



Psychological Trauma Level Among Post Earthquake Children in Kajai West Pasaman West Sumatera

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ABSTRACT

Indonesia is a country situated in the middle of two seas encircling continents. Indonesia is situated in the area of the world's most active earthquakes, as shown by its location on tectonic plates encircled by active volcanoes. Because of this, Indonesia is susceptible to a variety of natural calamities, including tsunami and earthquakes. An earthquake is a sudden, mild to strong shaking of the ground brought on by a shift in the earth's plates. Victims of earthquakes may have psychological and physical effects. For victims, it causes severe anguish and sadness. Examining the degree of trauma experienced by children following the earthquake in Kajai, West Pasaman, West Sumatra, Indonesia, is the goal of this study. In West Kajai Pasaman, West Sumatra, 303 post-earthquake children were the sample for this quantitative study, which used a descriptive research approach. According to the study's findings, mild trauma was experienced by 30.4% of post-earthquake children, moderate trauma by 62.7%, and severe trauma by 6.9% of the population. It is anticipated that this study would draw attention to the number of traumatized youngsters in Kajai village. The regulatory agencies will find these insights useful in reducing

INTRODUCTION

Situated between two continents and two oceans, Indonesia is an equatorial nation. According to three years' worth of data on the greatest earthquakes in the globe, the Indonesian islands are situated where four tectonic plates converge: the Pacific, Indian, Australian, and Asian plates (Intan, 2021). Indonesia's location on a tectonic plate encircled by active volcanoes indicates that it is in an earthquake-prone area, rendering it susceptible to a variety of natural calamities (Muhari, 2024). Because Indonesia is situated on a tectonic plate encircled by active volcanoes, it is vulnerable to a number of natural disasters, including the most frequent earthquakes in the world (Latif, 2020). The Agency for National Disaster Management (BNPB)

An earthquake is defined as a rapid release of energy that causes the earth to tremble and is typified by cracks in the rock strata that make up the crust. Earthquakes are caused by the accumulation of energy generated by the movement of tectonic plates (Eva et al., 2022). Property destruction, natural disasters, the socioeconomic situation, and fatalities are all consequences of earthquakes. In addition, victims of earthquakes may have psychological effects such as severe shock and grief. A person's psychological and mental health are intimately linked to trauma. Trauma results from a shock or injury that can seriously harm or injure the person who is impacted. Events in life, such as relationships or accidents, can cause trauma. When individuals experience psychological trauma, they feel overwhelmed emotionally, cognitively, and physically so that they are unable to overcome their condition (Trihantoro et al., 2016), (Ray, 2015), (Fitri et al., 2023). The symptoms of trauma can interfere with a person's daily life from functioning normally. Symptoms of psychological trauma include nightmares, anxiety, fear, and irritability, which can also develop into depression such as feelings of sadness, hopelessness, and worthlessness, excessive feelings of worry, nervousness, and panic, difficulty sleeping or excessive sleeping, headaches, stomach pain, and fatigue (Ray, 2015). Psychological trauma for earthquake-experienced victims are usually marked by the onset of psychotic symptoms and post-traumatic stress disorder (PTSD). It is found that post-earthquake children are at higher risk for experiencing symptoms of psychological trauma. The effects of traumatic symptoms in children such as symptoms of post-traumatic stress in these children can last up to 30 years. Traumatic symptoms among post-earthquake children such as fear, anxiety, depression, difficulty thinking, and impaired concentration (Srimulyani, 2022).

For the child victim, the psychological effects will outweigh the physical ones. Emotional disturbances including loss of joy and happiness, as well as the loss of parents, family, friends, and education, can all contribute to this. Complications like psychiatric problems that can interfere with social life, employment, and children's development will arise if this psychological influence is not handled right away (Widyastuti et al., 2019). As soon as feasible after a disaster happens, recovery interventions for its effects should be implemented. This is done because the less detrimental effects that can be avoided, the quicker the recovery treatment is implemented (Muhari, 2024). The

victim may require longer-term, more intensive psychological care if their condition worsens.

LITERATURE REVIEW

Along with property destruction, environmental harm, and fatalities, the earthquake's effects also harm children's and the elderly's mental health. It is probable that survivors of natural disasters would endure psychological stress as a result of the event (Novia et al., 2020). In February 25, 2022, at 08:39 WIB, a 6.1 Mw earthquake shook West Pasaman Regency, West Sumatra, Indonesia, causing a landslide in Nagari Kajai, Talamau District, West Pasaman, West Sumatera, Indonesia. Kajai was the area most severely affected by the earthquake. The region was pummeled by strong rainfall from the afternoon until the evening, which produced the landslide. Stable soil conditions as a result of the earthquake's effect into

METHODOLOGY

This quantitative study examines the degree of psychological trauma experienced by children following the earthquake using a descriptive study approach. Research designs that characterize a phenomena from the research object are known as descriptive research (Swarjana, 2023). This study was carried out at Kajai West Pasaman, West Sumatra, Indonesia, between October 2023 and May 2024. The sample size for this study was 303 kids. Children aged 7 to 12 who lived in the Kajai region of West Sumatra and had experienced an earthquake were eligible to participate. Children who have both physical trauma injuries and mental disabilities are excluded. The child PTSD Symptom Scale for DSM-V (CPSS-V SR) is the tool utilized in this investigation. The PTSD Symptom Scale for Children

RESULTS

According to Table 1, out of the 303 youngsters, 65 (21.5%) had responder characteristics of being 11 years old. Table 2 indicates that, of the 303 children surveyed, 132 (44.2%) are male and 171 (56.5%) are female. More than half (62.7%) of the youngsters in Kajai, West Pasaman, West Sumatra, Indonesia, suffered from significant psychological stress following the earthquake, according to Table 3. The majority of youngsters (81.5%) in Kajai, West Pasaman, West Sumatra, Indonesia, believed that an earthquake will occur again, according to Table 4. Table 5 demonstrates that when youngsters recall what happened, the majority of them (71.6%) experience bodily sensations like perspiration and heartbeat.

Table 1. Demographic Characteristic of Respondents: Age

Age	Frequency	Percentage (%)
7 year age	42	13.8
8 year age	46	15.2
9 year age	46	15.2
10 year age	49	16.2
11 year age	65	21.5
12 year age	55	18.1
Total	303	100

Table 2. Demographic Characteristic of Respondents: Gender

Gender	Frequency	Percentage (%)
Male	132	43.5
Female	171	56.5
Total	303	100

Table 3. Frequency Distribution of to Respondents

Variable	Frequency	Percentage (%)
Minimal level of trauma	92	30,4
Moderate level of trauma	190	62,7
Severe level of trauma	21	6,9
Total	303	100

Table 4. Frequency Distribution of Post-Earthquake Children for the Question if They Feel if the Eartquake will Happen Again

Variable	Frequency	Percentage (%)
feel the earthquake happen again	247	81,5
Does not feel that the earthquake will happen again	56	18,5
Total	303	100

Table 5. Frequency Distribution of Post-Eartquake Children for Having Feelings in Body When Remember What Happened the Earthquake

Variable	Frequency	Percentage (%)
Having feelings in body when remember what happened (sweating, heart beating fast, stomach or head hurting)	217	71.6
Does not having feelings in body when remember what happened (sweating, heart beating fast, stomach or head hurting)	86	28.4
Total	303	100

DISCUSSION

According to the study's findings, out of the 303 children, 65 (21.5%) are the oldest, at age 11. Of the 303 youngsters that responded, 132 (44.2%) were male and 171 (56.5%) were female. It was shown that following the earthquake in Kajai, West Sumatera, Indonesia, over half (62.7%) of the youngsters suffered from significant psychological damage. The majority of youngsters (81.5%) believe that the earthquake will occur again. When they think back on what happened after the earthquake in Kajai, West Pasaman, West Sumatra, Indonesia, the majority of the children (71.6%) have reported experiencing some physical symptoms of psychological stress, such as perspiration, a racing heart, or pain in their stomach or head.

According to a study by Eva Yuliani (2021) that used the Strengths and Difficulties Questionnaire (SDQ) to describe psychological trauma in children following the earthquake disaster, school-age children (7-12 years) fall on the difficulty subscale. The majority of them are in the border category, with 27 (54.0%), 18 (36.0%), and a small portion of 5 (10.0%) being classified as normal. The strength subscale falls into the normal group with 27 individuals (54.0%), the border with 19 individuals (38.0%), and the abnormal category with 4 individuals (8.0%) (Eva et al., 2022). However, this study's findings about children's psychological distress following the earthquake in Kajai, West Pasaman, West Sumatra, Indonesia, indicate that a modest degree

A catastrophe is an occurrence that can impact and jeopardize the lives and means of subsistence of society due to natural, man-made, and artificial forces (BNPD, 2015). Hurricanes, earthquakes, typhoons, wildfires, tsunamis, floods, and extreme weather occurrences such heat waves, floods, and storms are examples of natural disasters. When the ground plates shift and the ground moves a little, it causes an earthquake. Sideways, upward, downward, or wave-like tremors can happen across a large region. The duration of an earthquake can range from a few minutes to several minutes, and they typically begin with a

loud or quiet sound, like a freight train. Earthquakes happen abruptly and without warning. They may occur throughout the year (The National)

A psychological effect happens when a person experiences a condition that overwhelms them physically, emotionally, and intellectually, making it difficult for them to manage (Salamor et al., 2020). Trauma is among the psychological effects (Nihayah & dkk., 2022). A person's mental health status is intimately linked to trauma, which is a reaction brought on by traumatic events and conduct (Nawangsih, 2016). It is concerning that children frequently experience disrupted mental states after natural disasters. After experiencing trauma, children frequently exhibit behavioral, emotional, and physical symptoms of discomfort. There are several physical symptoms, including as trouble sleeping, nausea, and a heightened sensitivity to fear. Anxiety, sadness, and guilt are examples of emotional symptoms. Psychotic symptoms, for instance, include

An external incident frequently sets off trauma, but our minds subsequently incorporate the subjective meaning of the trauma that led to the event. A region of the brain known as the amygdala evaluates if a systematic reaction is necessary when people are exposed to a significant stressor. If the answer is positive, then the amygdala instantly connects (stimulates) another portion, especially the sympathetic nervous system (in the spine that governs muscles and autonomic organs) to prepare the body to react to assault or flight. The brain, pituitary, and adrenal glands that comprise the HPA circuit comprise the HPA-Axis, which is the area in contact. The hormone beta-endorphins is then released by this circuit, which

When someone encounters stressful circumstances that make them feel surprised and threatened, psychosis sets in. One way to deal with earthquakes and other calamities is to attempt to forget about them, but the memory of the incident endures (Yosep, H. Iyus, 2016). Traumatic disorders typically result from severe, persistent stressors that the person suffering them is unable to overcome. According to Rahmat and Alawiyah (2020), long-term traumatic problems are typically the result of a series of tragic events or experiences that cause a person to struggle with self-adjustment and become a major psychological burden..

Mild trauma is defined by trauma symptoms that are readily overcome and not overly upsetting, depending on the intensity of the symptoms. While severe trauma imposes trauma symptoms that are extremely upsetting and are primarily brought on by significant disability symptoms like rape, natural disasters, or having a life-threatening illness, moderate trauma has trauma symptoms that are quite upsetting and need professional assistance to overcome (Meyers, 2016). They suffer from chronic trauma, including sadness, anxiety, panic, nausea, and dizziness, as a result of the frequent calamities (Ray, 2015). Women are more likely than males to exhibit the symptoms of trauma. Men's brains aren't made to deal with emotions. Compared to women, men are more reserved, powerful, and swift to make judgments.

Japan, Ecuador (South America), Indonesia, China, and Turkey are among the nations where earthquake victims have psychological stress. In their 2019 study on the psychological traits of kids two years after the Great East Japan earthquake, Sakama et al. used telephone consultation records to find that 230 participants (31.9%) were still depressed two years later. The prevalence of PTSD is 33.2%, anxiety is 15.2%, depression is 29%, and suicide attempts are 18.2%, according to a study by Gersner et al. (2020) on earthquake-related stressors linked to suicidality, depression, anxiety, and post-traumatic stress disorder in adolescents from Muisne following the 2016 earthquake. Wahab's research from 2021 indicates that the prevalence of PTSD in youth following an earthquake According to a research by Wanjie Tang et al. (2017), children and adolescents in China who witnessed two significant earthquakes within a 12-month period had a 43.9% chance of getting post-traumatic stress disorder (PTSD). Additionally, sadness (20.9%) and other diseases (0.9%) were discovered to emerge in them. 15.7% of participants fulfilled the criterion for PTSD and 21.6% met the criteria for depression at the 30-month evaluation (Wanjie Tang, 2017). According to a study by Kizilhan et al. (2024) on the psychological effects of the 2023 earthquake in Turkey, four months after the event, there was a high prevalence of psychiatric stress symptoms and general mental health symptoms, including PTSD (Kizilhan et al., 2024). The most prevalent psychological

Traumatic disorders typically result from intense, persistent stressors that the person experiencing them is unable to resist. According to Rahmat and Alawiyah (2020), long-term trauma is frequently the outcome of traumatic events or experiences that load the brain and hinder healing. PTSD may develop if the person's response to the traumatic incident lasts for a while or happens at least six months after the occurrence and is not addressed right enough (Hatta, 2016). According to the results, children suffer from trauma following an earthquake because their psychological states differ from those following an earthquake. The child's growth and development will be impacted by this. This trauma

CONCLUSIONS AND RECOMMENDATIONS

65 (21.5%) of the 303 children in this research were found to be at the greatest frequency of age, at age 11. Out of the 303 children, 132 (44.2%) are male and 171 (56.5%) are female, according to respondent gender. The Kajai, West Sumatera, Indonesia earthquake was determined to have caused moderate psychological damage in over half (62.7%) of the children. 81.5% of youngsters believe that the earthquake will occur again. When recalling the events of the earthquake in Kajai, West Pasaman, West Sumatra, Indonesia, the majority of the children (71.6%) had reported experiencing some physical symptoms of psychological stress, such as perspiration, a racing heart, or pain in their stomach or head (Jumilia & Kanathanan, 2024). This will affect the development of the kid

FURTHER STUDY

Further study could research about possible interventions and therapies to heal psychological trauma to reduce the psychological impact experienced by children after the earthquake.

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