Analysis of Midwife Competency in Normal Delivery Service in West Pasaman District, Indonesia

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ABSTRACT

Background: Based on a survey of the Australia Indonesia Partnership for Maternal and Neonatal Health midwives who have good competence was 56%. The reason for the persistently competent midwife's competence is due to the lack of midwife knowledge and training gained. This study aims to analyze of midwife competency in normal delivery service in West Pasaman District, Indonesia
Method: This research is a mixed method research with embedded model. The research begins with quantitative research using cross sectional study design, followed by policy study approach. This research was conducted from November 2016 until October 2017 in West Pasaman District. The population of this study are all village midwife who practice in supporting health center in West Pasaman District with a sample 105 people. The sampling technique is proportional random sampling. Data were analyzed univariate and bivariate with Chi square.
Results: More than half of respondents (59%) had midwives' competence in poor normal delivery services in West Pasaman District. There are significant association between midwife training and knowledge level with midwives competency in normal delivery service in West Pasaman District (p value <0.05). However, there is no association between years of service of midwife and midwife competency in normal delivery service (p value> 0.05).
Conclusion: The conclusion of this research is there are significant association between midwife training and level of knowledge with midwives competence in normal delivery service in West Pasaman district. There needs to be an increase in midwife knowledge about normal delivery service and to improve implementation by midwife, normal delivery service training is needed with affordable cost so that all duty midwives can follow it.

Keywords: Midwife, Normal Delivery, Competency, Training

INTRODUCTION

The Ministry of Health, Republic of Indonesia policy in an effort to accelerate the reduction in mortality rates both for mothers and infants, basically refers to the strategic intervention "Seven Pillars of Safe Motherhood", one of which is "Clean and Safe Childbirth". Health workers are expected to be able to recognize early symptoms, signs of childbirth complications and be able to identify and perform basic management of these symptoms and signs. [1]

Efforts to reduce maternal mortality can be done by providing quality midwifery services. Midwifery care standards are a reference in the decision-making process and actions taken by midwives in accordance with authority starting from the assessment, formulation of diagnoses and obstetric problems, planning, implementation, evaluation and recording of midwifery care. [2]

One method to be able to improve midwives' knowledge and skills is training in normal childbirth care. In principle, normal childbirth care is a clean and safe care for all stages of labor and efforts to

prevent complications, especially postpartum bleeding, hypothermia and asphyxia of newborns. [3],[4]

Research conducted by the United Nations Population Fund found that trained midwives can help prevent approximately two-thirds of all maternal and newborn deaths. Midwives provide 87% of all sexual, reproductive, maternal and infant health services. But only 42% have good skills. Previous study found that 16.2% of normal deliveries were assisted by midwives. The practice of normal childbirth care requires good midwife competence. [5]

Another research results stated there was relationship between midwife competencies in providing midwifery services with a value of p <0.05. According to other study found midwives' compliance with private practice in the application of partographs around 63.6% were not compliant in completing the complete front and back sheets of partographs. The results of previous study conducted that there was a relationship between competence and the performance of officers in the implementation of midwifery services (p value <0.05). [6],[7]

The results of interviews conducted with several midwives, they said that the use of partographs in normal childbirth care sometimes. There are a number of reasons put forward, including the hassle, too many parts being filled and taking up time. Based on observations made on the use of partographs, midwives have not recorded routinely, incorrectly and incompletely fill in the front and back sheets of the partograph, do not immediately fill in the partograph after each inspection but use an observation sheet, and a new partograph is filled in and completed at the time of completion childbirth assistance.

LITERATURE REVIEW

The Ministry of Health, Republic of Indonesia developed a national action plan for the acceleration and reduction of maternal mortality which focuses on 3 strategies and 7 main programs. Three main challenges are; 1) access to health care facilities has improved, but coverage and quality have not been optimal, 2) limited availability of strategic resources for maternal and neonatal health, 3) low knowledge and public awareness about maternal health. [8]

Three strategies consisted of increasing the scope and quality of maternal health services, increasing the role of the Regional Government in Regulations that can effectively support the implementation of the program and family and community empowerment. [9], [10]

The seven main programs of the National Action Plan for the Acceleration and Reduction of Maternal Mortality included; 1) provision of maternal and child health services at the village level according to standards, 2) provision of health care facilities at the basic level that are able to provide delivery assistance according to standards 24 hours, 7 days a week, 3) guarantee of all Care Centers, Primary Health Centers for Emergency Emergence Neonatal Obstetric Services and Comprehensive Emergencies for Neonatal Obstetric Services 24 hours, 7 days a week to function according to standards, 4) implementation of effective referrals in cases of complications, 5) strengthening District / City Government in decentralizing governance of health programs, such as regulations, financing, and others, 6) implementing cross-sector and private partnerships, 7) increasing behavioral change and community empowerment through the containment and implementation of the childbirth planning and prevention complications program and integrated service posts. [1], [2]

The task of assisting childbirth in normal childbirth care; 1) provide support to the mother, husband and family during childbirth, when giving birth to the baby and in the period thereafter, 2) monitoring the mother and fetus during labor and after delivery; assess the existence of risk factors; detect early complications of labor that may arise, 3) carry out minor interventions if

necessary such as performing amniotomy; episotomy in cases of fetal distress; perform management of newborns with mild asfiction, 4) make a referral to a more complete facility in accordance with the case of the case referred if there are any risk factors or complications detected during the delivery process.

In addition to the above tasks, a labor helper must obtain qualifications as a labor delivery assistant through a series of training, direct guidance and opportunities to practice her skills in a real atmosphere. In this qualification, birth attendants can conduct an assessment of risk factors, detect early complications of labor, monitor the mother and fetus, and also the baby after birth.

Labor assistants must be able to perform early management of newborn complications. He also must be able to make a referral to both the mother and baby if the complications that occur require further management that requires skills beyond their competence. No less important is that a birth attendant must have patience, the ability to empathize, which is very necessary in providing support for mothers and their families.

MATERIALS & METHODS
Study Design and Research Sample
The study was conducted using cross sectional study design, in West Pasaman District, West Sumatera Province Indonesia. The population in this study were all midwives in West Pasaman District, sample size 105 respondents. Sampling technique was used proportional random sampling technique. The variables of this study included independent variable are years of service, training and knowledge and dependent variable is midwifery competency.

Data Collection Technique
This study was approved by the Ethical Committee of Medical Faculty, Universitas Andalas. *Quantitative study was done by collecting primary data taken with a questionnaire through structured interviews for the variables i.e years of service, training and knowledge and midwifery competency.*

Data Analysis
The quantitative variables were recorded as frequency and percentage. Hypothesis test used chi-square test. A two-tailed *P*-value of <0.05 was considered statistically significant. Data were analyzed using the SPSS version 21.0.

RESULT
Characteristics of respondents (Table 1).

Table 1: Characteristics of respondents

Characteristics	f (%)	Mean±SD
Age (years)		35.7±5.4
Age		
26-30 years	34 (32.4)	
31-35 years	57 (54.3)	
36-40 years	9 (8.6)	
> 40 years	5 (4.8)	
Educational background		
Diploma	3 (2.9)	
Bachelor	102 (97.1)	
Working status		
Civil servant	101 (96.2)	
Not civil servant	4 (3.8)	
Total	105 (100)	

Table 1 stated that more than half of respondents had an age range of 31-35 years, with an average age of 35.7 ± 5.4 years. Almost all respondents have education bachelor degree and have jobs as civil servants.

Distribution of respondent frequency based on midwife competency, work period, training and knowledge level in normal delivery services in West Pasaman District (Table 2).

Table 2: Distribution of respondent frequency based on midwife competency, work period, training and knowledge level in normal delivery services in West Pasaman District

Variable	f	%
Midwife competency		
Not good	62	59
Good	43	41
Work period		
< 5 years	25	23,8
≥ 5 years	80	76,2
Training		
Never	50	47,6
Ever	55	52,4
Knowledge level		
Low	44	41,9
High	61	58,1

Table 2 found that more than half of the respondents (59%) have midwife competencies in normal delivery services that was not good. A small proportion of respondents (23.8%) had a working period of <5 years. Less than half of the respondents (47.6%) had never attended a normal delivery service training. Less than half of respondents (41.9%) have a low level of knowledge about midwife competencies in normal childbirth services. Relationship between work period, training and level of knowledge with midwife competencies in normal childbirth services (Table 3).

Table 3: Relationship between work period, training and level of knowledge with midwife competencies in normal childbirth services

Variables	Competency						p-value
	Not good		Good		Total		
	f	%	f	%	f	%	
Work period							1.000
< 5 years	15	60.0	10	40.0	25	100.0	
≥ 5 years	47	58.8	33	41.3	80	100.0	
Training							0.048
Never	35	70.0	15	30.0	50	100.0	
Ever	27	49.1	28	50.9	55	100.0	
Knowledge							0.026
Low	32	72.7	12	27.3	44	100.0	
High	30	49.2	31	50.8	61	100.0	

Table 3 showed more than half of respondents (59%) have midwife competencies in normal delivery services that are not good. A small proportion of respondents (23.8%) had a working mass of <5 years. Less than half of the respondents (47.6%) had never attended a normal delivery service training. Less than half of respondents (41.9%) have a low level of knowledge about midwife competencies in normal childbirth services.

The percentage of respondents with poor competence was higher in respondents who had never received training (70%) than those who received training (49.1%). The statistical test results obtained p value <0.05, it was concluded that there was a significant relationship between training and midwife competencies in normal delivery services.

The percentage of respondents with poor competence was higher in respondents who had a low level of knowledge (72.7%) compared to a high level of knowledge (49.2%). The statistical test results obtained p value <0.05, it was concluded that there was a significant relationship between the level of knowledge and the competence of midwives in normal delivery services.

DISCUSSION

The results of the study revealed that the percentage of respondents with poor competence was higher for respondents who had new work mass compared to old work mass. The results of the statistical test concluded that there was no significant relationship between the mass of work and the competence of midwives in normal childbirth services. The reason for the absence of a midwife's relationship with the normal delivery service is because the work period is only one of the contributing factors, but if the long work period is not accompanied by upgrading knowledge and knowledge of the latest issues regarding normal delivery services and awareness of the role of the midwife in provide services that must be standardized and of high quality, so long working periods are not enough to play a role in improving normal childbirth services compared to new tenure that is able to increase their knowledge and awareness in providing a complete service.

Based on the analysis of researchers it can be concluded that aspects of normal childbirth training are very important in efforts to increase the competence of midwives so that it becomes a concern for midwives to be able to attend normal childbirth training so as to increase their knowledge, competencies and skills in providing services. Efforts should be made to ensure that all midwives who are in charge of assisting childbirth can attend the training of normal childbirth on an ongoing basis (reviewed again after 5 years). It is hoped that the health office will work together with the Indonesian midwives' associations to be able to design and schedule training events, with relatively affordable costs so that all midwives have

participated in training and can work according to specified standards. [10]

Knowledge can not only be obtained in the lecture bench but also with training, seminars and workshops that can increase knowledge. Therefore, midwives should like to participate in training, seminars and workshops, so that with the increase in knowledge, midwives will be better at carrying out tasks according to established standards.

Based on the results of the study it can be concluded that the knowledge of normal childbirth care has a great influence in increasing the skills of midwives about normal childbirth care. Knowledge can not only be obtained in lectures, but with training, seminars and workshops can also increase knowledge. Therefore, midwives should like to participate in training, seminars and workshops, so that with the increase in knowledge, midwives will be better at carrying out their duties according to established standards. [8], [9]

CONCLUSION

The conclusion of this research is there are significant associations between midwife training and level of knowledge with midwives competence in normal delivery service in West Pasaman district. There needs to be an increase in midwife knowledge about normal delivery service and to improve implementation by midwife, normal delivery service training is needed with affordable cost so that all duty midwives can follow it.

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