

## THE RELATIONSHIP BETWEEN IMPLEMENTATION OF ANTENATAL SERVICE STANDARD THAT WAS DONE BY VILLAGE MIDWIFE WITH THE INCIDENT OF ANEMIA IN LARANTUKA REGENCY

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### Abstract

Every year Indonesian women die due to obstetric complication. More than 90 percent is caused bleeding, preeclampsia/eclampsia and infection. It can be effectively prevented if communities are well informed about emergency signs as well as the provision of qualified health service in primary care. WHO has developed standard of midwifery service which had been adjusted for its application in Indonesia. This research was aimed to know the relationship between implementation of antenatal service standard that was done by village midwife with the incident of anemia. This was an observational research with historical cohort design. The number of samples in this study were 40 people. Data were analysed using univariate and bivariate analysis. The result showed that pregnant mothers who received non standard antenatal service had risk of anemia with  $OR=3.404$  (95% CI:  $1.303 < OR < 8.890$ ). This research showed that pregnant mothers who received non standard antenatal service had risk of suffering anemia than those with standard antenatal service. Standardized antenatal service was appropriate to be used in maternal perinatal health service unit.

**Keywords** : standard of antenatal service, anemia, midwife.

### BACKGROUND

Maternal Mortality Rate (MMR) is one of the indicators of the success of a country's development, because of the increased of quality life for women is one of the requirements of human resource development. The high of MMR reflects the failure of governments and communities to reduce the risk of maternal and child mortality. According to the Indonesian Demographic and Health Survey (IDHS) in 2012, MMR in Indonesia amounted to 359 per 100,000 live births. More than 90% are caused bleeding, 40-60% preeclampsia/ eclampsia and 20-30% infection. These numbers reflects that every pregnancy pose a risk for women of dying (Department of Health 2014).

Most of complications associated with pregnancy and childbirth can be effectively prevented or managed without the using of drugs or sophisticated and expensive technology. World Health Organization (WHO) through the meeting of Southeast Asia consultation recommended that the midwife

equipped with the knowledge and skills of first aid or the management of relevant midwifery emergencies care. At a meeting of program managers "safe motherhood", which was attended from countries in the region have agreed that the quality of midwifery care given to every mother who requires and effort in fulfilling the standards of safe and effective. Following up that issue, WHO developed a standard of midwifery care. This standard is also adapted for use in Indonesia, especially for the basic level services, as reference services at the community level (martasoebrata, 2006).

In Indonesia the standard of midwifery care consists of 24. This research will be devoted to the implementation of standard antenatal care provided by midwives. Standard antenatal care is useful in early detection of risks that would occur during pregnancy, delivery and post-partum. Quality of care during pregnancy and childbirth is most important in preventing mortality and morbidity for both mother and fetus. The service standards is needed in the the



implementation of the Maternal and Child Health services (JPNKK, 2007).

Preliminary studies conducted in Larantuka District, socialization obstetric care standards has been done to the midwife in Larantuka District. Similarly, quality assurance training in order to improve the quality of maternal and child health services.

In quantity of prenatal care coverage in Larantuka district categorized successful that antenatal examination are about 4 times or 86.3% during pregnancy, but the benefits of antenatal care on pregnancy outcomes were not significant. This is due to the quality of prenatal care is still low, which can be seen from a wide consultation and examination of the basis of pregnancy given the inadequate, meaning that pregnant women who receive antenatal care at least 4 times did not show any benefit on morbidity labor.

This research is important because every pregnant women need quality services during pregnancy. Besides that the implementation of the standards midwifery services in performing the tasks can improve the health status of also providing satisfaction to clients, families and communities as users of the services.

Paying attention to the problems above, the researchers want to conduct the research about the implementation of standard antenatal care provided by midwives in Larantuka District, especially anemia in pregnancy. According to a report of Larantuka District, there are about 40-50 percent of pregnant women suffers from anemia. The purpose of this research was to analyze the implementation of standard antenatal care according to the Ministry of Health in 2000 by the village midwife to see the incidence of anemia in Larantuka District.

## **METHODE**

### **Research design**

This type of research is observational. The design used in this study is the historical cohort

### **Location and Time of Research**

This research was conducted in Larantuka District on January 01 until March 31 in 2015.

### **Population**

Population in this study was all pregnant women who are in Larantuka District.

### **Sample**

Pregnant women who netted during research period to fulfill the established criteria, that is 40 pregnant women were exposed to antenatal care according to standards of the Ministry of Health of Indonesian Republic in 2000 and 40 pregnant women were exposed to antenatal care not proper with the standard of the Ministry of Health of Indonesian Republic in 2000.

### **Data Collection Tool**

The instruments used was a questionnaire, which is the measurement of the response of the research subjects received antenatal care by research subjects during visits pregnancy check up. Fill in the questionnaire include the identification of pregnant women, antenatal screening and monitoring, abdominal palpation, the management of anemia in pregnancy, early management of hypertension in pregnancy and childbirth. Guidelines questionnaire was made based on the indicators contained in the standard theory study midwifery care (Depkes RI, 2000). To complete the data and also the records of maternal health care, among other cohorts of women, mothers cards and the Books of Maternal and Child Health

### **Data Collection Procedures**

Quantitative data collection is conducted using a standard questionnaire of antenatal care (Depkes RI, 2000) which has been tested before. Data collected consist of primary data and secondary data, primary data is the data obtained from the interview questionnaires while secondary data obtained through cohort of mother, mother card and book of maternal and child health.



## RESULT

Tabel 4. The Relationship Between Implementation Of Antenatal Service Standard That Was Done By Village Midwife With The Incident Of Anemia In Larantuka Regency

Antenatal Standard	Incident Anemia		RR	CI 95 %	X <sup>2</sup>
	Anemia n (%)	No n (%)			
Tidak Standar	33 (68,8)	15 (31,2)	1,9	1,229 –	0,002
Standar	15 (35,7)	27 (64,3)	25	3,014	
TOTAL	48	42			

The analysis results in Table 4 show that the standard variable of antenatal care had a significant relationship with the occurrence of anemia ( $p < 0.05$  and  $RR = 1.925$ ). This means that pregnant women who receive antenatal care was not according to the standard is about 1,925 times the risk of developing anemia compared with pregnant woman who get standard service of antenatal.

## DISCUSSION

Statistical test results showed that the standard of antenatal care with anemia through bivariable analysis showed a statistically significant relationship. This means that the hypothesis of the standard of antenatal care reduce the risk of anemia in pregnant women has been proven.

This is consistent with the theory of the WHO states that the antenatal care plays a role in prevention and repairs the effects of emergencies in pregnancy or childbirth. With the quality of antenatal care (according to standards) can detect signs and symptoms that develop during pregnancy (Rooney, 2002). This means that the standard of antenatal care can reduce the risk for the occurrence of pregnancy morbidity, including the occurrence of anemia during pregnancy.

The results are corresponding with previous research conducted by Dasuki, et al.

in Purworejo which found that pregnant women who did not conduct the prenatal care has a risk of abnormalities in laboring 1.62 times higher than women who do prenatal care.

Corresponding with the research results conducted by Blondel and Marshal (1998) which suggests that pregnant women with poor antenatal care at antenatal visit  $< 4$  times and antenatal care after 6 months of gestation over 5.8 times the risk of a preterm delivery than mothers pregnant who conduct good antenatal care. This is due to lack of information about the health of the mother during pregnancy. The Department of Health the Indonesian Republic also noted that pregnancy is a reproduction process that needs special care, in order to be progressing well. The pregnancy involve the risky, the risk of pregnancy is dynamic. Pregnant women who previously in normal condition suddenly can be risky. For that needed the standard midwifery care to identify risks that may arise during pregnancy.

In the conceptual framework of the determinants of maternal mortality, McCarthy and Maine suggests strategies to reduce maternal mortality are the provision of quality antenatal care. The qualified antenatal care can detect the risk of pregnancy. The point is that pregnant women have access to quality maternal health care have the opportunity in early detection of the complications that may arise, so that maternal mortality can be avoided.

The benefit of pregnant women in receiving the antenatal care according to the standard is to determine the risk of early pregnancy. Early detection is very useful for determining gestational age of the pregnancy and the early detection of high risk. The panel discussion of experts recommends that midwifery prenatal care can start before pregnancy and continued during pregnancy until the first year after the child is born. Prenatal care provided include aspects of medical, psychological, social and environmental variables that affect health (Rosen et al. 1991).

## CONCLUSION



The result of research that there is relationship between implementation of standard antenatal care with anemia. Pregnant women who do not receive the standards antenatal care could be at risk of anemia.

The Standard of antenatal care according to the Ministry of Health of the Indonesian Republic in 2000, has been carried out by midwives in Larantuka District, but still needs to improve knowledge in order to provide more optimal antenatal care.

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