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**The Effectiveness of BESCIB (Brief Ego State Cognitive Behavior) Counseling to Reduce PTSD Symptoms in Victims of Natural Disasters in Sigi and Donggala, Palu, Central Sulawesi**

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# The Effectiveness of Brief Ego State Cognitive Behavior Counseling to Reduce PTSD Symptoms in Victims of Natural Disasters in Central Sulawesi

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**Abstract**—Natural disasters in Sigi and Donggala, Central Sulawesi, have caused Post Traumatic Stress Disorder (PTSD) in disaster victims. People who experience PTSD respond to traumatic events experienced with fear and despair, they will continue to remember the event and always try to avoid things that can remind them of that event. Starting from the problem was initiated a counseling that comprehensively is able to construct past events more positively and arouses the courage of the counselee to face the present and future reality more adaptively, the counseling called BESCIB. The objective of this research is to study the efficacy of counseling of BESCIB to reduce PTSD in victims of natural disasters. In this study used an experimental research design with pretest-posttest control group design. The subjects of this study were 45 victims of disasters in Palu and Donggala. The instrument used was Modified PTSD Symptom Scale (MPSS-SR) and Scaling Question. Techniques used to analyze the data is t-test. Based on the analysis and discussion of this research findings was concluded as BESCIB Counseling Effective to reduce PTSD Symptoms and the existence of realistic changes in mind, calm feelings and low anxiety, and more adaptive in dealing with natural disasters.

**Keywords**—effectiveness, PTSD, BESCIB, counseling, natural disaster

## I. INTRODUCTION

Reports from the National Disaster Management Agency (NDMA) mention the earthquake, tsunami and liquefaction that hit 4 areas in Central Sulawesi, namely Palu City, Donggala, Sigi and Parigi Moutong Regencies. The impact of the disaster until Sunday (10/21/2018) at 13:00 West Indonesia Time, 2,256 people have died. Distribution in the city of Palu 1,703 people died, 171 people Donggala, 366 people Sigi, 15 people Parigi Moutong and 1 person Pasangkayu. All victims have been buried.

A total of 1,309 people was missing, 4,612 people were injured and 223,751 people were displaced at 122 points. The number of refugees according to the Ministry of Health's report dated November 7, 2017 is 16,224 people. Among the survivors, many of them experienced Post Traumatic Stress Disorder (PTSD) or post-traumatic stress disorder, which is a psychological disorder caused by the experience of witnessing or experiencing firsthand a terrible event [1].

Based on the results of the literature review on effective and effective interventions in dealing with the problem of victims of natural disasters, and through heuristic research concerning the integration of personal life travel, testimonials

(recognition) and analysis, an intervention was developed counselling on triggered by trauma, by combining two interventions namely ego state counselling and cognitive behavioural counselling. Hereinafter referred to as BESCIB Counselling which stands for Ego State Brief and Cognitive Behavioural [2].

BESCIB counselling is an activity of giving assistance carried out by a counsellor to person who experience school strike problems triggered by traumatic events, so that he is able to reconstruct past events more positively and generate courage in facing more current and future realities.

The integration of these two types of interventions has been carried out by previous experts including integrative psychodynamic behavioural counselling, which is an integrated integration of psychodynamic approaches and behavioural approaches. This model was developed by Paul Wachtel [3]. Wachtel has identified some similarities or compatibility between psychodynamic theory and behavioural theory and has the belief that the integration of the two theories will provide a treatment modality that is very powerful, rather than if each theory is used individually.

BESCIB counselling, included in the single session counselling category as developed by Barabasz [4]. Although it is more directed towards single session counseling, this BESCIB counselling has very significant efficacy and effectiveness in overcoming School refusal behavior in high school students [2]. The steps for implementing BESCIB counselling can be summarized as follows: (1) relationship development (rapport) and problem assessment; (2) formulation of objectives, selection and implementation of strategies; (3) relaxation exercises; (4) mapping ego state and preparation of anxiety hierarchies; (5) processing and handling injured egos; (6) imagination and visualization hierarchical items by counselee; (7) practice in vivo; and (8) evaluation, follow-up and termination.

## II. METHOD

In this study used an experimental research design with pretest-posttest control group design. Participants in this study were school principals and school supervisors who were 45 victims of the disaster in Palu and Donggala. Implementation of BESCIB counseling as a group. The instrument used was Modified PTSD Symptom Scale (MPSS-SR) and Scaling Question. Techniques used to analyze the data are t-test and qualitative descriptive.

III. RESULTS

Before participants received BESC B counselling there were about 56% had severe trauma and 44% had moderate trauma, no one was included in the category of minor trauma. This data shows that they need to be helped immediately, so that they are free from traumatic events. Some participants stated that due to trauma to the earthquake, they experienced various diseases including stomach ulcers, high stomach acid, high blood pressure, blood sugar, cholesterol, dizziness and other physical illnesses.

Based on the results of the posttest, there were 40% of participants whose trauma was classified as moderate trauma while those included in the low trauma category were 60%. When displayed in tabular form is as follows (Table 1).

TABLE I. DISPLAYED IN TABULAR FORM

Category of traumatic	Percentage	
	Pre-experiment	Post-experiment
Severe	56%	0%
Moderate	44%	40%
Low	0%	60%

The Table 1 above shows that there was a significant decrease in the number of participants who experienced trauma after they received trauma healing, if before receiving treatment most of the participants were in the moderate and severe categories, but after receiving treatment most of the participants were in the moderate and low categories. To provide a clearer picture below also presented a graph showing the trauma scores of participants before treatment and after treatment (Figure 1).

The graph shows the pretest and posttest scores participants after receiving BESC B counseling

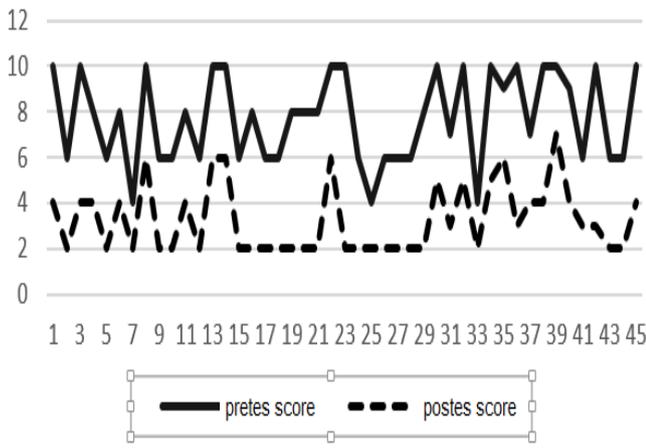


Figure 1. The Trauma Scores of Participants Before Treatment and After Treatment

Pre and posttreatment scores on these measures were examined using multiple one-tailed t-test comparisons. All of the five subjects who completed showed improvement on this measure,  $t = 5.0828, p < .005$ . The results show that, in PTSD symptom scores, there is a significant different between the experimental, and pre- experimental, in the level of 0.01. Based on the groups Mean at the post-test, the experimental group PTSD symptom scores declined compared to pre-experimental. Therefore, this result shows the effectiveness of

counseling BESC B on reducing PTSD Symptoms Pada victims of natural disasters di Sigi dan Donggala, Palu Sulawesi Tengah.

Based on the graph above, it shows that the 45 participants experienced a decrease in trauma scores after getting trauma healing, the decline varied 49% of participants who experienced a decrease of 4 points, 20% of participants experienced a decrease of 6 points, 9% of participants experienced a decrease of 5 points and 3 points, 7% of participants experienced a decrease of 2 points and 2% of participants who experienced a score reduction of 8 points The results above indicate that trauma healing given to participants effectively reduces the level of trauma participants.

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IV. DISCUSSION

The aim of the present study is to investigate the effectiveness of BESC B counselling on reducing PTSD Symptoms. Finally, it was shown that BESC B counselling decreases PTSD Symptoms. This finding is compatible with finding of Nursalim, specifically, studies have shown that BESC B counselling is an efficient method for reducing PTSD Symptoms [2]. There are realistic changes in mind, calm feelings and low anxiety, and more adaptive in dealing with natural disasters.

Based on data collected from 45 people (consisting of one class in Donggala and one in Sigi), there were 89% of participants who experienced PTSD symptoms of earthquakes, tsunamis and liquefaction, according to respondents in the disaster arising in the form of behaviors such as fear of hearing the roar , fear of hearing the sound of trucks and planes, fear of sudden sound, such as fear of the sound of cats or rats on the ceiling of a house. Other respondents also said that they were afraid of aftershocks, afraid to enter the house, afraid to enter the bathroom, even if they went to the bathroom using helmets, were afraid before sunset and the atmosphere was cloudy and the sound of thunder.

There are also those who say that they are afraid to sleep in the spring bed especially if they are alone, as if an earthquake occurred. Some people claim they have not been able to accept this fact because they watched their child die in a collapsed house and witnessed a house that moved because of the liquefaction. While other participants, about 11% experienced trauma in other events including trauma to the gas stove, trauma to chickens, trauma to blood pressure gauges, trauma to blood and so on.

While PTSD symptoms that appear victims of natural disasters are memory that is always depressed by events, difficulty concentrating, and easily surprised [4]. The present study shows that BESC B counselling is effective to reduce

PTSD symptoms. The effects of BESC B counselling were clinically as well as statistically meaningful. The research findings show that the effect of BESC B counseling can not only be sustained over time, but also patients have a significant increase by reducing the value of PTSD [5]. These findings support the results of Watkins research which found a significant influence from the development of communication and ego condition of patients [6], [7].

PTSD is a psychological disorder experienced by someone, triggered by a terrible event, and experienced by the patient. A terrible event is an event that can result in trauma to the patient. People who experience trauma will have difficulty adjusting to the conditions that caused the trauma, but over time the patient can adjust to these conditions. Symptoms such as nightmares, will last for months and can interfere with patients in everyday life. Therefore, the patient will experience PTSD.

PTSD is a trauma condition that can increase due to conditions that can threaten a person's life. Traumatic conditions that can trigger PTSD such as accidents, raping, sexual harassment, emotional abuse, or war. PTSD is a brain disorder in someone who is always afraid and excessive nervousness, after a person experiences a terrible event, even though the trauma can also recover later. The brain will overreact and respond hyperactively to subsequent trauma.

People with PTSD will experience the trauma again by having disturbing memories, flashbacks, or nightmares, even though the trauma occurred in the past. After a traumatic event, you can also become numb and close your feelings and try to avoid situations that might cause you to remember the trauma. Symptoms of post-traumatic stress disorder usually appear one month after the traumatic event. But in some rare cases, new disorders will appear months or even years after the event. If PTSD symptoms last for only one month, then the individual is likely to experience an acute stress disorder. In some cases, the acute stress disorder experienced can develop into PTSD if the patient still feels the disorder for more than a month after the traumatic event.

These symptoms can cause significant problems in social situations or in interpersonal relationships. This disorder can also interfere with the ability to carry out daily activities. PTSD can occur when a person has experienced, seen, listened to, or learned about an event involving death, serious injury, or sexual violence. The exact cause of PTSD is unknown. However, like most mental health problems, PTSD can be caused by a combination of: (1) a stressful and traumatic experience; (2) the body's response to stress; (3) personality (temperament); and (4) risk factors such as family history of mental disorders, including anxiety disorders and depression.

After going through a traumatic event, most people experience PTSD-like symptoms, such as being unable to stop thinking about what happened, feeling scared, anxious, angry, depressed, and feeling guilty. The reaction is a general reaction when someone is traumatized. However, the majority of people who experience trauma can cope with this event and do not experience long-term post-traumatic stress disorder.

Help and support as early as possible can prevent someone's stress level which can be bad and become a case of PTSD. Patients must communicate with family, friends, or psychiatrists who want to listen to complaints. Patients should consult a doctor and psychiatrist. Support from family and

friends to patients is very important to prevent the occurrence of deviations in the patient's life, such as alcohol dependence, drugs, and depression.

Not all people who experience trauma will react abnormally. PTSD symptoms experienced by patients about a month after experiencing trauma is called acute stress. Several studies that provide treatment to patients show that there is a good condition for patients, ie patients recover gradually [11], [12].

Some cases of PTSD are also associated with the brain and responses in other parts of the body [13], [14]. The amygdala is a part of the brain that is sensitive to threats based on sensory input. Amygdala when activated will give a warning to the body because of the threat by activating the hormone system. The structure of the brain that can help form memory is the hippocampus. The risk of PTSD can be caused by abnormal memory consolidation [15]. The results of this study indicate a reduction in hippocampal volume caused by PTSD.

The results of this study conclude the use of BESC B counseling has a significant effect on treating PTSD. The results also have a high level of consistency and positive, which is indicated by positive changes during the patient is given BESC B counseling. The results of this study reinforce the results of research that states a positive relationship as long as the patient is given intense treatment.

## V. CONCLUSION

Based on the results and discussion conclusions can be formulated as follows: (1) BESC B counselling Effective to reduce PTSD Symptoms, and (2) the existence of realistic change of mind, calm feelings and low anxiety, and more adaptive in dealing with natural disasters.

Based on the conclusion above, the following recommendations are formulated. First, for other researchers, to conduct further research in the form of research effectiveness BESC B counselling, with subjects expanded at natural disasters, with the number of subjects more adequate. Second, Pre-service education S1 Guidance and Counselling and Professional Counsellor Education (PCE) needs to provide materials BESC B counselling in the curriculum content.

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