



The Relationship between Knowledge and Attitude of Midwives with Midwives Preparedness in Facing Flood Disasters in the Work Area of Sukamerindu Health Center and Beringin Raya Health Center Bengkulu City

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ABSTRACT

This study aims to determine the relationship between knowledge and attitudes of midwives with midwife preparedness in dealing with flood disasters in the working area of Sukamerindu Public Health Center and Beringin Raya Public Health Center, Bengkulu City. This type of research is quantitative using an analytical survey method with a cross sectional approach. The population in this study were all 30 midwives at Sukamerindu Public Health Center and Beringin Raya Health Center. Sampling technique by means of total sampling. Data analysis in this study used the chi-square statistical test with a significance level of = 0.05. The results of this study were obtained: 1. From 30 respondents there were 7 people who were not ready to face disasters, 23 people were ready to face disasters. 2. Of the 30 respondents there are 7 people with sufficient knowledge and 23 people with good knowledge. 3. Of the 30 respondents there are 8 people with an unfavorable attitude and 22 people with a favorable attitude. 4. There is no significant relationship between the knowledge of the midwife and the preparedness of the midwife in dealing with flooding in the Sukamerindu Puskesmas work area and the Beringin Raya Public Health Center, Bengkulu City. 5. There is a significant relationship between the attitude of the Bida and the Preparedness of the Midwife in the face of flooding in the Sukamerindu Puskesmas work area and the Beringin Raya Public Health Center, Bengkulu City. It is hoped that health workers at the puskesmas can take part in disaster preparedness training activities, so that when a disaster occurs,

Keywords: Knowledge, Attitude, Preparedness

I. INTRODUCTION

Data from the United Nations (UN) and the United Nations Population Fund (UNFPA) reported in 2015 that around 61% of maternal deaths occurred in disaster-prone countries. More than a third of maternal deaths occur in the midst of a disaster, one of the reasons is the lack of equipment and qualified personnel in the health care system (Novria, 2019).

According to Nengrum (2020), disaster is defined as an incident in an area that causes ecological damage, loss of human life and significant deterioration of health and health services that require extraordinary assistance from outside parties.

Indonesia has many disaster-prone areas. Geographically, Indonesia is an archipelagic country that is located on the Ring of Fire, which is the meeting of three large tectonic plates, namely Indo Australia, Eurasia, and the Pacific, so that if there is a movement of one of them it will cause disasters such as earthquakes. Earthquakes are the biggest threat of natural disasters that have the potential to damage Indonesia, because they come suddenly (Sudden Onset) and the impact can be very broad, including dense urban areas. Almost every year, at least 3 earthquakes with a magnitude of 7 or more occur in Indonesia and cause casualties and damage to infrastructure or the environment (Direja & Wulan, 2018).

Yulita & Absari (2020), explained that the Bengkulu Province since the last five years, 2014-2019, experienced 90 times the number of disaster events including 42 floods, 29 landslides, 12 tornadoes, 2 forest and land fires, earthquakes 5 events and various impacts including health problems. In the Decree of the Minister of Health of the

Republic of Indonesia number 876/Menkes/SK/XI/2006 concerning national policies and strategies for handling crises and health problems, it is stated that the handling of crises and other health problems is more focused on pre-disaster efforts, namely prevention, mitigation, and preparedness.

According to Susilawati (2019) Health services during a disaster are a very important factor to prevent death, disability and disease occurrence, as well as reduce the impact caused by a disaster which is an unwanted event and usually occurs suddenly and causes fatalities.

Midwives are health workers who generally work at the Puskesmas or who are in the community/community closest to the impact of the disaster. The contribution of the midwife to disaster/emergency risk reduction or preparedness is very important. Midwives are often excluded from disaster preparedness at local, national and international levels. This is supported by the fact that the WHO states that the health of mothers, newborns and women needs to be considered in the management of mass victims so that the International Confederation of Midwives (ICM) and its member associations to ensure that midwives can participate and take a role in disaster preparedness (Novria, 2019).

Factors that affect the preparedness of midwives in dealing with disasters include previous practice experience, education and age. Previous practical experience After someone knows a stimulus or health object then gives an assessment or opinion on what is known, the next process the individual will carry out or practice what he knows or responds to Education states that a person's educational background will affect the ability to fulfill his needs according to the level of fulfillment of needs which in turn affect one's work motivation. Age affects the perception and mindset of a person. The older they get, the more their catching power and mindset will develop so that the knowledge they get is getting better (Novria, 2010).

According to Fakhurrizi (2015), knowledge of disasters is the main reason for a person to carry out protection activities or existing preparedness efforts. The knowledge possessed affects the attitude and concern of health workers to be ready and alert in anticipating disasters. The indicators of knowledge and attitudes include knowledge about disasters, their causes and symptoms, as well as what to do in the event of a flood. The knowledge and attitude of the community towards disasters can be seen by their knowledge of various preparedness actions that they should take.

According to Fakhurrizi (2015), attitude is a determinant of behavior because attitude is related to perception, personality and motivation. Attitude is defined as mental preparedness, which is learned and organized through experience, and has a certain influence on the way a person responds to other people, objects, and situations related to him.

According to Fakhurrizi (2015), explaining the conclusions that can be drawn in this study, among others, there is a significant relationship between the knowledge of health workers on preparedness to face flood risk at the Pidie Jaya Regional General Hospital. There is a significant relationship between the attitude of health workers to preparedness to face the risk of flooding at the Pidie Jaya Regional General Hospital.

According to Setiawati (2020), explaining related to knowledge about the preparedness of health services in dealing with flood disasters shows that the knowledge of nurses working in puskesmas has poor knowledge and some have good knowledge. The results of the research related to the attitude of nurses in the preparedness of health services in the face of floods showed that most had a bad attitude and half of the respondents had a good attitude.

In areas that are prone to flooding, namely in the coverage area of the Sukamerindu Health Center and the Beringin Raya Health Center. Based on data obtained at the Sukamerindu Public Health Center and the Beringin Raya Public Health Center, which is one of the health centers whose coverage area is often flooded. The Sukamerindu Health Center has 5 working areas, namely Tanjung Jaya, Tanjung Agung, Semarang, Surabaya and Sukamerindu. Meanwhile, the Beringin Raya Public Health Center has 4 working areas, namely Rawa Makmur, Rawa Makmur Indah, Kandang Limun and Beringin Raya.

The formulation of the problem in this study is how "the relationship between knowledge and attitudes of midwives with preparedness in dealing with flood disasters in the work area of Sukamerindu Public Health Center and Beringin Raya Health Center Bengkulu City in 2020". The purpose of this study was to determine the relationship between knowledge and attitudes of midwives with preparedness in dealing with flood disasters in the work area of the Sukamerindu Public Health Center and the Beringin Raya Public Health Center, Bengkulu City in 2020.

II. RESEARCH METHODS

This research has been carried out in the working area of the Sukamerindu Public Health Center and the Beringin Raya Health Center which was carried out on June 2 - July 2 2021. This research is a research *Analytical Survey* using a cross sectional approach. The population in this study were midwives in the work area of the Sukamerindu Public Health Center and the Beringin Raya Public Health Center of Bengkulu City as many as 30 midwives. The sampling technique used the Total Sampling technique as many as 30 Midwives. Data collection with primary and secondary data. Data analysis using Univariate and Bivariate analysis. To find out the closeness of the relationship, the Contingency Coefficient (C) test is used.

III. RESULT AND DISCUSSION

3.1 Result

3.1.1 Univariate Analysis

To get an overview of the frequency distribution of the independent variable (Attitude and Knowledge) and the dependent variable (midwifery preparedness) in the Sukamerindu Public Health Center and Beringin Raya Public Health Center, Bengkulu City. After doing so, the following results are obtained:

Table 1.

Overview of the Distribution of Midwife Preparedness in the Work Areas of Sukamerindu Health Center and Beringin Raya Health Center Bengkulu City

No	Midwife Preparedness	Frequency	Percent
1	Not ready	7	23.3
2	Ready	23	76.7
	Total	30	100.0

Based on table 1 above, it shows that of the 30 midwives in the working area of the Sukamerindu Health Center and the Beringin Raya Health Center there are 7 midwives (23.3%) who are not ready, 23 midwives (76.7%) are ready.

Table 2

Overview of Knowledge Distribution of Midwives in the Working Areas of Sukamerindu Health Center and Beringin Raya Health Center Bengkulu City

No	Midwife Knowledge	Frequency	Percentage (%)
1.	Not enough	0	0
2.	Enough	7	23.3
3.	Well	23	76.7
	Total	30	100.0

Based on table 2 above, it shows that of the 30 midwives in the working area of Sukamerindu Health Center and Beringin Raya Health Center there are 7 Midwives (23.3%) with sufficient knowledge and 23 Midwives (76.7%) with good knowledge.

Table 3

Overview of the Distribution of Midwives' Attitudes in the Work Areas of Sukamerindu Health Center and Beringin Raya Health Center Bengkulu City

No	Midwife's Attitude	Frequency	Percentage (%)
1.	Unfavorable	8	26.7
2.	Favorite	22	73.3
	Total	30	100.0

Based on table 3 above, it shows that from 30 Midwives in the working area of Sukamerindu Public Health Center and Beringin Raya Health Center there were 8 Midwives (26.7%) with an unfavorable attitude and 22 Midwives (73.3%) with a favorable attitude.

3.1.2 Bivariate Analysis

This analysis was conducted to see the relationship with the independent variable and the dependent variable. In this study, the data analysis test was used using the Chi-square statistical test. To see the closeness of the relationship used contingency coefficient test (C). Based on the results of the research conducted, the cross tabulation between the independent and dependent variables can be seen in the table below:

Table 4

The Relationship between Midwife Knowledge and Midwife Preparedness in Facing Flood Disasters in the Work Areas of Sukamerindu Health Center and Beringin Raya Health Center Bengkulu City

Knowledge Midwife	Midwife Preparedness				Total		X^2	p
	Not ready		Ready		F	%		
Not enough	0	0%	0	0%	0	0	1964	0.306
Enough	3	42.9%	4	54.1%	7	100.0		
Well	4	17.4%	19	82.6%	23	100.0		
Total	7	23.3%	23	76.6%	30	100.0		

Based on the table above, it can be seen that from 7 midwives with sufficient knowledge there are 3 midwives who are not ready and 4 Midwife ready to face flood disasters, while from 23 midwives with good knowledge there are 4 midwives who are not ready and 19 midwives are ready to face flood disasters in the Sukamerindu Public Health Center and Bengkulu City Public Health Center in 2020.

To know relationship between knowledge midwives with preparedness in dealing with flood disasters in the Sukamerindu Community Health Center Work Area and Bengkulu City Health Center Beringin Raya in 2020 used the Chi-Square test (Fisher's Exact Test). The results of the Fisher's Exact Test obtained the value exact.sig (p) = 0.306.

Because the p value > 0.05 , there is no significant relationship between knowledge of midwives with preparedness in dealing with flood disasters in the Sukamerindu Public Health Center and Beringin Raya Public Health Center Bengkulu City.

Table 5.
The Relationship between Midwives' Attitudes and Midwives' Preparedness in Facing Flood Disasters in the Work Areas of Sukamerindu Health Center and Beringin Raya Health Center Bengkulu City

Attitude Midwife	Midwife Preparedness				Total		X^2	p	C
	Not ready		Ready		F	%			
	F	%	F	%					
Unfavorable	5	62.5%	3	37.5%	8	100.0	9.355	0.007	0.488
favorable	2	9.1%	20	90.9%	22	100.0			
Total	7	23.3%	23	76.7%	30	100.0			

Based on research results cross tabulation can be seen between the relationship between the attitude of the midwife and the preparedness of the midwife in dealing with the flood disaster in the work area of the Sukamerindu Public Health Center and the Banyan Raya Public Health Center, Bengkulu City. Based on table above, it can be seen that from 8 midwives with an unfavorable attitude there were 5 midwives who were not ready and 3 midwives ready to face disasters flood, while from 22 midwives with favorable attitudes there were 2 midwives who were not ready and 20 midwives ready to face the flood disaster in the Sukamerindu Public Health Center and the Beringin Raya Public Health Center Bengkulu City in 2020.

To find out the relationship between midwives' attitudes and preparedness in dealing with flood disasters in the Sukamerindu Community Health Center and Beringin Raya Bengkulu City Health Center in 2020, the Chi-Square test (Fisher's Exact Test) was used. The results of the Fisher's Exact Test obtained the value exact.sig (p) = 0.007. Because the value of $p < 0.05$, there is a significant relationship between the attitude of the midwife and preparedness in dealing with flood disasters in the Sukamerindu Public Health Center and the Beringin Raya Public Health Center in Bengkulu City.

The close relationship between midwives' attitudes and preparedness in dealing with flood disasters in the Sukamerindu Public Health Center and the Bengkulu City Health Center Beringin Raya in 2020 is seen from the Contingency Coefficient (C) value. The value of C is 0.488 with the value of $C_{max} = 0.707$. Because the value of $C/C_{max} = 0.488/0.707 = 0.690$ is between 0.6-0.8, the relationship is said to be in a close category.

3.2 Discussion

Based on research results cross tabulation can be seen between the relationship between the attitude of the midwife and the preparedness of the midwife in the face of flood disaster in the working area of the Sukamerindu Health Center and the Beringin Raya Public Health Center, Bengkulu City.

The results of this study are not in line According to Ismail, Nizam et al, 2015, explaining that there is a significant relationship between knowledge of health workers on preparedness to face flood risk at the Pidie Jaya Regional General Hospital.

To know relationship between knowledge of midwives with preparedness in dealing with flood disasters in the Sukamerindu Community Health Center Work Area and the Bengkulu City Public Health Center Beringin Raya in 2020 used the Chi-Square test (Fisher's Exact Test). The results of the Fisher's Exact Test obtained the value exact.sig (p) = 0.306. Because the p value > 0.05 , there is no significant relationship between knowledge of midwives with preparedness in dealing with flood disasters in the Sukamerindu Public Health Center and Beringin Raya Public Health Center Bengkulu City.

This result is not in line with the theory according to Setiawati, 2020 explaining, the results of the study show that having good knowledge and having poor knowledge. This result is in line with the research conducted by Berhanu, Abrha, Ejigu, which shows that respondents' knowledge of preparedness to face flood disasters has good knowledge. Based on research results cross tabulation can be seen between the relationship between the attitude of the midwife and the preparedness of the midwife in the face of flood disaster in the working area of the Sukamerindu Health Center and the Beringin Raya Public Health Center, Bengkulu City.

Fisher's Exact Test results obtained the value exact.sig (p) = 0.007. Because the value of $p < 0.05$, there is a significant relationship between the attitude of the midwife and preparedness in dealing with flood disasters in the Sukamerindu Public Health Center and the Beringin Raya Health Center in Bengkulu City.

This is in line with research According to Ismail, Nizam et al, 2015, explaining that there is a significant relationship between the attitudes of health workers towards preparedness to face flood risk at the Pidie Jaya Regional General Hospital.

The close relationship between midwives' attitudes and preparedness in dealing with flood disasters in the Sukamerindu Public Health Center and the Bengkulu City Health Center Beringin Raya in 2020 is seen from the Contingency Coefficient (C) value. The value of C is 0.488 with the value of $C_{max} = 0.707$. Because the value of $C/C_{max} = 0.488/0.707 = 0.690$ is between 0.6-0.8, the relationship is said to be in a close category.

The results of this study are in line with the theory according to Indri et al, 2020 explaining the results of the study showing that having a good attitude and having a bad attitude.

According to Setiawati, 2020 Attitude is a response that will determine a person's actions or behavior. Attitudes influence behavior through the decision-making process and in this case is the nurse's decision to prepare for disaster management efforts.

The results of this study are in line with the theory according to Novria, 2019 explaining that there is a significant relationship between attitudes and midwives' preparedness in dealing with the earthquake and tsunami disaster at the Padang City Health Center with $p < 0.05$ (0.017). The results of this study are supported by Bukhari et al (2013) regarding earthquake disaster preparedness in the BLUD of the Aceh Government Mother and Child Hospital. earthquake by the implementing nurse.

The results of this study are in line with the theory according to Direja & Wulan, 2019 explaining the results of research between the relationship between attitudes and the preparedness of health workers in dealing with earthquake and tsunami disasters in all health centers in Bengkulu City, showing that based on the results of the Pearson Chi-Square test, the value of $\chi^2 = 18.180$ with value $= 0.000 < (0.05)$, statistically significant so that H_0 is rejected and H_a is accepted, meaning that there is a significant relationship between attitudes and the preparedness of health workers in dealing with earthquake and tsunami disasters in all health centers in Bengkulu City.

IV. CONCLUSION

1. Of the 30 midwives, there are 7 midwives who are not ready to face disasters, 23 midwives are ready to face disasters.
2. From 30 Midwives there are there are 7 midwives with sufficient knowledge and 23 midwives with good knowledge.
3. Of the 30 midwives there were 8 midwives with an unfavorable attitude and 22 midwives with a favorable attitude.
4. There is no significant relationship between the knowledge of the midwife and the preparedness of the midwife in dealing with flooding in the Sukamerindu Puskesmas work area and the Beringin Raya Public Health Center, Bengkulu City.
5. There is a significant relationship between Bida's attitude and Midwife's preparedness in dealing with flooding in the Sukamerindu Public Health Center and the Beringin Raya Public Health Center, Bengkulu City.

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