



ARTICLE

CORRELATION BETWEEN HEALTH WORKER FACTORS AND COPING STRATEGY TO MOTHER'S RESILIENCE LEVEL IN MAN-AGING ANNUAL FLOOD IN THE COVID-19 PANDEMIC

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ABSTRACT

Low level of coping strategies and health worker factors reduce the ability to survive from flood. This can lead to low level of mother's resilience. This study aims to analyze the correlation between health worker factors and coping strategy against mother's resilience in managing the impact of annual flood disasters during the COVID-19 pandemic. This research used correlational analytic method with cross sectional approach. This study used a sample of 121 mothers in Sukorejo Village, Karangbinangun District, Lamongan Regency who were affected by flood. The independent variables of this study were health workers factors and coping strategies. The dependent variable of this study was mother's resilience. The research instrument used a questionnaire of support, facilities, and motivation health workers; coping strategy; and mother's resilience. Spearman Rho Analysis correlation test was used as analytic approach with a significance of <0.05 . The data obtained will be analyzed using a Spearman Rho correlation test. There was a correlation between health worker factors and mother's resilience ($p=0.003$; $r=0.264$). In addition, it was found that there was a correlation between coping strategies and mother's resilience ($p=0.000$; $r=0.369$). The higher health workers factor and mother's coping strategies level, the higher mother's resilience managing the flood impact. Capacity building for health workers is needed to be able to educate mothers about flood impact management, so that ultimately improve their coping strategies.

Keywords: disaster; flood, mother's resilience

АБСТРАКТ

Низкий уровень стратегий преодоления трудностей и факторы медицинского работника снижают способность выжить после наводнения. Это может привести к низкому уровню сопротивляемости матери. Целью данного исследования является анализ взаимосвязи между факторами работников здравоохранения и стратегией преодоления трудностей с устойчивостью матери к воздействию ежегодных наводнений во время пандемии COVID-19. В данном исследовании использовался корреляционный аналитический метод с кросс-секционным подходом. В исследовании использовалась выборка из 121 матери в деревне Сукореджо, район Карангбинангун, регентство Ламонгана, пострадавших от наводнения. Независимыми переменными данного исследования были факторы медицинских работников и стратегии преодоления последствий. Зависимой переменной данного исследования была сопротивляемость матери. В качестве инструмента исследования использовался вопросник, включающий поддержку, условия и мотивацию медицинских работников, стратегии преодоления трудностей и жизнестойкость матери. В качестве аналитического подхода использовался корреляционный тест Спирмена Rho Analysis при значимости $<0,05$. Полученные данные будут проанализированы с помощью корреляционного теста Спирмена Rho. Была обнаружена корреляция между факторами медицинского работника и жизнестойкостью матери ($p=0,003$; $r=0,264$). Кроме того, была обнаружена корреляция между стратегиями преодоления трудностей и жизнестойкостью матери ($p=0,000$; $r=0,369$). Чем выше фактор медицинских работников и уровень стратегий совладания матери, тем выше устойчивость матери к воздействию наводнения. Необходимо наращивать потенциал медицинских работников, чтобы они могли обучать матерей управлению последствиями наводнения, чтобы в конечном итоге улучшить их стратегии преодоления.

Ключевые слова: стихийное бедствие; наводнение, устойчивость матерей

INTRODUCTION

Communities, especially mothers who are continuously affected by floods, can cause psychological problems such as stress(1). The stress experienced by the mother is also influenced by the low level of resilience and coping strategies so that the mother cannot survive the impact of the flood. The low coping strategy causes no thoughts and actions to be taken to deal with threatening situations such as flood(2). The low level of resilience causes mothers to be passive and tend to surrender to the situation they are experiencing(3). Health workers also plays a role in flood disaster management. The low level of the health workers role means that the information, support, motivation and facilities provided to the community to deal with flooding are at a low level(4).

Flood disaster is still a trend of disasters in Indonesia by occupying the top three positions since the last three years. The data obtained from the Indonesia Disaster Data Geoportal page is that in 2019 there have been 3,814 disasters with 784 flood disasters, in 2020 there were a total of 4,650 disasters with 1,518 floods, in 2021 there were 5,402 disasters with 1,794 flood events(5). Apart from floods, Indonesia is also affected by the Covid-19 outbreak. In March 2020, it was first reported that there were two cases of Covid-19 virus infection in Indonesia. The high number of Covid-19 cases in Indonesia has also caused regional handling to be too focused on managing the impact of Covid-19, so that it forgets to include elements of natural disaster management(6).

Annual flood that occurs has the potential to continue to repeat itself every year. Therefore, the community needs to understand disaster mitigation and how to minimize the impact of disasters. Lack of knowledge to recognize potential floods, health threats, and other impacts due to flooding needs to be improved to support optimal disaster management processes(7). Resilience as an effort to manage the impact of disasters needs to involve various aspects of the community, including the role of mothers.

Women, especially mothers, have an important role in disaster management so that the resulting impacts can be well controlled. The role of the mother in the family is also an important component that is able to bring about change in the family sphere(8). Resilience as an effort to rise from stress and trauma due to disasters can be obtained by developing coping strategies. Coping strategy is a process of changing from one condition to another as an action to resolve an unexpected condition. Previous research on the effect of coping strategies on the resilience of disaster-prone families stated that there were positive results where the higher the coping strategies the family had, the higher the resilience of the family(9). Research on the relationship between factors of health workers and coping strategies on the level of mother's resilience is still very limited in number. Therefore, the researcher wanted to conduct a study to obtain data regarding the relationship between health worker's factors and coping strategies on the level of mother's resilience in managing the impact of annual floods in the Covid-19 pandemic.

MATERIAL AND METHODS

This research is part of the research of the Academic Research Program of the Faculty of Nursing, Airlangga University in 2021 with the title "Model of Mother's Resilience in Managing the Impact of Annual Flood Disasters during the Covid-19 Pandemic Based on Family Centered Empowerment and Family Resilience Models as Efforts to Strengthen Disaster Resilient Villages" . The research method used is correlational analytic method with cross sectional approach.

A total of 121 mothers in Sukorejo Village, Karangbinangun District, Lamongan Regency, East Java became respondents in this study. The sampling technique used was purposive sampling technique with inclusion criteria of mothers aged 20-60 years, able to read and write, not having physical and mental disabilities. The exclusion criteria in this study were mothers as a vulnerable group, namely

pregnant women, mothers with chronic diseases and elderly mothers. The independent variables in this study were factors of health workers and coping strategies. The dependent variable in this study is mother's resilience. This study uses a questionnaire as a research instrument. Researchers compiled a questionnaire to obtain data on demographic data, mother's perceptions of health workers, coping approval with certificate number 2413-KEPK in 2022.

RESULT

Based on the demographic data of the respondents in the table, it shows that most of the respondents are aged 31-40 years, as many as 57 people with a percentage of 47.1% of the total number of respondents. The last

strategies, and mother's resilience. Data analysis using SPSS version 25 program with Spearman Rho correlation test. If the probability (Sig.) Spearman Rho > 0.05 then H1 is accepted, and vice versa, if (Sig.) Spearman Rho < 0.05 then H1 is rejected. This research has passed the ethical test of the Research Ethics Commission (KEPK) of the Faculty of Nursing, Universitas Airlangga and has received education level of respondents is mostly high school graduates, namely 67 people with a percentage of 55.8%. Most of the respondents worked as housewife, namely 96 respondents or 79.3%. Most of the respondents in the status of married marriage as many as 117 people or 96.7% of the total number of respondents

Table 1. Respondent Demographic Data by Category

	Respondent Characteristics	f(x)	%
Age	20-30	3	19,0%
	31-40	57	47,1%
	41-60	41	33,9%
Education	Didn't Pass Elementary School	1	0,8%
	Elementary School	6	5%
	Junior High School	28	23,1%
	High School	67	55,4%
	Bachelor	19	15,7%
Profession	Government Employee	2	1,7%
	Employee	11	9,1%
	Entrepreneur	10	8,3%
	Housewife	96	79,3%
	Others	2	1,7%
Marital Status	Married	117	96,7%
	Divorce	4	3,3%

The demographic data of the respondents in the table shows that most of the respondents are aged 31-40 years, as many as 57 people, with a percentage of 47.1% of the total number of respondents. The last education level of respondents is mostly high school graduates, namely 67 people, with a

percentage of 55.8%. Most of the respondents worked as housewives, namely 96 respondents or 79.3%. Most of the respondents are married, as many as 117 people, or 96.7% of the total number of respondents.

Table 2. Distribution of the Correlation between Health Worker Factors and Mother's Resilience in managing the impact of annual floods in the Covid-19 Pandemic

Health Worker Factors	Mother's Resilience								Total	
	Very High	%	High	%	Low	%	Very Low	%	N	%
Good	4	3,3	13	10,7	21	17,4	6	5	44	36,4%
Enough	0	0	4	3,3	11	9,1	15	12,4	30	24,8%
Less	4	3,3	3	2,5	7	5,8	4	3,3	18	14,9%
Very Less	1	0,8	3	2,5	10	8,3	15	12,4	29	24%
Total	9	7,4	23	19	49	40,5	40	33,1	121	100%
Test Spearman Rho					p = 0,003			r = 0,264		

Analysis of the data using the Spearman test with the results of significance (p) = 0.003 with a significant degree of p < 0.05 concluded that there was a correlation between the Health worker's Factor and Mother's

Resilience. The correlation coefficient (r) = 0.264 results indicate a low correlation with a positive correlation direction. The higher Health worker's factor, the higher the Mother's Resilience level is

Table 3. Distribution of the Correlation between Coping Strategy and Mother's Resilience in managing the impact of annual floods in the Covid-19 Pandemic

Coping Strategy	Mother's Resilience								Total	
	Very High	%	High	%	Low	%	Very Low	%	N	%
Good	6	5	12	9,9	27	22,3	7	5,8	52	43
Enough	3	2,5	11	9,1	18	14,9	24	19,8	56	46,3
Less	0	0	0	0	4	3,3	9	7,4	13	10,7
Total	9	7,4	23	19	49	40,5	40	33,1	121	100
Test Spearman Rho					p = 0,000			r = 0,369		

Analysis of the data using the Spearman test with the results of significance (p) = 0.000 with a significance degree of $p < 0.05$, it was concluded that there was a relationship between Coping Strategies and Mother's Resilience. Results Correlation coefficient (r)=0.369 indicates a low relationship with a positive correlation direction, namely the higher the coping strategy, the higher the level of mother's resilience.

DISCUSSION

From the results of the Spearman rho statistical test, it can be concluded that there is a correlation between two variables, the health worker's support and the mother's level of resilience. The health worker's support major parameter are education, motivation, and facilities from the health worker's to Mothers in Sukorejo Village, Karangbinangun District, Lamongan. From the research, mother's perceive that health worker's provide counseling and education on managing disasters' impact in a friendly and polite manner. In line with research by Pahleviannur, the increase in knowledge carried out was useful for reducing the impact of disasters that occurred in the community⁷. Alongside the increase in knowledge about disaster mitigation, the community will adapt to the changes when a disaster occurred.

The role of health workers in providing health care regarding disaster mitigation in Sukorejo Village, Karangbinangun District, Lamongan Regency, is quite good. However, because the facilities provided by the health worker such as disaster management training is not sustainable, the experience gained by the community are not optimal¹⁰. It is stated that continuous training of disaster management can increase preparedness when disaster occur.

Resilience is negotiating, managing, and adapting to traumatic and stressful conditions so individuals can rise up and face various uncomfortable conditions¹¹. Floods, as the main stressor, cause traumatic conditions. Therefore, resilience is needed to get up and live life as usual. Based on demographic

factors, several things can affect resilience. Most of the mothers have an education level only up to high school. This is in line with research by Marseva says that a person's education level influences resilience. The higher a person's education level, the higher the knowledge in solving problems¹². Therefore, people with higher knowledge tend to use their knowledge and act more rationally. The higher a person's level of knowledge, the easier it is for that person to access information to help overcome the flood disaster.

The mother in Sukorejo Village also stated that health workers are easy to contact and always assist in managing the impact of the flood disaster and paying attention to existing complaints. This fact aligns with research from Widayatun & Fatoni, which revealed that health workers also play a role in rescuing disaster victims and providing health services¹³. Most of the mothers in Sukorejo Village have a low level of resilience. This is obtained because mothers are not flexible when their living environment changes. In line with Maddi's research, hardiness is defined as courage that emerges as a pattern of attitudes and strategies that facilitate change from a threatening situation to an opportunity to rise¹⁴. So when flood occur, the impacted mothers in Sukorejo Village, Karangbinangun District, Lamongan Regency, mothers could not survive and change from this condition.

The coping strategies major parameter are social support, problem solving management, and religious coping. The mother evidences this as a research respondent seeking support from friends and family in dealing with floods. In line with research by Irzalinda & Sofia, individuals who get social support from family and friends tend to have better coping strategies. Social support received can be in the form of enthusiasm, attention, appreciation, help, and affection. In line with research by Kumalasari, individuals with high social support feel valued and cared for to develop positive attitudes towards themselves and rise from unpleasant conditions. Individuals need social support to

become more resilient individuals when facing threatening situations. In addition, with other people who provide social support, individuals can find a way out of the motivation, advice, and direction provided through social support¹⁵. Based on the questionnaire results, it was found that the mother had positive thoughts about the disaster she experienced, so she felt she could go through it well. In addition, the mother also feels that she has a good correlation with the environment in which she lives, even when affected by the flood.

Most of the mother's resilience levels in Sukorejo Village, Karangbinangun District, Lamongan Regency are in a low category. Mothers aged 31-40 years have a higher resilience level than those aged 20-30. This is in line with the research of Salamah said that age influences resilience. The more mature a person's age will affect a person's ability to solve problems. Therefore, mothers aged 31-40 can find solutions to the problems they face because they have more experience than mothers of younger ages¹⁶. Therefore most mothers don't have enough experience to handle the flood.

Mothers in Sukorejo Village, Karangbinangun District, Lamongan Regency have a good level of coping as evidenced by mothers who always try to get closer to God in dealing with flood disaster situations. This is in line with Fidinillah's research that coping strategies in the form of religious coping plays a role in reducing individual stress levels and increasing self-confidence through religious activities¹⁷. In addition, a research conducted by Feder stated that individuals with good religious coping tend to have positive emotions¹⁸.

CONCLUSION

Resilience is something that is influenced by many factors. Therefore, increasing one factor alone is not enough to increase one's resilience. Coping strategies and support from health workers have a positive relationship although not significant because there are many other factors that affect resilience itself. However, from this study it can be concluded

that a. The better the support from health workers, the higher the level of maternal resilience because there is social support from health workers and increased knowledge facilitated by health workers. Then, the better the coping strategy, the higher the mother's resilience level because with good coping, positive thinking and self-confidence will emerge with her abilities.

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DECLARATIONS

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