of the study showed that there was an effect of age on the experience of the midwife in the management of maternal emergencies. Health HR is a very important element and influences the improvement of all aspects of the health care system for all levels of society. The quality of human resources greatly

determines the success of a company programs, especially the program to accelerate the decline in maternal mortality. Midwives with good performance are more skilled and agile than midwives with less performance, due to more work experience, in addition to other basic things related to computerization capabilities in the reporting process (Hidayah et al., 2016).

Senior midwives have more diverse innovations in problem solving and are more competent in providing services. This is because it is supported by environmental conditions that provide opportunities for midwives to attend training and learn from the experience of more senior midwives (Adriansyah, 2017). Bleeding is the highest cause of maternal death. The experience of midwives in the management of bleeding prevention is one of the keys to success in reducing maternal mortality due to bleeding (Moucheraud et al., 2015).

2. The effect of training on the experience of midwives

The results showed that there was an effect of training on the experience of midwives in the management of maternal emergencies. Training is a form of non-formal education provided to midwives in order to increase knowledge and skills to improve competence in service delivery, in addition to increasing the awareness of midwives so that they can provide services in accordance with Standard Operating Procedures (SOP).

Knowledge can be increased by attending training. Training is a form of providing additional knowledge related to the knowledge, skills and attitudes of midwives in providing treatment to form the basis of performance so as to improve the skills and knowledge of midwives and to improve performance and performance in office or develop their potential (Longgupa, 2014). In line with this, the Silfia study (2020) shows that APN training is the most influential factor in the use of partographs in childbirth by midwives. The results of statistical tests obtained POR values of 37.7; 95%CI 12.1 to 60.2. This study suggests that midwives must have an APN certificate to be valid in carrying out services. Thus knowledge can be increased, one of which is by participating in training in this study, especially related to the use of mobile partographs so that early detection can occur if problems occur in the delivery process.

Midwives can make the right decisions in handling maternal emergencies. Productivity can increase if the duration of work and training is provided to support and increase knowledge, so that by providing training, especially related to handling maternal emergencies, it is expected to improve the performance and experience of midwives in handling maternal emergencies. The experience of midwives can support the skills and competencies of health workers in this research related to the experience of midwives in order to provide optimal and quality services according to standards (Iswanti et al., 2018). Skills in handling emergency maternal midwives affect the management of bleeding prevention (Nelissen et al., 2017). Skills in providing effective treatment

and good estimation of blood loss are important priorities that must be possessed by midwives for bleeding prevention management so that midwives (Vendittelli et al., 2016).

3. The influence of work motivation on the experience of midwives

The results showed that there was an effect of work motivation on the experience of the midwife. High work motivation can increase satisfaction, both from the leadership or workers. The need for work motivation is different for each worker, work motivation can be influenced by individual or environmental factors. Other staff members in the working community can affect work motivation, so the support of work partners is one factor that needs to be considered to increase work motivation (Letchworth et al., 2017).

Freeney and Fellenz (2013) explain that work motivation for health workers (doctors, nurses and midwives) is an important thing that must be grown. High motivation will affect the quality of service so that it can improve better performance. Work motivation is influenced by a good leadership style that can motivate health workers to work well. Thus, a leader with a democratic leadership style is needed in determining the priority of problems that occur so that midwives can work optimally and have an effect on increasing experience.

The leadership style in handling problems, one of which is prevention of bleeding, must focus on a planned decision-making process and receive input from members of workers who have collaborated in handling it, so that good relations between workers and leaders are needed so that bleeding problems can be resolved properly. Adequate health facilities and good management from the leadership are also important factors in supporting the successful management of postpartum hemorrhage (Colbourn et al., 2013; Akladios et al., 2014). Experience in handling health problems in a health organization is influenced by one of the ways in which leadership style with a good relationship between workers and leaders can improve skills so that workers have experience according to the problems at hand (Sánchez et al., 2018). The results showed that maternal emergencies at the border were influenced by age with p=0.034, training with p=0.040 and work motivation with p=0.016.

CONFLICT OF INTEREST
There is no conflict of interest in this study.

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