### **ORIGINAL ARTICLE**

# **Psychological Treatment after the Tsunami Disaster**

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## **ABSTRACT**

Psychological problems are closely related to disaster events, both immediately after the disaster in the form of acute stress and trauma that occur later as from the inability of survivors to adapt to the stressors they face. Rajabasa sub-district is one of the areas in South Lampung with the areas worst affected by the Tsunami, especially the villages of Kunjir, East Way Muli and West Way Muli. The purpose of this study was to determine the form of psychological treatment for survivors in Rajabasa Subdistrict, South Lampung. This research was conducted using the Static Group Comparison Design method by providing treatment in the form of providing psychological assistance and supportive therapy in the form of therapeutic activities to address the psychological problems of survivors. The population in this study were all survivors affected by the December 2018 Sunda Strait Tsunami in Rajabasa Subdistrict, South Lampung. The sample of this study was taken by purposive sampling method with a sample size of 60 people. Samples were divided into two groups, namely groups that only received assistance and groups that received assistance and activity therapy. Data was collected by interview using a self reporting questionnaire to assess the psychological condition of survivors and feelings of trauma from the tsunami disaster that had been experienced. The analysis showed that most respondents experienced psychological problems (64.9%) and most experienced trauma (83.5%). The results of the analysis using the t test obtained pvalue <0.005. These results indicate there is an influence of psychological assistance with therapeutic activities on the psychological condition of survivors. It is recommended to use counseling in the form of psychological assistance and maintain survivors' activities in the form of supportive therapy so that survivors continue their lives and still feel meaningful.

**Keyword:** Psychological treatment, disaster, tsunami, penyintas/survivor

#### INTRODUCTION

Lately, various natural disasters have again overshadowed the country. The four elements of nature have shown its might. From flooding (water), forest fires and volcanic eruptions (fire), typhoons and nipples (wind), to landslides and earthquakes (land). The sequence of natural disasters certainly affects human life. Included in the psychological realm. According to Maramis, on every occasion of natural disasters, the average population with psychiatric problems reached 50%. Therefore, in addition to the need of logistics supply, the victims of natural disasters also require stress recovery and trauma therapy(Maramis, 2010).

Anka A. Vujanovic, & Matthew W. Gallagher, states that natural disasters can be overwhelming and potentially a traumatic life experience. People who are directly impacted by natural disasters, may suffer serious injury or experience near death; They witnessed the destruction among their larger friends, families, neighbors, and communities; And they may experience loss of property and possessions that cannot be repaired. For those who are directly impacted, a direct disaster can be confusing, characterized by displacement, shock, and a strong need to restore his or her feelings. The weeks and months after the disaster they will face a new situation. So, for some people, the full impact of a disaster and its impact on mental health may not be obvious for weeks or months after the disaster occurs. This condition is not a guarantee of loss feeling is also resolved(Anka A& Matthew W, 2017).

Disaster in the form of Tsunami occurred in December last year in Sunda Strait and impact along the coast of South Lampung Regency, and the most severe

impact occurred in Kecamatan Rajabasa Lampung Selatan. This natural disaster raises many victims. Based on the data in the public authorities recorded 3,130 victims were treated, 2,764 mild injuries and 366 severe injuries. The victim died 116, not including the victims still declared lost. Although this incident has been happening more than six months ago the trauma condition should be wary of this time (Post Traumatic syndrome disorder).

Disasters lead to various potential health problems for affected communities. This impact will be felt worse by the vulnerable population group. As mentioned in article 55 (2) ACT No. 24 of year 2007 on disaster relief, vulnerable groups include: 1). Infants, toddlers and children; 2). Mothers who are pregnant or breastfeeding; 3). Disabled; and 4) elderly people. In addition to the four groups of residents, in the head regulation BNPB number 7 year 2008 about the basic requirements fulfillment guidelines added 'sick people' as part of vulnerable groups in catastrophic conditions (Fillah, Ishartono, & Fedryansyah, 2016). The protection effort must be prioritized to the vulnerable groups, ranging from rescue, evacuation, security to health and psychosocial services. The mental health problem will increase by 50% in disaster situations. When referring to Riskesdas results 2018, emotional mental impairment of 9.8% will increase to 15% with catastrophic impacts.

The provision of health care in catastrophic conditions is often inadequate. This happens among other things due to damage to health facilities, the number and type of drugs and medical devices, limited health, limited service operational funds in the field. Natural disaster Tsunami Straits Sunda in Lampung Selatan especially in Kecamatan

Raja Basa and surrounding, caused many victims. Health facilities damaged Rajabasa. Based on the data in the Humpun of detik.com, recorded 3,130 victims were treated, 2,764 mild wounds and 366 severe injuries. The victim died 116, not including the victims still declared lost. If not immediately handled seriously, the condition can certainly cause a worse impact due to the disaster.

Catastrophic events bring impact to the citizens, especially the victims. Some of the problems faced by the disaster victims of Mount Merapi are: A. Loss of shelter for a while or could happen for the next, because it is a disaster prone area (included in the red zone). B. Loss of livelihoods due to the destruction of agricultural land and the destruction of businesses. C. Part with the head of the family because many fathers or husbands choose to stay at home on the grounds of keeping home, possessions and still working as farmers, gardening or ranchers. D. Fulfillment of basic needs in the form of eating, drinking, temporary shelter or shelter, education, health and clean water facilities are inadequate. Not available or limited to public facilities and social facilities. E. Depending on the education of children who cannot school because of the breakdown of school facilities and infrastructure. F. The risk of mild diseases (such as diarrhea) because of environmental conditions and shelter that is less clean and not conducive and inadequate health services facilities. G. The disruption of family functions and roles because in one place shelter several families at once. The optimal implementation of family functions and roles and the possibility of loss of self-control can be displaced due to saturated, not fulfilling the necessities of life. H. Loss of self-esteem and ability either as individuals or as families because at the shelter they received the mercy of the other party and even often a spectacle. Disappointed by the Government or other parties that cannot minimize the damage caused by volcanic eruptions and disappointed to the service provided by the Government that potentially become social action. I. The unenforceability of the function and social role in the kinship and the implementation of life duties in the community, for example: Arisan activities, cultural activities or culture that could not be implemented at the evacuation site. A. The saturation due to uncertainty how long to evacuate, feelings of helplessness, fear and even feelings of despair faced a possible disaster that could not be avoided (unable to resist the will of God). Consequently arises feelings of anger, stress or frustration with situations and conditions that are erratic, trauma, despair, feeling helpless and uncertainty over his future. K. Think unrealistically and look for natural supra powers to catastrophe. Spiritual disappointment disappointed in God because it is given a test or punishment even trials to the people who feel he has worship performed the according to religious teachings.(Rusmiyati & Hikmawati, 2012)

However, most of the psychological impacts that arise after disaster are normal stress reactions. Especially if the proper psychological support to the survivors is given immediately. The incidence rate of a more severe psychological disorder is generally not more than 10%. It is therefore important to be given early psychological support known as psychological First Aid (PFA) to survivors. The psychological First Aid (PFA) is the basic psychological aid

for survivors given by the public and not mental health professionals (Allen, et al.,, 2010). Includes a series of skills aimed at reducing distress and preventing the emergence of negative mental health behaviors caused by the disaster faced by survivors (Everly, et al., 2006). PFA is a basic treatment that is non intrusive (hear but does not impose to speak) and encourages mentoring without compulsion from significant people who are around the survivors (Sphere, 2004).(Amalia, Arum L, & Kusdaryono, 2019)

Disaster recovery efforts can improve public health and improve welfare and resilience by addressing the health, social, and economic gaps of people's lives. However, in the areas of disaster management and emergency, post-rehabilitation has played an important role, if not forward in the arena of disaster response as a whole and, when handled, often refers to the recovery of physical or economic systems that existed in the community. In particular, focus areas tend to center the recovery of infrastructure and/or business and commercial recoveries. Often, absent from this conversation is the importance of health, including public health, medical and social services and their role in supporting the recovery of the community as a whole. Psychosocial conditions have become neglected.

The efforts to make the psychological impact on psychologically have been conducted, especially by providing mental and psychosocial health support to survivors at several evacuation locations. Activities carried out in the form of incidental and unsustainable activities. The results of preliminary surveys are known to most survivors of mental and emotionantry, such as anxiety and depression. The handling of social psychological problems of refugees is essentially to help people who are experiencing difficulties to meet the needs of life for themselves and their families, because of the obstacles such as catastrophic factors that should be Where it is considered safe. Therefore, in providing social services or intervention should use a humanitarian approach in order not to offend those who are given service. Allen Pancus and Anne Minahan guoted by GunantoSuriono, et al., 2004 suggests that to be able to perform social problem solving should well involve the source system (resources System) which includes: a. Informal sources, originating from the family, Friends, neighbors and surrounding communities are given spontaneously. B. Formal source, derived from the Organization (government or private) that bears the problem as a member of the organization or not the member (outside) the organization. C. Social resources, derived from organizations that are specifically formed to provide relief interventions at specific and specific times (given situation).(Rusmiyati & Hikmawati, 2012)

By looking at the condition of Indonesia that is prone to disaster, natural disasters are difficult to avoid, so it can be difficult to predict. Not a few of the earthquakes in Aceh, Padang and Bengkulu who moved to other provinces including the ones in Lampung, which are considered relatively safe from earthquakes. Likewise, enough people living in coastal areas leave their homes to avoid from potential tsunamis. Escaping or avoiding by switching a traumatic place will not solve the problem. Natural disaster survivors must be able to accept disaster-prone natural

conditions and allow negative thoughts and feelings about traumatic events without having to strive to eliminate the symptoms that arise from trauma. Natural disaster survivors should be able to shift their focus to the life objectives that are to be achieved in order to improve the quality of life(Elita, Sholihah, & Sahiel, 2017).

Psychological handling efforts on survivors have been carried out much, but the continuity is often overlooked. Various groups on behalf of certain organizations who conduct activities and claim to have traumatized healing, only to provide instantaneous entertainment, without followup and maintain the sustainability of activities, so as not to be measured Effectiveness of its activities. Based on this condition, the therapy activities conducted by researchers have differences from previous activities, especially at the activities given. Psychosial treatment is a management that pays attention to the psychological aspects and social ability of survivors. Stress management is given the integrated in the socialization of patients through activity therapy. Through this activity survivors remain productive and still socialize with each other to support and strengthen each other. Thus, the treatment can overcome the psychosocial problems experienced by survivors.

# **MATERIALS AND METHOD**

This research is carried out by Static Group Comparison Design method by providing treatment in the form of providing psychological and supportive therapy in the form of therapeutic activities to provide a psychological problem of survivors. The population in this research is the entire survivors affected by the Sunda Strait Tsunami of December 2018 in Rajabasa Lampung Selatan district. This research sample was taken with a purposive sampling method with a sample number of 60 people. Samples are divided into two groups, namely groups that only get mentoring and groups that get mentoring and therapeutic activities. Data retrieval is conducted with interviews using self reporting questionnaire to assess the psychological condition of survivors and trauma to the tsunami disaster that was ever experienced.

Respondents who used to sample are respondents who meet the criteria of the respondent, which is mature, willing to be the respondent by getting involved from the beginning of the activity until the completion of the activity by signing informed Consent. With psychological and trauma problems, then the respondents group I (control group) who only get assistance with given assistance in the form of a consultation and stress management as much as three sessions, while the group II (group Experiment) that get mentoring and therapy activities, get treatment as group I coupled with therapy activities with group therapy in the form of activities making crafts make handkerchiefs for traditional events Lampung Typical Rajabasa.

The Data that has been collected is in the analysis of Univariate and Bivariates. Bivariate analysis uses the dependent and independent T-Test, to determine the average psychological score of the sample in both groups before and after the intervention and different psychological scores in the two groups to bind the influence of therapy/intervention.

#### RESULTS

**Intervention:** The activity of management of psychological problems post-disaster is conducted for one month, which is divided into five sessions for the intervention group and two meeting sessions for the control group namely pre test activities followed by activities Convey feelings and discussions, while the second meeting was conducted a month later to post the test. The first meeting of the intervention group began with the construction of closeness to the survivors and continued by expressing feelings. The second to fourth meeting was continued with stress management and provided psychological support by the psychiatric specialist in temporary housing. The meeting begins with spontaneous discussions as an opening. Activities continued with the skills to conduct psychological support in the form of various relaxation techniques and therapy activities group in combination with occupational therapy by utilizing PERCA waste and instant drink wrap. All participants were actively involved in the implementation of activities and reiterated after the guidance from the therapist. The fifth meeting was carried out by completing a post test questionnaire and follow-up plan.

The results of the analysis on the intervention group and control group indicate the average score difference before and after the intervention. From table 1 can be seen that in the intervention group when pretests and post test there is a difference with the difference of 3.23, the analysis results obtained p-value smaller than 0.05, so it can be concluded that there is a difference that means psychological conditions in Intervention group between before and after the treatment.

From table 2 can be seen that the ability score in the control group scores capability when pretests and post test There is a difference, it psychological sor decline with the difference of 1.867. Results of the analysis of sufficient obtained in more than 0.05 value, so it can be concluded that there is no psychological difference.

From table 3 It can be seen that psychological scores on the intervention group and control group there is a difference with the difference of 2.10. The results of the analysis obtained a P-value smaller than 0.05, so it can be concluded that there is a meaningful difference between psychological respondents between the intervention group and the control group.

Table 1: Psychological Conditions Intervention Group (Before and after treatment)

Group	Mean	SD	Minimum	Maximum	P-value
Before	8,53	2,51	1	17	0,001
After	5,30	3,51	0	11	

Table 2: Psychological Conditions Control Group (Before and after treatment)

Group	Mean	SD	Minimum	Maximum	P-value
Before	9,27	2,596	2	19	0,119
After	7,40	2,580	0	16	

Difference in Problem of Psycholigis group intervention and control group

Table 3: Problem of Psycholigis group intervention and control group

Group	Mean	SD	Minimum	Maximum	P-value
Before	7,40	2,580	0	16	0,001
After	5,30	3,511	0	11	

# **DISCUSSION**

The results of the study were obtained that when the posttest of the control group and the experimental group showed relatively similar psychological conditions, that most of the respondents experienced a psychological problem of 70% and experienced trauma due to natural disasters. More than 73% of survivors. The average value in the control group is 9.3 with a minimum value of 2 and a maximum value of 19. Meanwhile, the average psychological value of the patient is 11.94 with a minimum value of 5 and a maximum value of 22. All respondents felt a trauma to a natural disaster that had happened.

The results of the study gained that the psychological condition of the respondent in the experimental group when Pretests and Posttest showed significant impairment, judging by the value of the mean reduced from 8.5 to 5.3. From Hasi test paired sample T-Test obtained P-value = 0.001, which means there is a difference or there is a significant influence of mentoring and therapy activities against the psychological condition of the trial in the experiment group during pretests and Posttest.

Psychological conditions in the control group when pretests and posttest indicate a decrease in the mean value, from 9.3 to 7.4, but not statistic. Hasi test paired sample T-Test obtained P-value = 0,119, which means there is no difference or there is no significant influence of mentoring the psychological conditions of the survivors on the control group during pretests and Posttest.

The prerequisite test results show that the results of the pretests and postest data on the experiment Group and the control group are normal distributions due to the P-value 0.309, indicating > 0.05 and homogeneous due to the P-value > 0.05 (0.280), making it feasible to test Hypothesis using the T independent test.

The P-value test result is 0.001. It is thus known that the probability values are below 0.05 (0.001 < 0.05). So it can be said that the value at the time of Posttest has a significant difference. This shows that the research hypothesis is acceptable, namely: "There is an influence of mentoring and therapeutic activity on psychological conditions".

According to the researchers, the average value of the psychological condition of the survivors is quite different in the experiment group and the control after intervention is due to different treatment on the respondents are therapeutic activities. Generally post-disaster survivors experience loss of property and work. It takes a long time to recover. This condition leads to many survivors having free time which means the thought of the catastrophic impact on their lives will always interfere.

Living in a temporary residential/post-disaster evacuation does not necessarily eliminate the trauma. Even conflicts that occur as a trigger to the severity of the trauma experienced. Psychosocial problems and need psychologic help to address their problems. Trauma experienced by diverse communities. The goals of obtaining psychosocial and trauma counseling are some of them in conflict areas (such as those in Ambon City, North Maluku), and some in refugee areas. In general, residing in a refugee area gives them a separate effect (negative) for them. Those who are in the Pegungsian want to be able to return to his hometown, want to return to the natural life as on Asal-muasalnya although some of them already have no place to stay. Actually residing in his own house (not a refugee) did not make a design in a quiet condition. Once, conflicts or attacks from other groups may occur. Therefore, their psychological problems are also due to such circumstances. Under no circumstances "certain" psychological problems are increasingly experienced in society. Nevertheless, the problem solving is sometimes resolved along with time travel. The conflicts and social problems that the community gradually experienced were able to overcome the problem. However, problems in evacuation areas often run into many issues, either with local communities and with fellow refugees. Design needs to make adjustments to the new pattern of life(Latipun, 2014).

The management provided is not separated from the support of many Parties. Regional disaster management has functions as a responsible person and coordinator in disaster management from the pre-disaster stage, during emergency and post-disaster response. The results of the research in the implementation in Magelang Regency established volunteers and Disaster response Task force consisting of various elements and personnel, namely from PMI. ARMY/police. health workers and related crosssectors. Consideration of management systems, reporting and rapid handling of disaster affected territories must be done well, this is not separated from the mapping of disaster areas, training to volunteers and routine task force Stakeholders and ongoing coordination to monitor the readiness of all personnel of disaster response task units(Arisanti & Nugroho, 2018).

Psychological treatment is not detached from the conditions of Psychological Well-Being survivors themselves. Psychological Well-Being is an individual assessment based on its perception of his life experiences that he is able to perform Self-Acceptance, able to establish positive relationships with others (Positive Relation with Others), able to be self-reliant (Autonomy),

capable of mastering its environment (Environmental Mastery), has a purpose in life (Purpose in Life) and also able to do Personal Growth and successfully overcome all challenges and The difficulties that exist in their lives (Ryff and Singer, 2002). The happy condition as revealed by Ryff and Singer in 2002 is apparently not yet fully achieved by the Ciloto community who had experienced landslide, because of his life-scourge experiences that were porous frightening. Psychological Well-Being communities of landslide victims are in the category tend to be low (94.64%). Research results of Cardiyoni& Harding show that cultural values are able to improve the ability to overcome psychological problems(Kadiyono & Harding, 2017). Research conducted in therapeutic activities involve local wisdom by motivating the treatment to continue to work according to the traditions that exist in Lampung customary.

Communication system for the involvement of many Parties in the disaster management needs to be a communication system that runs both naturally and through policy intervention. The paradigm of communication systems in disaster management should prioritize community empowerment rather than giving charity. As a system, inter-elements (subsystems) must post-disaster interconnected and coordinate in management from emergency response, rehabilitation and reconstruction. Activities are also ideally available holistically in various sectors sustainably. For that participatory model is an ideal strategy in social development with a long-term goal to restore the socioeconomic condition of the community as the original (Badri, 2018).

Tyhurst outlined three stages that describe behaviors that occur in response to a disaster. The first is called the impact phase and occur when disaster strikes, and continues until the immediate stress of the event no longer exerts a force.13 In any kind of disaster whether natural or man-made disaster, it is absolutely resulted the impacts to entire communities. The more serious the disaster is, the more impacts would be. Although it is only cataclysmic or long-term disaster, the impacts always bring the difficult consequences to human beings(Razali, 2013).

Other research results showed the restoration of psychological conditions also done through trauma healing with the approach of Islamic da'wah against the Community earthquake victims. Participants of this activity are as many as 60 people who live in Gumantar village, Kayangan Sub District, North Lombok which affected by the earthquake. Results show that trauma healing program with Islamic Da'wah approach is able to increase awareness of good practice of religion so that it has a passion to rise again in living(Sa'i & Acim, 2018).

Research conducted by Hamid & Fasikhah, 2009 showed that the method of dhikr to reduce stress on single-parent women is able to reduce symptoms of stress on the subject of research and help reduce the symptoms level of stress(Hamid, Anwar, & Fasikhah, 2009). Administration of Interpensi with respect to all aspects and done in holistic understanding ignore the involvement of related parties. Especially local governments.

The research conducted in Rajabasa subdistrict was conducted after coordinating with the health office, BPBD

South Lampung, Rajabasa subdistrict, village in Rajabasa sub-district and RajabasaPuskesmas. This makes it easier for the team to do activities and is important for sustainability. Results of several studies on the handling of disaster Murujuk conclusion that the efforts of pretreatment. disaster and post-disaster multidimensional. In the context of governmental authority, disaster management is not only done by one local government. Thus, the cooperation between regions (intergovernmental networks) is important to be developed at the regional level. Cooperation between regions is very potential to encourage the capacity of local governments in order to share the website, sharing profits and sharing tasks/loads together in the improvement of public service function of each local government. Results of the study also concluded the importance of strengthening BPBD institutions to facilitate inter-governmental cooperation in the area in disaster management(Sadat, 2019)

### CONCLUSION

There has been a higher rate of psychological scoring in the group's than treatment. The results of the analysis show that there is a meaningful influence to give psychological and therapeutic activities to the psychological resilience of survivors. It is recommended on the holders of mental health programs to be able to regularly schedule meetings on families for the implementation of psychoeducation for families. To put posters in health facilities such as the village post and the practice of the health center about preventing and treatment of patients with violent behaviour.

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