

Farmer Resilience After Floods and Landslides

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Article Info:

Submitted:

31-12-2021

Revised:

24-02-2022

Accepted:

07-03-2022

DOI:

<https://doi.org/10.53713/nhs.v2i2.89>



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ABSTRACT

Floods and landslides are crisis conditions for farmers who have the potential to cause trauma. The capacity of farmers to deal with, overcome and change due to traumatic experiences varies throughout life. Resilience will form coping mechanisms and influence mental health. Method: This research is a descriptive study with a cross-sectional design. Questionnaires were given to 100 farmers. Resilience was assessed using The Connor-Davidson Resilience Scale (CD-RISC). Univariate statistical analysis to determine the proportion of resilience. Results: The mean resilience of farmers after a disaster is 95.72. Discussion: Resilience is a stable personality trait characterized by an individual's ability to rise again from negative experiences and the ability to adapt to continual changes in life. Farmers who are directly affected by a disaster are in a traumatic condition, so they are very vulnerable to stress. The mental endurance of each farmer is different, according to the influencing factors

Keywords: resilience; farmers; disaster

INTRODUCTION

Indonesia is one of the countries that are prone to landslides. Climatic, geographical, and topographical conditions in Indonesia are factors that have the potential to increase the incidence of floods and landslides. Floods and landslides cause physical impacts such as material damage, loss of life, environmental damage, and psychological impacts. Many farmers experienced floods and landslides as victims who were directly affected by the incident. The Jember National Disaster Management Agency noted that landslides and floods caused damage to elementary schools, 2.5 hectares of chili plants, and 7.5 hectares of rice plants to be flooded (Mulyono, 2017). Floods and landslides hit three sub-districts, namely Sumberbaru, Tanggul, and Semboro Sub-districts so that as many as 230 residents fled to several locations (Laily, 2021). Landslides also occurred in the area of Curah Ungkal, Pace Village, Silo District, Jember due to heavy rain which caused several houses to be badly damaged (Hatta, 2022)

Floods and landslides are crisis conditions for farmers that have the potential to cause trauma (BNPB, 2014). The results of previous studies have shown that floods and landslides can cause extraordinary feelings of uncertainty, fear, and panic in affected residents (Subandi, Achmad, Kurniati, & Febri, (2014). The capacity of farmers to face, cope with, and change as a result of traumatic experiences varies throughout life. The ability to adapt to traumatic situations is called resilience (Revich & Shatte, 2002). Resilience will shape coping mechanisms and affect mental health. The role of mental nurses is needed to explore the resilience of farmers, as a basis for determining nursing interventions for clients with psychosocial risks/problems. The results of this study can be used as initial data in establishing nursing diagnoses and as a development related to the rehabilitation process in disaster-affected communities by determining aspects of mental problems and appropriate management in the post-disaster period occur.

METHOD

This study used a descriptive research design with a cross-sectional approach. Descriptive research is research that describes and describes a phenomenon or problem that exists in a place (Budiarso, 2003). The population in this study amounted to 100 farmers. The sample is part of the number and characteristics possessed by the population used in a study (Sugiyono, 2017). The sampling technique used in this research is total sampling. The measuring instrument used is a resilience questionnaire from Connor and Davidson (2001). Analysis of research results is used to describe descriptively the frequency distribution and proportion of each variable studied. This analysis aims to explain or describe the characteristics of each research variable (Sumantri, 2015). The data is presented in the form of a frequency

distribution table and is displayed as a percentage of each data. Numerical data uses the mean and standard deviation, while categorical data types use the proportion value.

RESULT

Description of Respondents Characteristics Respondent characteristics consists of farmer characteristics which include: age, gender, marital status, last employment status, and family income. Characteristic data was obtained by asking directly to the respondent.

Table 1. Distribution of Respondents' Characteristics by Age and Income

Characteristics of Respondents	Mean	SD	Minimum Maximum
Age (years)	45.07	12.988	23-85
Income (IDR)	1,234,000 (88\$)	486,270 (34\$)	500,000 (35\$)-2,500,000 (178\$)

Table 1 shows the distribution of respondents' age and income where the average age is 45.07 which means it is close to the minimum value, while the average income is around IDR 1,234,000 (88 \$) which means it is close to the minimum income.

Table 2. Distribution of Respondents Characteristics Based on: Gender, Marital Status, and Last Education

Characteristics of Respondents	Frequency	Percentage
Gender		
Male	54	54
Female	46	46
Total	100	100
Marital Status		
Not yet/Not Married	9	9
Married	81	81
Widows/Widowers	10	10
Total	100	100
Recent Education		
No school/Not finished Elementary school	17	17
Primary school	52	52
Junior high school	17	17
Senior high school	14	14
Total	100	100

Data analysis in table 2 shows the number of male respondents 54 people, 81 respondents married, and 52 respondents with elementary school education.

Table 3. Overview of Farmer Resilience

Variable	Mean	SD	Min – Max
Resilience	95,72	5,691	75 – 118

Based on data analysis from table 3 shows that the mean resilience of respondents is 95.72 so that it is close to the maximum value.

DISCUSSION

Resilience is a stable personality trait characterized by an individual's ability to bounce back from negative experiences and the ability to adapt to continuous life changes (Connor, 2006; Rinaldi, 2010). Flores, Cicchetti, and Rogosch (2005) explain that resilience is a dynamic process that affects a person's capacity to adapt and succeed in dealing with chronic stress and adversity.

Coping style and personality also have a role in resilience. There are two forms of coping styles in resilience, namely flexible adaptation, and pragmatic coping. First, most people who have resilience in the face of adversity are people who have psychological health. This individual has flexibility in adapting to shifts with challenges. As an example of the resilience and endurance ego variables. Second, the idea of pragmatic coping stems from the fact that some people can achieve resilience from adversity in ways that may not be adaptive under normal circumstances. Forms of this strategy include repressive coping, dismissive attachment, and habitual use of attribution of self-attainment, and bias (Mancini and Bonano, 2006).

There is a very significant difference in resilience between men and women. According to Mancini and Bonano (2006) that men are more resilient than women. The results of this study are also in line with the results of Barends (2004), and Bonano, Rennie, and Dekel (2007). Barends (2004) shows that demographic factors including age, gender, language, race, native and immigrant, income have a significant relationship with resilience. Bonanno, Galea, Bucciarelli, & Vlahov (2007) in their research found that the factors that influence resilience are gender, age, race, education, trauma level, income, social support, frequency of chronic illness, past and present life stresses.

This study only focuses on age and gender factors. The results of previous studies found that there were gender differences in responding to disasters. The results of Karanci et al's (1999) research on the ability to adapt to earthquakes found that men often use a problem-solving approach and have an optimistic attitude compared to women, while women use a pattern of helplessness compared to men.

According to Eisenberg et al (2003), individuals with high levels of resilience (males) can adapt to various conditions to change circumstances and are flexible in solving problems, while individuals with low levels of resilience (women) have little adaptive flexibility. , is unable to react to changing circumstances, tends to be stubborn or disorganized when faced with change or stress, and has difficulty adjusting after a traumatic experience. Differences in the adjustment of men and women are influenced by biological conditions. This can be seen from the physical differences between men and women. Biological conditions affect behavioral differences between the sexes. According to the theory of natural selection, this division of roles tends to encourage behavioral differences based on biological circumstances. Every trait that is innate from birth determines that men are aggressive and free, and women behave as caregivers, and stay at home, while the opposite trait of male passivity, female aggressiveness, is deeply suppressed (Calhoun and Acocella, 1990). Men and women have different views on how to perceive risk. Women are more concerned with the affective aspect of taking risks, while men are more concerned with cognitive considerations in viewing risk and danger as part of life. The results of Karanci et al's (1999) research on the ability to adapt to earthquakes that men often use a problem-solving approach and have an optimistic attitude compared to women, while women use a pattern of helplessness. The results of research conducted by Barends (2004) indicate that men have confidence in solving problems and believe in their ability (competence) to master difficult tasks or situations, more positively than women.

Community resilience is influenced by internal and external factors. Internal factors are intrapersonal or personality. Intrapersonal factors include cognitive factors and special competencies. Cognitive factors include optimism, intelligence, creativity, humor, and belief systems that give meaning to life, as a collection of life stories and respect for each other's uniqueness (Tusaie and Dyer, 2004), social skills or positive responses to others, self-esteem and positive self-concept and internal locus of control. Empathy, humor, flexibility, and gentle personality, all of which can enhance social skills (Everal, Altrows, and Paulson., 2006; Hoge, Austin, and Pollack, 2007). Specific competencies that contribute to resilience include coping strategies, social skills, talents, and having above-average memory abilities (Tusaie and Dyer, 2004). The external factor is social support (Bonano et al, 2007). Social support is an important factor in resilience. Social support includes the many sources of social support as a process that affects individuals. Social support is a form of relationship that individuals receive from the environment, including family and society (Eisenberg et al, 2003; Everal, Altrows, and Paulson., 2006).

CONCLUSION

The average value of farmer resilience is 95.72 with a moderate resilience category. Farmers who experience floods and landslides are in a traumatic condition and are at risk of experiencing stress. Each farmer has a different mental resilience in managing his problems.

ACKNOWLEDGEMENT

The researchers would like to thank the Dean of the Faculty of Nursing and LP2M University of Jember

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