

## Factors Associated with Village Midwives Performance in Antenatal Care Services, Ogan Ilir Regency 2019

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**Abstract**—Maternal mortality is still the main problem in Indonesia. Based on SDKI 2012, maternal mortality in Indonesia is 346 each 1000 of birth while national target in 2019 is 305 each 1000 of birth. The aim of research is to analyze factors that correlate with village midwives performance in ante natal care services. The method was cross sectional study with chi square test. Independent variables are knowledge, training, supervision, leadership, motivation while dependent variable is village midwives performance in ante natal care services. Total of sampling is 50 village midwives. The result show factor that correlate with village midwives performance in ante natal care services is knowledge (p value= 0,01, nilai OR 0,66) while factors such as training, supervision, leadership, motivation are not correlate. Suggestion that needed is to improve knowledge of village midwives performance in ante natal care services such as early detection of high risk of pregnancy sustainability.

**Keywords:** *midwives, antenatal, pregnancy*

### I. INTRODUCTION

The maternal mortality rate in Indonesia is still high compared to Malaysia. The current maternal mortality rate is based on the 2012 Indonesia Basic Health Survey (IDHS) year report of 346 per 1000 births while the target in 2019 is 305 per 1000 births [1]. the cause of maternal death is closely related to maternal knowledge, access to health services and socioeconomic status [2]. While Agustini explained that the basic cause of maternal death is being late to recognize the dangers and making decisions, being late in reaching the referral service facility and being late getting adequate services in the referral facility [3].

To reduce maternal mortality, one of the programs undertaken is to optimize antenatal care services. Siregar [4] research results on the analysis of the performance of village midwives in antenatal care services in Ogan Ilir, especially in the working area of the Lebung river health center, not yet fully referring to the 14 Q standard. home visit. The purpose of this study was to analyze factors related to midwife performance in carrying out antenatal care services [5].

### II. METHOD

This research is a quantitative study with a cross-sectional approach. The study population was all midwives in Ogan Ilir Regency. The research sample was 50 village midwives. Simple random sampling method. Research variables include knowledge, training, facilities, supervision, leadership, motivation, and the performance of midwives in

carrying out antenatal care. Data analysis used chi square test where  $H_0$  was rejected if  $p \text{ value} > 0.05$ .

### III. RESULTS

#### Univariate Analysis

##### 1. Knowledge of Village Midwives about Antenatal Care Services

Based on the results of the study note the knowledge of midwives about antenatal care services as follows;

TABLE I  
Distribution Knowledge of Village Midwives about Antenatal Care Services

Knowledge	Frequency	Percent (%)
Bad	6	12
Good	44	88
Total	50	100

Based on Table I, it is known that the majority of knowledge is good where the difference between the knowledge of village midwives is good and bad is 76%. If analyzed based on the components of knowledge, the following results are obtained.

TABLE II  
Distribution of Subvariables Knowledge of Villages Midwives

Sub Variables	True	False
The aim of ANC Service	12 (24%)	38 (76%)
The Limit of body mass index for obese pregnant women	32 (64%)	18 (36%)
Medical history data in the first Visit	8 (16%)	42 (84%)
Physical examination (obstetrics) in the first Visit	25 (50%)	25 (50%)
Leopold examination	12 (24%)	38 (76%)
Supporting investigation	6 (12%)	44 (88%)
Frequency of TT immunization	20 (40%)	30 (60%)
The characteristics of normal pregnancy	42 (84%)	8 (16%)
The characteristics of pregnancy with emergencies	8 (16%)	42 (84%)

Source: Primary Data, 2019

Based on Table II. It is known that there is still a lot of misinformation in village midwives, especially regarding the limitation of the body mass index of obese pregnant women (64%), physical examination at the first visit especially about obstetric examination (50%), the characteristics of normal pregnancy (84%) , and the frequency of TT immunization to mothers (40%).

Analysis of bivariate conducted using chi-square found two variables which were significantly associated with communicable disease. They were food and water treatment and domestic solid treatment. Other variables could not explain significantly association.

## 2. Facilities

Based on the results of the study note the facilities and infrastructure in antenatal care services as follows

TABLE III  
Facilities and Infrastructure in Antenatal Care

Infrastructure	Frequency	Percent (%)
Enough	12	24
Good	38	76
Total	50	100

Based on Table III, it is known that the majority of facilities and infrastructure is good where the difference between good facilities and infrastructure is quite good at 52%.

## 3. Supervision of ANC Activities

Based on the results of the study note the supervision in antenatal care services as follows:

TABLE IV  
Distribution of Supervision Frequencies in ANC

Supervision	Frequency	Percent (%)
Poor	13	26
Good	37	74
Total	50	100

Based on Table IV, it is known that the majority of supervision conducted during ANC services is good where the difference between good and poor supervision is 48%.

## 4. Motivation of Villages Midwives

Based on the results of the study note the motivation of village midwives in antenatal care services as follows:

TABLE V  
Distribution of Motivation Frequencies of Village Midwives

Motivation	Frequency	Percent (%)
Poor	28	56
Good	22	44
Total	50	100

Based on Table V it is known that the motivation of the village midwife during the majority of ANC services is not good where the difference in motivation is not good enough by 12%.

## 5. Leadership

Based on the results of the study note the leadership of the person responsible for MCH in antenatal care services as follows:

TABLE VI  
Frequency Distribution of Leadership in Charge of MCH

Leadership	Frequency	Percent (%)
Poor	17	34
Good	33	66
Total	50	100.0

Based on Table VI, it is known that the leadership in charge of MCH Puskesmas in the majority of ANC services is good where the difference between good leadership is less than good at 32%.

## 6. Training

Based on the results of the study note the training of village midwives in antenatal care services as follows:

TABLE VII  
Frequency Distribution of Village Midwife Training

Training	Frequency	Percent (%)
Poor	35	70.0
Bad	15	30.0
Total	50	100.0

Based on Table VII it is known that the majority of village midwife training during the ANC service is not good where the training gap is not good enough by 40%.

## 7. Midwives Performance

Based on the results of the study note the training of village midwives in antenatal care services as follows:

TABLE VIII  
Frequency Distribution of Village Midwife Performance

Performance	Frequency	Percent (%)
Poor	2	4
Bad	48	96
Total	50	100

Based on Table VIII, it is known that the majority of village midwives performance in ANC services is good where the difference between good performance is quite good at 92%.

## Bivariate Analysis

Based on the results of the chi-square test the following results were obtained:

TABLE IX  
Bivariate Analysis

Dependent Variable	Variabel dependen	P-Value	OR 95% CI
Knowledge	Performance	0,012	0,379- 1,174
Training	Performance	1,000	0,869-1,023
Facilities	Performance	1,000	0,59-16,928
Motivation	Performance	0,497	0,838-1,029
Supervision	Performance	1,000	0,979-1,142
Leadership	Performance	1,000	0,117-34,096

Based on Table IX it is known that only the knowledge variable has a P value  $<0.05$  which is 0.012 so that  $H_0$  is rejected (there is a significant relationship between the knowledge of the village midwife and the performance of the village midwife).

#### IV. DISCUSSION

Performance is a work that is achieved by a person considering the quality, quantity, and responsibility in his work [6]. The purpose of performance appraisal is as information for decision-making in employee development such as identifying HR that needs to be fostered, determining the criteria for awarding, improving the quality of work, planning material for HR management in the future and efforts to obtain good feedback [7]. The performance of village midwives when implementing antenatal care health services refers to 14T antenatal care health service standards. The antenatal care service standard is made according to the needs of the community because the demands for improving the quality of service are increasing. The antenatal care service standard that starts from 7T (weighs, measures blood pressure, measures the height of the fundus uteri, giving complete TT immunization, giving Fe tablets at least 90 tablets during pregnancy, testing for sexually transmitted diseases, meeting and talking in order to prepare for a referral). The 7T antenatal care standard then developed to 10T with the addition of standard items including assessing determining fetal and DJJ performance) and laboratory testing (routine and special). Now the government is adding standard nutritional status (measuring upper arm circumference), antenatal care service items from 10T to 14T with the addition of items such as Hb examination, VDRL examination, urine protein examination, urine reduction examination, breast care, pregnancy exercises, administration of malaria drugs and iodine oil capsules. The addition of antenatal care service standards is expected to be a reference for health workers, especially midwives in providing quality antenatal care services to improve maternal health status, which in turn will contribute to the reduction in MMR [8]. Based on the results of the study note that 92% of the midwife's performance has been categorized well but the standards used have not fully used the 14 T. standard.

According to Shields, et al. [9], performance is influenced by 3 factors: ability, effort, and support. According to Truss, et

al. [10] individual performance contributes to improving organizational performance. Knowledge is an individual factor that influences one's ability to do work. Based on the results of the bivariate analysis it was found that there was a significant relationship between knowledge and the performance of village midwives in providing antenatal care services. Knowledge about antenatal care services includes an understanding of the meaning, objectives, benefits, standards of health services and the role of village midwives in providing antenatal care that refers to 14T antenatal care service standards. The results showed that there were several sub-variables of village midwife knowledge about antenatal care services that were still low, namely knowledge of the body mass index of pregnant women, physical examination at the first visit, especially regarding obstetric examination, the characteristics of normal pregnancy, the frequency of TT immunization to mothers. Knowledge has a significant relationship to performance. Midwives who have more knowledge are more likely to apply antenatal care service standards than midwives with less knowledge.

#### V. CONCLUSION

The performance of midwives in the Ogan Ilir district shows that 92% already have good performance although it still refers to the 7T service standard. Knowledge is a significant factor influencing performance with p value  $<0.05$ . This means that knowledge can improve midwife performance so that training efforts to increase knowledge of midwives need to be a concern of the local health office, especially to better socialize the 14 T. standard.

#### REFERENCES

- [1] BKKBN, "Survey Demografi dan Kesehatan Indonesia (SDKI) 2012," ed. Jakarta: BKKBN, 2013.
- [2] A. Medhanyie, M. Spigt, G. Dinant, and R. Blanco, "Knowledge and performance of the Ethiopian health extension workers on antenatal and delivery care: a cross-sectional study," *Human resources for health*, vol. 10, p. 44, 2012.
- [3] S. Graner, I. Mogren, L. Q. Duong, G. Krantz, and M. Klingberg-Allvin, "Maternal health care professionals' perspectives on the provision and use of antenatal and delivery care: a qualitative descriptive study in rural Vietnam," *BMC Public Health*, vol. 10, p. 608, 2010.
- [4] R. Siregar, "Analisis Kinerja Bidan Desa Dalam Pelaksanaan Pelayanan Kesehatan Antenatal Care," S1, Kesehatan Masyarakat, Universitas Sriwijaya, Ogan Ilir, 2019.
- [5] W. Gunathunga and D. N. Fernando, "Assessment of community maternal care performance of public health midwives of a province in Sri Lanka: a multi-method approach," *Southeast Asian J Trop Med Public Health*, vol. 31, pp. 310-8, 2010.

- [6] L. Kusmayati, "Faktor-Faktor Yang Berhubungan Dengan Kinerja Bidan Dalam Kunjungan K4 Pada Ibu Hamil Di Puskesmas Syamtalira Bayu Kabupaten Aceh Utara Tahun 2012," *Jurnal Kesehatan Masyarakat: U'budiyah Banda Aceh*, 2012.
- [7] P. I. Pavlik Jr, H. Cen, and K. R. Koedinger, "Performance Factors Analysis--A New Alternative to Knowledge Tracing," *Online Submission*, 2009.
- [8] F. Fitrayeni, S. Suryati, and R. M. Faranti, "Penyebab Rendahnya Kelengkapan Kunjungan Antenatal Care Ibu Hamil Di Wilayah Kerja Puskesmas Pegambiran," *Jurnal Kesehatan Masyarakat Andalas*, vol. 10, pp. 101-107, 2017.
- [9] J. Shields, M. Brown, S. Kaine, C. Dolle-Samuel, A. North-Samardzic, P. McLean, *et al.*, *Managing employee performance & reward: Concepts, practices, strategies*: Cambridge University Press, 2015.
- [10] C. Truss, A. Shantz, E. Soane, K. Alfes, and R. Delbridge, "Employee engagement, organisational performance and individual well-being: exploring the evidence, developing the theory," ed: Taylor & Francis, 2013.