HEALTH EDUCATION ABOUT NEONATAL CARE TO INCREASE NEONATES HEALTH STATUS

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ABSTRACT

Background: Infants and children health care is vital at preparing a healthy, smart and qualified generation and reducing infants and children mortality. In the last 5 years, Neonatal Mortality Rate (NMR) remains at 19/1000 births. Apropriate neonatal care can prevent infant's death and also prevent residual symptoms due to complications or health problems previously. This study purpose to identify effect knowledge to neonates health status in the intervention and control group. **Methods**: This study was conducted experimentally in the intervention group with control group comparison. The Purpose of this study to describe the knowledge of mothers about neonatal care with neonatal health status. The sample was taken using purposive sampling with 30 respondents in the intervention group and 30 respondents in the control group. **Results**: There is a significant effect of health education toward mother's knowledge level about neonatal care (pV = 0.000 ; 0,05). There is no influence between mother's knowledge about neonatal care toward infant health status with p-value = 0,508 ($p > 0,005$). **Conclusion**: Infant health status is not influenced by mothers' knowledge level about neonatal care.

Keywords: Neonates, Morbidity, Neonatal Care

INTRODUCTION

Children and infants health care is purposed to prepare the healthy, smart, and qualified generations and to decrease the children and infants mortality rate. This health care must be done since the pregnancy, birth, and after childbirth until the age of 18 years. The proper treatment since pregnancy influences in minimizing many risks and health complications for both, moms and her kids (Ministry of Health, 2014).

In Indonesia, infant mortality rate (IMR) is higher than in other ASEAN countries, it is about 4,6 times higher than in Malaysia, 1,8 times higher than in Thailand, and 1,3 times higher than in Philippine (Ministry of Health, 2011). In 2009, Indonesia is one of the countries with average infant mortality rates of 30 per 1000 live birth. Therefore Indonesia at the 10th positions among 18 ASEAN countries add with high IMR. The high level of IMR is caused by the lack of services, facilities, and the decrease of society income (Kemenkes, 2011; Kemenkes, 2012).

The majority of infant mortality occurs in the neonatal period. (Ministry of Health, 2012). In the last 5 years, the Neonatal Mortality Rate (NMR) is still high, at 19/1000 birth, while the Post Neonatal Mortality Rate (PNMR) decreased from

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15/1000 into 13/1000 live birth, toddler mortality rate also decreased from 44/1000 into 40/1000 live birth. The next challenge is preparing mothers during their pregnancy and ready to give birth and maintain the environmental health which can protect the infant from getting infected. Various health educations about reproduction health are given to teenagers to support them gain the healthy reproduction age (Ministry of Health, 2015).

Several factors affecting high infants and neonatal mortality rate, include the increase of infant birth with low birth weight (LBW), the lack of capability in care the infants and minimal exclusive breastfeeding coverage (UNICEF, 2004). The high infant mortality rate shows the low quality of health services (Ministry of Health, 2011, WHO, 2003). Proper neonatal care can prevent infant mortality and prevent residual symptoms due to complications or previous health problems. Precautions, diagnostics, and appropriate interventions can provide long-term benefits. However, lack of knowledge in neonatal care may result in neonatal death (WHO, 2003).

Study by Opara *et.al* (2011) found that there was 91.4% of neonates receiving improper umbilical cord care. Most people still believe in the benefits of giving a *bedong* (the way people in Indonesia wrap their infant to make them feel warmer) is to straighten the baby's bones, so that the *bedong* is put on too tight on the baby's body. The use of *gurita* (infant's body wrapper) and other equipments given to babies are actually a myth. This lack of understanding can cause big problems in infants.

Klaten Regency has a high enough rate of high neonatal risk that is 62% in 2013 (Department of Health, 2014). Although the coverage of neonatal visits is close to a perfect figure of over 90%, neonatal visits are considered ineffective because they are still focused on immunization. Meanwhile health education on neonatal care is still not yet optimal (Elsera, 2015).

METHODS

The design used in this study was *"Quasi Experimental with Control Group"* with health education interventions on neonatal care. This study aims to know the effect of health education on newborn care (neonates) toward the health status of newborns in Klaten Regency.

The sample was mothers who have babies aged 0-28 days in Klaten Regency taken by purposive sampling. The numbers of samples was 60 respondents, 30 respondents as intervention group and 30 respondents as control group.

Data collection methods were conducted through interviews and observations used for measuring mothers' knowledge and infant health status. Knowledge in the intervention group was measured after a health education on newborn care of the infant aged 16-18 days, while the control group was not given any treatment. The health status of the intervention group was taken ten days after the health education, or it was given at the age of the infant 26-28 days. In the control

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group, it was taken at the same time (at the age of the infant 26-28 days). The data were then analyzed by using Chi-Square test with $\alpha = 5\%$.

RESULTS

Based on the study, there are 30 mothers in the control group and intervention group with the characteristic as follows:

Table 1.Description of respondents characteristic (Reproduction ages, educations, occupations, numbers of children, and types of labor) (n = 60)

Variable	Intervention Group		Control Group	
	N	%	n	%
Reproduction age				
- Healthy	22	73	25	83
- Unhealthy	8	27	5	17
Education				
- Elementary	26	87	26	87
- Advanced	4	13	4	13
Occupation				
- Occupied	7	23	12	40
- Not occupied	23	77	18	60
Number of Children				
- < 3	20	75	22	73
- ≥ 3	10	25	8	27
Type of Labor				
- Spontaneous	25	83	14	47
- Surgery	5	17	16	53
Level of Knowledge				
- Lack	0	0	23	77
- Good	30	100	7	23
Infant Health Status				
- Sick	5	17	7	23
- Healthy	25	83	23	77

The table shows that most respondents who have healthy reproductive age between 20-35 years old are 22 people in the intervention group and 25 people from the control group. Most of respondents

completed primary education *i.e.* Elementary, Junior & Senior High School. 23 people from the intervention group and 18 people from the control group was not occupied or as housewives. Forty-two of the total respondents had children less than 3 and 21 of the total respondents gave birth by surgery.

Table 2. The relationship between knowledge and neonatal health status.

Variable	Health Status				P	OR
	Healthy		Sick			
	n	%	N	%		
Knowledge						
- Good	31	51,7	6	10	0,508	1,824
- Low	17	28,3	6	10		

Table 2 illustrates the relationship between mother's knowledge levels about newborn care toward infant health status using Chi-Square test, with *p* value of 0,508. It means that there is no correlation between the level of knowledge and health status.

DISCUSSION

The results of the study showed that 100% of respondents in the intervention group had a good level of knowledge about newborn care than control group 30% had good level. This shows that the level of knowledge increases after a person is given information, in this case is the newborn care. Mother's knowledge level on newborn care can affect mother's attitude in carrying out newborn care. But it can't directly affect the infant health status because of many other factors that affect.

The results showed that there is no correlation between knowledge toward infant health status by the $pV = 0,508$. This

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is in accordance with research conducted by Quarisma *et.al.* (2017) who stated that factors affecting morbidity in neonates include premature birth, LBW, risk of labor complications, premature history, family support and frequency of visits during the pregnancy period. Mother's knowledge is not the main factor affecting infant health status.

Prematurity increases the status of morbidity and the rate of mortality of newborns, birth weight <1500 grams has a risk of death in the first seven days of birth. Premature birth is influenced by a history of premature birth, a mother's age which is too young or too old, more than 2 times pregnancy and exposed to infection (Silveira, 2008). The newborn health status is influenced by the history of pregnancy, labor and birth.

The health status of newborns is important to note as it contributes 59% of infant deaths. There is a huge change of the condition in the uterus and the maturation of the entire organ system after birth, therefore the government increased the efforts of neonatal health services by conducting the Neonatal Visit program. Direct management to deal with the problems in newborns is given in health care places (Ministry of Health, 2015).

CONCLUSION

The results showed that the mother's knowledge level on newborn care does not affect the health status of newborns in Klaten Regency.

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