

Situation Awareness's Effect to Midwife Effort for Prevent Low Birth Weight Infant in Wonogiri

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Abstract: The prevalence of LBW is estimated to be 15% of all births in the world with a 3.3% -38% limit and is more common in developing countries (Kusparlina, 2016). It takes a serious handling of LBW because the baby is very easy to experience hypothermia and not fully perfect in the formation of the organs of the body. Percentage of cases of LBW that stagnated for five consecutive years in Central Java, one of them is Wonogiri Regency. Seeing the various consequences caused by LBW, it becomes an important reason for the effort to prevent and anticipate the percentage of cases of decreased LBW, so that is not to increase again in the future. This study aims to create an overview or description of midwife efforts in Public health center of Kabenen Wonogiri in preventing cases of LBW. This method of research is quantitative with cross sectional research design. The sample size was 143 midwives using proportional stratified random sampling technique. The result of this research is 76, 22% midwife is in situation awareness level 2. From third level situation awareness, only level 1 with significance value 0, 78 bigger than value of α (0, 05) which have no effect to Efforts made by the midwife in preventing LBW. It can be concluded that the higher level of awareness situation, the higher effort of the midwives are deployed in the Public health center of Wonogiri in preventing LBW cases.

Keywords: low birth weight, situation awareness, efforts

1. INTRODUCTION

Low Birth Weight (LBW) is still one of the causes of morbidity and mortality in the newborn period in Indonesia. LBW criteria according to World Health Organization (WHO) are babies born with weight less than 2500 gram or called low birth weight infant. 57% of infant deaths occur in infants aged under one month and the underlying cause is perinatal and LBW (Pramono & Paramita, 2015). Death is often caused by neonatal complications such as asphyxia, aspiration, pneumonia, intra cranial bleeding and hypoglycemia. The prevalence of LBW is estimated to be 15% of all global births with a 3.3% -38% limit and is more common in developing countries (Kusparlina, 2016). Another impact of LBW is that babies experience slow cognitive development, neurological weakness and poor performances in their educational process (Pramono & Muzakkiroh, 2011). The cause of LBW because pregnant women have anemia, lack of nutrient intake when pregnant or born less months. It takes serious handling on LBW because the baby is very easy to experience hypothermia and not perfect the formation of the organs of the body. (Central Java Provincial Health Office, 2014). Percentage of cases of LBW that stagnated for five consecutive years in Central Java region one of them is Wonogiri Regency. Seeing the various consequences caused by LBW, it becomes an important reason for the effort to prevent and anticipate the percentage of cases of decreased LBW not to increase again. Wonogiri Regency

consists of 34 Public health center of with different percentage of cases of LBW. The highest percentage of LBW occurred at Public health center of Giritontro which is average 9.89%, while the lowest percentage of LBW occurred at Public health center of Jatisrono I which is 1.77% on average during 2011-2015. The data showed that there is no significant reduction in cases of LBW. The maximum target of cases of LBW is 7%, while in Wonogiri District, the percentage of more than 7% is still found in Public health center of Wuryantoro which is 7.22%, Public health center of Karangtengah 8.43%, Public health center of Paranggupito 8.7%, Tirtomoyo Public Health Unit 9, 3% and Public health center of Giritontro at 9.89%. The purpose of this study is to analyze the effect of midwife awareness situation in the working area of Public health center of in Wonogiri Regency in the efforts to prevent LBW cases This study aims to create an overview or description of midwife efforts in Public health center of Kabenen Wonogiri in preventing cases of LBW.

2. METHOD

The research that will be conducted is a kind of analytic research with observational approach. A tool in the form of questionnaires is used to obtain primary data. Respondents were asked to fill out questionnaires that have been provided and then will be analyzed. The research design used is cross sectional. The study was conducted in all 34 Public health center of in Wonogiri District from March to

April 2017. Samples to be taken in the study using proportional stratified random sampling technique that is as many as 143 midwives. Data collection technique in this research is using primary data about situation awareness and effort of midwife. The initial stage of the data collection procedure is to explain the purpose and objectives of the research that will be carried out, then explain the benefits for the respondents when following the research. Data analysis performed includes crosstabs and linear regression analysis. Situational research variable awareness was measured using questionnaire based on management guideline of LBW Ministry of Health. The conceptual framework of the study is as follows.

The data obtained are answers to 11 question items for measuring level awareness level 1, 8 question items for measuring level awareness level 2, 8 questions to measure level 3 awareness situation and 12 question items to measure midwife effort. The value of all components in the comparative situation awareness is then classified, for respondents who have a score of 11-27 in the initial stage then it is categorized as situation awareness level 1. Respondents who have a score of 28-44 can then move on to stage level awareness level 2. Furthermore, for respondents who have a value of 0-4 then including category situation awareness level 2. While respondents who have a value of 5-8 can continue to the next stage of situation level awareness at level 3. For respondents who have a value of 0-4 then belong to a category that has a situation Awareness level 2, and respondents who have a score of 5-8 are included in category 3 awareness category.

3. RESULTS

Respondents at each level of situation awareness will be tested for influence on the effort variable. The result of situation awareness measurement can be seen in Table 1.

Table 1 Measurement Results Situation Awareness Based on Midwife Level at Public Health Center of Wonogiri

<i>Situation Awareness</i>	Rating	
	n	%
Level 1	24	16,8
Level 2	109	76,22
Level 3	10	7,0
Total	143	100

Prevention of cases of LBW can be done if the midwife can do something appropriate with the perception, understanding and prediction of the environment in the workplace. Midwives with low situation awareness are likely to have an effect on

the effort mobilized. Most midwives in Wonogiri Public Health Center have a situation awareness level 2, that is 76.22%. Each respondent based on situation awareness level tested influence to effort variable using SPSS regression linear software. The crosstab situation awareness of midwife efforts in preventing LBW cases is described in Table 2 below.

Table 2 Crosstab Situation Awareness of Midwife Efforts

Situation Awareness	Efforts			
	Very Low	Low	High	Very High
	%	%	%	%
Level 1	0	0	41,7	58,3
Level 2	0	0	71,6	28,4
Level 3	0	0	20,0	80,0

Based on 2 it is found that midwife with situation awareness level 1 of 58.3% has very high effort in preventing LBW case. While midwife with situation awareness level 2 mostly, that is 71, 6% have only high effort. The percentage of midwife effort with situation level 3 awareness is very high overall about 80%. So it can be concluded that the higher the level of situation awareness the higher the effort that is mobilized by somebody.

Category of test results of the influence in the variable situation awareness of the effort variables can be seen in Table 3.

Table 3 Results of Linear Regression Effect of Situation Awareness Based on Level on Midwife Efforts at Public Health Center of Wonogiri March-April 2017

Variables	Efforts		Information
	p	B	
Situation Awareness Level 1	0,078	0,276	Not significant
Situation Awareness Level 2	0,024	1,312	Significant
Situation Awareness Level 3	0,010	3,280	Significant

Based on Table 3 it is known that only situation level 1 awareness that does not significantly affect the effort. This is evidenced by a significance value of 0.078 which is more than the value of α (0.05). While midwives effort is influenced by situation awareness level 2 and 3

with each value of significance 0,024 and 0,010 which less than value α (0, 05).

4. DISCUSSION

Situation awareness is a person's perception of the environment that can be understood and projected in the future. According to (Endsley, 1988) the process of situation awareness involves human resources, information, and behavior and conformity responses. Situation awareness is divided into three levels, namely perception, comprehension and projection. The first level represents the initial acceptance of information. The analysis of the awareness of the midwife's situation overall shows that most elements have a good perception and understanding of the environment. Midwives must have the elemental perception ability as a key factor in the situation awareness. Without the good perception, it will not create the good situation awareness. Midwives at this stage must be able to view and collect relevant information on LBW cases. The information could be pregnant women's habits, maternal and infant health facilities, maternal income level and the criteria for determining LBW.

The second level represents a midwife's understanding of the importance of known elements to get an idea of what happened. Midwives are able to process information that already obtained with the knowledge they have. The condition is realized through comparing the reality of pregnant women's habits with medical guidelines, then understand what the consequences if there are cases of low birth weight. Midwives with low comprehension will influence preventive measures at the next level. The third level is the ability to project the future of elements in an environment that has previously been done. Accuracy and prediction depend heavily on first and second level situation awareness. This stage requires midwives to predict the consequences of pregnant women's circumstances with their habits in the near future as well as in the future. Types of activities began to be considered to prevent cases of low birth weight.

Most of the midwives, 76.22% in Public health center of Wonogiri are still in the 2nd level awareness situation. It is caused by various factors; one of them is because the instrument used by the researcher to measure the situation awareness of level 1, 2 and 3 comes from the management guideline LBW from the Indonesian Ministry of Health. Midwives who lack the time to study the LBW guidelines normatively cause the midwife to tend to serve pregnant women based on the experience and circumstances at that time alone. Some midwives in Public health center of

Wonogiri district also have functional positions so that the workload increases. As a result, midwives are judged to lack the ability to predict future status such as one of which determines the LBW criteria that must be referred immediately to the hospital.

Midwives with low situation awareness will have an effect on their slow attitude in preventing LBW cases. This is indicated by the result of linear regression situation awareness to the effort. Situation awareness level 1 has no effect on midwife efforts. This is because at that stage midwives have not been able to make understanding and predict future status of elements or information obtained. In contrast, midwives with level 3 awareness have a very high effort in preventing LBW cases. The results of this study in accordance with research (Wright & Cropanzano, 2000) that the situation awareness has a positive relationship to the performance of a person.

5. CONCLUSION

Conclusions obtained from the measurement of the situation awareness of the midwife's efforts in preventing LBW cases in Public health center of Wonogiri Regency are: Situational awareness measured using the instrument based on the LBW Management Manual by Ministry of Health indicates that the midwife in the Public health center of Wonogiri is in situation awareness level 2, that is 76.22%. Measurement of influence of situation awareness on midwife effort in preventing LBW case in Wonogiri regency shows that the higher level in situation awareness, the higher the effort should be mobilized.

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