

## Mental Recovery Post Cianjur Earthquake Disaster Among Nursing Student Who Living in Cianjur

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### Abstract

It is been almost 1 month since the Cianjur earthquake disaster, but there are still many problems that have not been resolved. One of these problems is the post-disaster trauma of the people affected by the Cianjur earthquake. Post-disaster mental recovery efforts are needed, especially for nursing students who are domiciled in the Cianjur region. The purpose of this community service activity is to carry out post-disaster recovery efforts and provide material support to nursing students who are domiciled throughout the Cianjur. This community service activity was held on December 19 2022 by all lecturers, educational staff, and nursing student association (HIMA) Fitkes Unjani by providing deep breathing relaxation therapy and material support assistance for 32 nursing students who live in 4 subdistricts in Cianjur. The results of the recovery effort showed that there was a difference in the average anxiety score between pre and post-mental recovery therapy with a significant value of 0.001, ( $<0.05$ ), which means that post-mental recovery therapy can significantly reduce anxiety scores. Deep breathing relaxation therapy has been proven to be able to significantly assist the mental recovery process after the Cianjur earthquake disaster for nursing students who live in Cianjur. It is suggested to all nursing students affected by the Cianjur earthquake to apply this therapy to further reduce anxiety after the Cianjur earthquake.

**Keywords:** Earthquake disaster, mental recovery, nursing students

### INTRODUCTION

The Cianjur earthquake disaster caused many deaths, and many houses were damaged, and infrastructure was damaged. the current conditions after the earthquake disaster still left many houses unrepaired, infrastructure that had not been repaired, and also left many unresolved problems. one of the problems that still needs to be addressed is the problem of post-disaster mental recovery. The earthquake in Cianjur that occurred on Monday afternoon, November 21, 2022, with an earthquake strength of 5.6 on the Richter scale, centered 10 km to the southwest of Cianjur Regency with a depth of 10 km shocked all Indonesian people considering the amount of damage caused and the many victims who died and injuries. Many people from all over Indonesia helped provide assistance to the victims of the Cianjur earthquake. This can be seen from the large number of aids that came one after another to help the victims of the Cianjur

earthquake, such as tarpauline, food, basic necessities, medicines, and clothes that were still usable. It's been almost 1 month since the Cianjur earthquake, but the impact of the loss is still being felt by all residents of Cianjur district. The aftermath of this earthquake not only left many buildings still damaged, and infrastructure that had not been repaired, but also left mental problems after the disaster that required attention and handling.

The earthquake disaster in Cianjur which caused a lot of damage, injured victims, died, and heavy infrastructure damage was felt by the people in the Cianjur area, including students from the Bachelor of Nursing study program from the Cianjur area who also felt the impact of the earthquake disaster. The impact of this earthquake disaster will certainly cause material losses, loss of family members, loss of residence, and also impact on post-traumatic psychological and mental conditions. Based on (Sasmita et al., 2021) stated that earthquakes can cause mental health problems and post-traumatic stress disorder (PTSD) in victims affected by earthquakes impact of this disaster can cause a post traumatic disaster including traumatic events, anxiety, fear, stress, hopelessness, and depression. The traumatic impact of the earthquake can still be felt even though it has been a long time ago. (Gunawan et al., 2022) stated that 80% of the people of Soka Hamlet are still traumatized by the 2006 earthquake. Anxiety is a problem that must be addressed. This anxiety is a feeling of worry about something whose object is not clear. This feeling of anxiety if not treat can become severe anxiety up to panic. Anxiety due to post-traumatic disaster can have an impact if left untreated. Pathological anxiety can have an impact on physical disorders so if left unchecked it can have a serious impact. Based on (Seto et al., 2019) stated that the provision of post-disaster mental health and psychosocial support (MHPSS) is required for victims of the Great East Japan Earthquake disaster. Effective mental health recovery strategies for disaster survivors can be achieved by providing effective assistance for mental health recovery of disaster survivors, both personal and public resilience should be promoted while considering both cultural and spiritual elements (Choi et al., 2018). Several efforts can be made to recover from post-disaster anxiety disorders by providing support from the closest family, praying, and deep breathing relaxation therapy.

Deep breathing relaxation is a therapy that can treat psychological disorders such as post-disaster anxiety. Deep breathing relaxation therapy is carried out by means of guided breathing settings accompanied by strengthening the client's mind so that the client can relax. One of the earthquake disasters left a prolonged anxiety disorder. Very rare research on the effectiveness of deep breathing relaxation therapy in disaster victims, but here is one example of research that deep breathing relaxation has proven effective in reducing anxiety in preoperative patients (Malikul Mulki & Sunarjo, 2020). This is also reinforced by a statement (Hardayati & Mustikasari, 2019) stating that relaxation and distraction therapy have been proven to reduce anxiety levels in teenagers in the area in prone areas of earthquake victims. The existence of preparedness and support from organizations is very important to disaster victims to minimize risks, handle psychosocial impacts, and enhance resilience (Brooks et al., 2016). Post-disaster mental recovery efforts are needed, especially for nursing students who live in Cianjur region and as a form of concern lecturers in a nursing science study program at Jenderal Achmad Yani University and attention from other nursing students' friends which are packaged in the form of community service activities affected by the Cianjur earthquake by making post-disaster mental recovery efforts for undergraduate nursing students and their families who live in the Cianjur region. This community service activity aims to help carry out post-disaster mental recovery, provide moral

support and material assistance that can slightly ease the burden of earthquake victims as well as a form of empathy and concern from all lecturers and other nursing student friends.

## METHODS

This community service is carried out in four areas of the Cianjur, namely Kecamatan Cilaku, Kecamatan Cugenang, Kecamatan Cianjur, and Kecamatan Warung Kondang. This community service team consists of nursing lecturers, educational staff, and HIMA IKP S1 (nursing students associations) with a target of 32 nursing students and their families who live in the Cianjur area and were affected by the Cianjur earthquake. The community service team provided material and psychological assistance in an effort to show empathy and concern for the lecturers and friends of the affected nursing students. As for the support provided, namely, the intervention group was given material support and deep breathing relaxation therapy which was given for 15 minutes, while the control group was only given material assistance as a form of concern and empathy when visiting student homes. the team assessed post-disaster psychological conditions using the Hamilton Anxiety Rating Scale (HARS). Data analysis using parametric dependent t-test and independent t-test. This community service was carried out on December 19, 2022, in the Cianjur City area.

## RESULTS

Following are the results of anxiety score recovery before and after giving deep breathing relaxation in the intervention group and control group which are described in the following table:

**Table 1.** The effect of mental recovery intervention in the intervention group and control group

Variable	Group	
	Intervention	Control
	Mean $\pm$ SD	Mean $\pm$ SD
Anxiety score Pre	27.38 $\pm$ 6.811	29.69 $\pm$ 7.012
Anxiety score Post	22.31 $\pm$ 5.237	29.44 $\pm$ 6.713

From the results of Table 1 analysis, in the intervention group the average anxiety score before giving deep breathing relaxation was 27.38, and the anxiety score after being given deep

breathing relaxation was 22.31. in control group that the average of pre anxiety score was 29.69, and post anxiety score was 29.44.

**Table 2.** The effect of deep breathing relaxation to anxiety

Group	Variable	Mean	Std Deviation	Mean different	t	<i>P Value</i>
<b>Anxiety score difference</b>						
intervention	Anxiety score (Pre)	27.38	6.811	5.07	5.617	0.001
	Anxiety score (Post)	22.31	5.237			
control	Anxiety score (Pre)	29.69	7.012	0.25	0.542	0.596
	Anxiety score (Post)	29.44	6.713			
<b>Anxiety score compare</b>					F	
intervention	Anxiety score (Pre)	27.38	6.811	2.31	0.103	0.750
control		29.69	7.012			
intervention	Anxiety score (Post)	22.31	5.237	7.13	4.388	0.045
control		29.44	6.713			

Based on the results of the analysis in Table 2, it shows that in the intervention group there was a difference in the average anxiety score between pre and post mental recovery therapy with a significance value of 0.001, ( $<0.05$ ), which means that post mental recovery therapy can reduce anxiety scores significantly. Meanwhile, the control group did not show a significant difference 0.596 ( $> 0.05$ ). According to comparison between the two groups in the pre and post, there was no significant difference in the pre-anxiety scores in both the control and intervention groups with no significance with p value of 0.750 ( $> 0.05$ ), while in the post intervention there was a significant difference with p value of 0.045 ( $< 0.05$ ), which means there is a difference in the results between pre and post in both the control group and intervention group.

## DISCUSSION

Deep breathing relaxation is one therapy that can be useful for decreasing post-disaster. This condition that can lead to anxiety would be reduced by deep breathing relaxation. The aim of this

research is to help carry post-post-disaster mental recovery, it means that people who have anxiety can give the intervention by deep breathing relaxation. The aftermath of the Cianjur earthquake has left problems, one of which is that the people in the Cianjur area need mental recovery efforts after the earthquake disaster so that people can quickly recover from this problem. Together with the nursing lecturers, education staff, and the Fitkes Unjani Nursing Student Association (HIMA), we empathized with holding post-disaster mental recovery activities for nursing students who were affected by the Cianjur earthquake. This activity was filled with giving deep breathing relaxation therapy as an effort to carry out post-disaster mental recovery.

The results of this activity indicated that the administration of deep breathing relaxation therapy in the intervention group had an anxiety score of before being given therapy of 27.38 or included in the moderate anxiety category and after being given therapy it became 22.31 or there was a significant decrease in anxiety in nursing students who live in Cianjur. There is a decrease in the anxiety score for nursing students who live in Cianjur, although the decreased score is still in the moderate anxiety category range. In the intervention group, there was a decrease in the level of anxiety after the nursing students were given deep breathing relaxation therapy along with moral and material support to further assist in post-disaster mental recovery. Different from the results obtained in the control group with an anxiety score of 29.69 or included in the severe anxiety category according to the results of the Hamilton Anxiety Rating Scale parameter measurement compared to an anxiety score of 29.44 after providing moral and material support. The results of reducing anxiety scores in the control group proved to be less effective in reducing anxiety after the Cianjur earthquake. The study provided evidence on the significant effect of mental recovery post earthquake disaster using by deep breathing relaxation in nursing student. The significant reduction in anxiety scores was showed in the intervention group compared to the control group, which only experienced a slight decrease in the mean anxiety score. The possible explanation was the same as the results of research conducted by (Sasmita et al., 2021) which stated that the earthquake natural disaster experienced by the nursing student living in Cianjur, it not only had an impact on physical and environmental condition but also had an impact of the psychological condition of earthquake such as anxiety, stress, and depression.

In this community service activity, they are not only given deep breathing relaxation therapy, but also provide material support in the form of logistical assistance such as tarpaulins, staple foodstuffs, wearable clothing, and others. based on the results of caring activities for nursing students affected by the Cianjur earthquake through deep breathing therapy accompanied by material support it is proven to be able to provide mental recovery efforts after the Cianjur earthquake disaster. This community service activity is a form of concern and empathy from nursing lecturers, educational staff, and the Nursing Students Association (HIMA) Fitkes Unjani in an effort to participate in mental recovery after the Cianjur earthquake disaster for Cianjur community members, especially community members including nursing students who are registered as a nursing student at Fitkes Unjani and domiciled in the Cianjur area. Mental recovery efforts with psychosocial capacity building for post-disaster victims can enrich daily life, better mood, enhance self-confidence, increase willingness to socialize, and the provision of mutual help (Sim et al., 2019). In this community service activity mental recovery efforts were given by

providing deep breathing relaxation therapy and also providing material assistance such as tarpaulins, community staple foods such as rice, packaged noodles, and also assistance with proper clothing. This community service activity succeeded in making mental recovery efforts for nursing students who were affected by the Cianjur earthquake.

## CONCLUSION AND RECOMMENDATION

Community service activities through providing deep breathing relaxation therapy and providing material support for nursing students who are domiciled in the Cianjur region have been proven to significantly reduce anxiety levels after the Cianjur earthquake disaster. Support from all nursing lecturers, educational staff and Fitkes Unjani nursing student associations provided to nursing students who were affected by the Cianjur earthquake has been proven to be able to provide mental recovery after the Cianjur earthquake. It is recommended that this mental recovery effort be continued in order to achieve maximum mental recovery and the community members are no longer burdened by mental problems after the Cianjur earthquake.

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## APPENDIX



**Figure 1.** Delivery of material assistance to nursing students and their families affected by the Cianjur earthquake



**Figure 2.** providing deep breathing relaxation therapy for students and their families who were affected by the Cianjur earthquake





**Figure 3.** Symbolic delivery of material assistance by nursing lecturers for students and their families affected by the Cianjur earthquake