

Differences of Effectiveness of Autogenic and Supportive Therapy on Post Traumatic Stress Disorder in Post Flood Elderly (Rengel Village, Rengel, Tuban District)

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ABSTRACT

Post Traumatic Syndrome Disorder is a syndrome of anxiety, autonomic lability, and experiencing flashbacks of experiences that are very sad after physical or emotional stress that exceeds the limits of an ordinary person's endurance. Research Objectives To determine the difference between autogenic and supportive therapy for Post Traumatic Stress Disorder in post-flood victims in Rengel District, Tuban Regency. Method: Quasy experimental design with a prospective approach with a pretest-posttest design with control group. The sample used systematic random sampling totaling 60 respondents (30 respondents in the experimental group and 30 respondents in the control group). Data collection using a questionnaire. This study uses probability sampling techniques and is tested by the Sample t-Test (Independent sample t-Test). Results: The Wilcoxon test obtained a p value of 0.000 < 0.05, which means that there is a difference in the effectiveness of autogenic and supportive therapy against Post Traumatic Stress Disorder in the Elderly Post Flood (in Rengel Village, Rengel District, Tuban Regency). Discussion: Providing Autogenic and Supporting Therapy can be an alternative therapy to relieve post-flood trauma. Suggestion: Autogenic and supportive therapy can be applied early after a disaster and is expected to reduce the number of trauma in the elderly Providing Autogenic and Supporting Therapy can be an alternative therapy to relieve post-flood trauma. Suggestion: Autogenic and supportive therapy can be applied early after a disaster and is expected to reduce the number of trauma in the elderly Providing Autogenic and Supporting Therapy can be an alternative therapy to relieve post-flood trauma. Suggestion: Autogenic and supportive therapy can be applied early after a disaster and is expected to reduce the number of trauma in the elderly.

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1. Introduction

Natural disasters can occur all over the world, including in the territory of Indonesia. Geographically, Indonesia is a country that is prone to natural disasters (Price, 2008). The impact caused is not only material loss, but also psychological impact. The psychological impact in the form of Post Traumatic Stress Disorder (PTSD) is a syndrome of anxiety, autonomic lability, and experiences flashbacks from experiences that are very sad after physical or emotional stress that exceeds the limits of ordinary people's endurance. Because many people experience anxiety and stress after the occurrence of natural floods that continue to occur in Indonesia, many efforts have been made to reduce the number of PTSD.

Based on BPBD data from the preparation of disaster-prone maps in Tuban Regency in 2014, and based on the disaster risk index (IRBI) released by the Regional Disaster Management Agency (BPBD), Tuban Regency has a very high disaster risk index. Namely with a score of 175 which is ranked 145 out of 496 districts or cities in Indonesia that are prone to disasters. It is estimated that around 50% of the population in the affected areas experience significant psychological stress. As many as 10-30% of those who experience traumatic events will suffer from PTSD (PERSI, 2008). The prevalence of post traumatic stress disorder (PTSD) increases after natural disasters such as floods, landslides, earthquakes, volcanic eruptions or others (Sandra, et, 2005). Based on the WHO report (2015) 43% of them experienced depression, 31% had anxiety disorders,

There are several factors of post traumatic stress disorder (PTSD), namely biological factors, psychological factors. Social factors, and risk factors (Kaplan & Sadock, 2007). Of the four factors, the main cause of the development of PTSD in society is psychological factors in the form of negative emotions such as feeling excessive anxiety as a result of past traumatic experiences, fear means showing fear of something that is sometimes illogical, sad, easy. surprised and in terms of behavior that is often raised is lazy to carry out daily activities. Disaster victims who are prone to experiencing PTSD need serious treatment so that the consequences do not last.

One form of intervention that can overcome the psychological factors that cause PTSD in the

elderly is supportive and autogenic therapy. Autogenic therapy is a relaxation to change negative thoughts that have an impact on positive behavior. Supportive therapy is a condition in which a person feels free mentally and physically from tension and stress. Relaxation techniques aim so that individuals can control themselves when there is a sense of tension and stress that makes individuals feel uncomfortable (Potter & Perry, 2005). Autogenic therapy as a technique or deliberate effort directed at the life of an individual, both psychologically and somatically, causes changes in consciousness through autogesty so that relaxation is achieved (Luthe, 1969 in Kang et al, 2009). Based on Puspitasari's (2016) research, supportive therapy has an effect on reducing stress in adolescents and autogenic therapy based on the research of Hutabarat (2015) has an effect on reducing depression in the elderly. Researchers also argue that from the research results obtained after completing the entire therapy process, respondents said they felt more comfortable with themselves and their environment. Elderly as disaster victims who are prone to experiencing PTSD need to receive serious treatment so that the consequences do not last. Elderly have unique characteristics, so they require forms of intervention in accordance with their characteristics and stages.

2. Research methods

This research method is analytical experimental with a pre-experimental design (Static-group comparison design). In the static group comparison design, there were 2 experimental groups. Each of these groups was given a pre test to determine its initial condition. The population in this study were all the flood victims in Rengel Subdistrict, Tuban Regency, as many as 60 respondents who were divided into 2 groups, namely the autogenic and supportive treatment groups using systematic random sampling. Data analysis using the Sample t-Test (Independent sample t-Test). The instrument used in this study for the independent variable autogenic and supportive therapy was the Standard Operating Procedure (SPO) regarding the provision of autogenic and supportive therapy. For the dependent variable Post Traumatic Stress Disorder in the elderly post flood using PTSD Screening, namely PCL. This questionnaire has been tested by previous researchers, namely Frida Nov Kristina Gub (2014) with a valid CVI value of 0.96 and reliability with a Cronbach alpha value of 0.757. This self-evaluation questionnaire consists of 17 questions consisting of 3 groups of questions. Questions 1-5 are in the Re-experiencing symptoms group, Questions 6-12 are in the group for Avoiding symptoms, and Questions 13-17 are in the Hyperarousal symptoms group. The procedure in data collection was the first time the respondent was given informed consent and informed choice, then observations were made to ensure the PTSD level was followed by the provision of treatment, namely autogenic and supportive, after which the PTSD level was observed for the two treatment groups.

3. Results and Discussion

3.1 RESULTS

Table 1

Distribution Frequency of Post Traumatic Stress Disorder Level of respondents before and after being given autogenic therapy in Rengel village, Rengel sub-district, Tuban district

No Respondents	Score	
	Pre Test	Post Test
1	58	39
2	55	39
3	46	43
4	35	35
5	45	36
6	48	31
7	63	47
8	39	35
9	45	40
10	64	42
11	38	35
12	40	24
13	52	38
14	50	36
15	48	33

No Respondents	Score	
	Pre Test	Post Test
16	37	32
17	52	40
18	53	42
19	48	37
20	47	36
21	50	33
22	37	32
23	35	33
24	36	32
25	48	36
26	50	35
27	48	38
28	37	32
29	36	30
30	48	29

From table 1 it can be seen It can be seen that the mean PTSD score before therapy was 46.27 with a standard deviation of 8.02. While after giving therapy the average score was 35.67 with a standard deviation of 4.72. If the data is converted into the PTDS category, it shows that out of 19 (100%) respondents it shows that the majority of 13 (68.4%) respondents are moderate PTSD, while in the post therapy administration the majority of 14 (73.7%) respondents are mild PTSD.

Table 2

Respondents' Post Traumatic Stress Disorder Level Before and after Supporting Therapy in Rengel Village, Rengel District, Tuban Regency

No. respondents	Score	
	Pre Test	Post test
31	50	33
32	33	30
33	64	50
34	48	45
35	65	63
36	38	32
37	37	30
38	48	35
39	37	32
40	35	33
41	36	32
42	48	36
43	50	35
44	48	38
45	37	32
46	36	30
47	48	29
48	50	33
49	33	30
50	64	50
51	48	45
52	65	63

From table 2 it can be seen It can be seen that the mean PTSD score before therapy was 46.03 with a standard deviation of 10.00. Meanwhile, after giving therapy the average score was 37.4 with a standard deviation of 9.2. If the data is converted into the PTDS category, it shows that the majority of 13 (47.4%) respondents are moderate PTSD, while in the post therapy, 14 (84.2%) respondents are mild PTSD..

A. Statistical analysis of the effect of supportive therapy and autogenic therapy on Post Traumatic Stress Disorder in elderly flood victims.

The research data shows that data is normally distributed with homogeneous variants. Which becomes loaded for parametric analysis using the paired t test.

Based on the analysis using the SPSS version 23 program with the paired T test statistical test with the degree of significance $\alpha = 0.05$.

Table 3
Paired T Test

		t	df	t-test for Equality of Means		
				Sig. (2-tailed)	Mean Difference	Std Error Difference
treatment_1	Equal variances assumed	6,237	58	,000	10,60000	1,69940
	Equal variances not assumed	6,237	46,946	,000	10,60000	1,69940
treatment_2	Equal variances assumed	3,478	58	,001	8,63333	2,48216
	Equal variances not assumed	3,478	57,609	,001	8,63333	2,48216

The significant value of the two treatments $<\alpha =$ there are differences in pre and post of each treatment. The mean value of treatment 2 was smaller. Because the expected pre to post change is decreasing, it can be concluded that treatment 2 shows a more significant result than treatment 1, it is concluded that H1 is accepted, which means that there is a difference in the effectiveness of autogenic and supportive therapy for PTSD among post-flood elderly in Rengel Village, Rengel District, Tuban Regency.

Table 4
Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	pre_tes_1 & post_tes_1	30	,668	,000
Pair 2	pre_tes_2 & post_tes_2	30	,837	,000

From this table shows treatment 2 has a stronger correlation than treatment 1

3.2 DISCUSSION

A. Identification of the level of post traumatic stress disorder before being given Autogenic and Supportive Interventions to elderly flood victims in Rengel Village, Rengel District, Tuban Regency.

Based on table 3, the research results show that before being given autogenic and supportive post-traumatic stress disorder to elderly flood victims in Rengel Village, Rengel District, Tuban Regency, it shows that most of the respondents with moderate PTSD.

Post Traumatic Stress Disorder (PTSD) is a syndrome of anxiety, autonomic lability, and experiencing flashbacks from a very painful experience after physical and emotional stress that exceeds the limits of ordinary people's endurance (Kaplan & Sadock, 2007). Additionally, PTSD is characterized by an intense reaction to reminders of traumatic events, mood swings, feelings of threat, disturbed sleep, and excessive alertness (Shalev, A., Liberzon, I., & Marmar, C., 2017)

Based on research conducted by researchers in Rengel Village, Rengel District, Tuban Regency, the psychological disorder that stands out in elderly flood victims is experiencing repeated experiences of trauma, shown by frequently remembering sad events that they have experienced, excessive anxiety and fear. Some of the respondents also experienced increased tension such as difficulty experiencing sleep at night, avoiding certain places that they thought were dangerous and also trying to avoid activities that respondents usually do to reduce the trauma caused by flooding. Most of the respondents belonged to moderate PTSD, although floods often occur every year in Rengel Village. PTSD experienced by the elderly is often not identified and has not been properly treated because the environment in which they live also considers it normal. If this is not handled, it will hamper the health of the elderly.

B. Identification of the level of post traumatic stress disorder after being given autogenic and supportive interventions to elderly flood victims in Rengel Village, Rengel District, Tuban Regency.

1) PTSD Intervention in the Elderly Given Autogenic Therapy.

Based on table 1, the results showed that after being given therapy to elderly flood victims in Rengel Village, Rengel District, Tuban Regency, a total of 30 respondents indicated that most or almost all of the respondents were at the mild PTSD level and a small proportion were still in moderate PTSD.

The results of data analysis and data interpretation carried out on elderly flood victims 30 respondents experienced PTSD, after being given autogenic therapy in Rengel Village, Rengel District, Tuban Regency based on the data obtained after being converted into the post PTSD category of therapy, most of them were 14 respondents, namely mild PTSD. This shows that there is a decrease in the level of PTSD among respondents who after being given autogenic therapy. Changes in PTSD levels are influenced by several things, including participation, the effectiveness of carrying out activities in understanding the goals of autogenic therapy. Typically, extreme stressors that arise gradually decrease so that the negative effects that are often caused, such as sadness, fear, and excessive anxiety are also not often experienced by respondents. Autogenic therapy is a non-pharmacological treatment that has a relaxing function and is an effective remedy for reducing the symptoms of post traumatic stress disorder.

Autogenic relaxation is used as a technique or effort that is deliberately directed to cause a change in consciousness through autogestly so as to achieve a relaxed state (Kusyati, 2006).

Autogenic therapy is an example of a relaxation technique based on passive concentration using body perception (for example, warm and heavy hands) facilitated by self-suggestion (Kanji, et al, 2006; Saunders, 2007).

In autogenic relaxation, the patient is no longer dependent on the therapist but through self-suggestion techniques, a person can make changes in himself, and can also regulate the appearance of his emotions (Saunders, 2007). Widiyastuti (2004) adds that autogenic relaxation helps individuals to be able to control several body functions such as blood pressure, heart rate and body flow.

Autogenic therapy was carried out for 3 sessions in 1 month. Each meeting lasts for 20-30 minutes in the first session until the second session is on average good enough, so they are able to continue to the next session. The last session of the meeting showed good results, they were able to tell their unpleasant experiences and some of them were able to carry out exercises in dealing with difficult situations, and activities went well because none of the respondents were sick and they could still participate in activities according to the session stages. In addition, the results of the session evaluation scores also showed an improvement in accordance with the objectives of the session, they understood how to prevent recurrence and most of them could also mention the benefits of all the activities that had been carried out. After the activity has been completed for three days, the final assessment will be carried out (post test). Based on the research that has been done, there is a significant decrease in the level of PTSD, this change can be seen from each session that is run.

From the results of research that has been conducted by researchers on autogenic therapy for PTSD in post-flood elderly, it is proven to show a decrease in PTSD levels after being given intervention. This therapy is expected to be one of the health programs and activities, especially for the elderly with PTSD.

2) PTSD Intervention in Elderly Given Supportive Therapy

Based on table 2, the results of the study after being given supportive therapy for post-traumatic stress disorder in the elderly in Rengel Village, Rengel District, Tuban Regency, showed that the post therapy administration was mostly 14 respondents, namely mild PTSD.

The results of data analysis and data interpretation carried out on elderly flood victims who experienced PTSD after being given autogenic therapy in Rengel Village, Rengel District, Tuban Regency, based on the data obtained, showed that most of the elderly with mild PTSD levels were 14 people, almost half of them were PTSD was 5 people. , neither had severe PTSD. This shows that there is a decrease in PTSD levels among respondents after being given autogenic therapy. Changes in PTSD levels are influenced by several things, including participation, the effectiveness of carrying out activities in understanding the

goals of autogenic therapy. Typical extreme stressors that arise gradually decrease so that the negative consequences that often arise such as sadness, fear, Respondents also rarely experienced excessive anxiety. Autogenic therapy is a non-pharmacological treatment that has a relaxing function and is an effective remedy for reducing the symptoms of post traumatic stress disorder.

According to Paterson and Zderad (2016) there are three aspects of the approach in supportive therapy, namely congruence, unconditioned positive rewards, and empathy.

Supportive therapy was carried out for 3 meetings in 1 month. Each meeting lasts for 20-30 minutes in the first session until the second session is on average good enough, so they are able to continue to the next session. The last session of the meeting showed good results, they were able to tell their unpleasant experiences and some of them were able to carry out exercises in dealing with difficult situations, and activities went well because none of the respondents were sick and they could still participate in activities according to the session stages. In addition, the results of the session evaluation scores also showed an improvement in accordance with the objectives of the session, they understood how to prevent recurrence and most of them could also mention the benefits of all the activities that had been carried out. After the activity has been completed for three days, the final assessment will be carried out (post test). Based on the research that has been done, there is a significant decrease in the level of PTSD, this change can be seen from each session that is run.

From the results of research that has been conducted by researchers on supportive therapy for PTSD in post-flood elderly, it is proven to show a decrease in PTSD levels after being given intervention. This therapy is expected to be one of the health programs and activities, especially for the elderly with PTSD.

C. Analysis of Differences in the Effectiveness of Autogenic and Supporting Post-Traumatic Stress Disorders in the Elderly in Rengel Village, Rengel District, Tuban Regency

The results of data analysis and data interpretation showed that before the implementation of autogenic and supportive, most of the elderly flood victims in Rengel Village, Rengel District, Tuban Regency were at the moderate PTSD level and a small proportion of respondents were severe PTSD. Meanwhile, after the implementation of autogenic and supportive, it was found that the PTSD level in the elderly flood victims, most of the respondents were classified as Mild PTSD and a small proportion were still at the Heavy PTSD level.

The results of data analysis used in this study were the Paired T Test using the SPSS 23 for windows software application with a significance level of $\alpha \leq 0.05$ (maximum error rate). The significant value of the two treatments $< \alpha =$ there are differences in pre and post of each treatment. The mean value of treatment 2 was smaller. Because the expected pre to post change is decreasing, it can be concluded that treatment 2 shows a more significant result than treatment 1

This shows that there are effects and differences in autogenic and supportive effectiveness in post-flood PTSD in the elderly in Rengel Village, Rengel District, Tuban Regency.

According to (Potter & Perry, 2005) autogenic relaxation is a condition in which a person feels free mentally and physically from tension and stress. Relaxation techniques aim so that individuals can control themselves when they are uncomfortable.

Autogenic relaxation is used as a technique or effort that is deliberately directed to cause a change in consciousness through autogestly so as to achieve a relaxed state (Kusyati, 2006).

Supportive therapy is a type of psychotherapy that is commonly carried out and exists in an orientation that is centered on delivery and understanding (Basford, 2006).

The results of this study support previous research such as research conducted by Rizal Darmawan on autogenic therapy for stress to reduce stress. Because autogenic therapy provides relaxation, relieves insomnia and stress.

From the results of this study, it supports Raesya A. Puspitasari's (2018) previous research about supportive therapy for stress that can reduce stress. Because supportive therapy provides restoring and strengthening defenses and integrates disrupted capacities.

4. Conclusion

In conclusion, the results of this study indicate that autogenic and supportive can reduce the level of trauma to the elderly who experience PTSD in Rengel, Tuban Regency. Hence, therapy autogenic and supportive can be recommended as a method of reducing trauma or depression. It is important for nurses to learn these therapeutic techniques on an ongoing basis because these techniques can be used in a variety of non-pharmacological therapies. A relaxed and comfortable condition needs to be built by the nurse during therapy. Analysis between nurse and client needs to be considered by nurses to find out the focus because each respondent has a different level of focus.

It is hoped that the village will facilitate the community to provide further treatment. Therapeutic activities autogenic and supportive is a therapy that aims to achieve a state where a person feels free mentally and physically from tension and stress.

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5. References

- [1] Anam *et al.* 2016. "Post Traumatic Stress Disorder Pada Penyintas Erupsi Gunung Kelud Berdasarkan *Impact of Event Scale Revised* (IESR) di Dukuh Kali Bladak Kecamatan Nglegok Kabupaten Blitar". *Jurnal Ners dan Kebidanan* Vol 3 No. 1. Hal 42-56.
- [2] Armanto, D, et, al 2006, Mengelola Bencana, Buku Bantu Pendidikan Pengelolaan Bencana untuk Anak Sekolah Dasar
- [3] BNPB. 2018. Data Bencana 2018. Diakses 29 Januari 2019. <http://dibi.bnpb.go.id/>.
- [4] BPBD. 2018. Data Bencana 2018. Diakses 20 Maret 2019. http://www.google.com/fusiontables/DataSource?docid=1k_SrX-IEOMw_wdTT8GTtHX510qKdCmxuGWxDI_qd.
- [5] Budiarti. RD 2018. "Pengaruh *Cognitive Behavioral Play Therapy* (CBPT) Terhadap *Post Trauma Stress Disorder* Pada Anak Korban Banjir di SDN Bandungrejo Kecamatan Plumpang Tuban". Skripsi S1 Keperawatan. Sekolah Tinggi Ilmu Kesehatan Nahdlatul Ulama. Tuban.
- [6] Erwina. I 2010. "Pengaruh *Cognitive Behavior Therapy* Terhadap *Post-Traumatic Stress Disorder* Pada Penduduk Pasca Gempa Di Kelurahan Air Tawar Barat Kecamatan Padang Utara Provinsi Sumatera Barat". Tesis Fakultas Keperawatan program magister ilmu keperawatan kekhususan keperawatan jiwa. UI. Depok.
- [7] Gulb K. F N 2014. "Gambaran *Post Traumatic Stress Disorder* (PTSD) pada Remaja Teluk Dalam Pasca 8 Tahun Bencana Gempa Bumi Di Pulau Nias", Skripsi. Fakultas Keperawatan Universitas Sumatera Utara. Diakses 24 Januari 2019. <https://text-id.123.dok.com/document/mviix6yl-gambaran-post-traumatic-stress-disorder-ptsd-pada-remaja-teluk-dalam-pasca-8-tahun-bencana-gempa-bumi-di-pulau-nias.html>
- [8] Hamid Ibrahim. 2017. *Pakar Teori Keperawatan*. Edisi 8. Indonesia: Elsevier inc.
- [9] Henrikus. 2015. "Penerapan *Eye Moving Desensitization and Reprocessing* (Emdr) Untuk Menurunkan Tingkat Stress Akademik Pada Siswa Kelas Xi Pekerjaan Sosial 2 di Smk Negeri 7 Makassar". Program Studi Bimbingan Konseling. Universitas Negeri Makassar.
- [10] Junaidi. 2010. Tabel r Koefisien Korelasi Sederhana. Diakses 22 Maret 2019. <http://junaidichabiago.wordpress.com>.
- [11] Latifah, M 2016. "*Eye Movement Desensitization and Reprocessing* (Emdr) Sebagai Salah Satu Strategi Mereduksi Dampak Kekerasaan Pada Anak". *Jurnal Pendidikan Buana*. Tahun XII No. 22.
- [12] Lestari. Rhamadaniyati. 2018. *Falsafah dan Teori Keperawatan*. Yogyakarta: Pustaka Pelajar.
- [13] Nisa'. F 2014. "Manajemen Bencana Banjir, Puting Beliung, dan Tanah Longsor di Kabupaten Jombang". JKMP (ISSN. 2338-445X) Vol 2 No. 2. Hal 103-220.
- [14] Nursalam. 2016. *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan*. Jakarta: Salemba Medika.
- [15] Pangau. 2014. "Perbedaan *Post Traumatic Stress Disorder* Pada Anak di Daerah Aliran Sungai Tondano Pasca Banjir Bandang Kota Manado. Ilmu Keperawatan. Universitas Sam Ratulangi". Manado.
- [16] Rizki. *et al.* 2017. "*Eye Movement Desensitization and Reprocessing* (Emdr) Untuk Menurunkan (*Post Traumatic Stress Disorder*) PTSD Pada Korban Inses". *Humanitas* Vol.14 No.1. Hal 57 – 65.
- [17] Satrianta. 2017. "Aplikasi *Eye Movement Desensitization and Reprocessing* dalam konseling *Post Traumatic Stress Disorder*". *Terapeutik Jurnal Bimbingan dan Konseling* Vol 1 No. 1. hal 69-77.
- [18] Sefril M 2018. "Hubungan Sikap Dengan Kader Bencana Dalam Kesiapsiagaan Desa Tangguh Bencana di Kebomelati Kecamatan Plumping Kabupaten Tuban". Skripsi S1 Keperawatan. Sekolah Tinggi Ilmu Kesehatan Nahdlatul Ulama. Tuban.
- [19] Susanty. E 2017. "Penanganan Gejala Traumatik Dengan Terapi EMDR (*Eye Movement Desensitization and Reprocessing*) Pada Narapidana Wanita di Lapas Kelas IIA". *Jurnal Ilmiah Psikologi* Vol 8 No. 1. Hal. 1-15.
- [20] Susanty. *et al.* 2015. "*Eye Movement Desensitization and Reprocessing* (EMDR) *Therapy for Handling Post Traumatic Stress Disorder* (PTSD) Respondent". *Indonesian Psychological Journal* Vol. 3 No. 2. Hal. 65-74.
- [21] Susilowati. A 2018. "Pengaruh *Acceptance And Commitment Therapy* (ACT) Terhadap *Post Traumatic Stress Disorder* (PTSD) Pada Remaja Pasca Banjir Di Desa Kebomelati Plumpang Tuban". Skripsi S1 Keperawatan. Sekolah Tinggi Ilmu Kesehatan Nahdlatul Ulama. Tuban.
- [22] Purwoko, Alif, dkk. 2015. *Pengaruh Pengetahuan dan Sikap Tentang Risiko Bencana Banjir Terhadap Kesiapsiagaan Remaja Usia 15-18 Tahun Dalam Menghadapi Bencana Banjir Di Kelurahan Pedurungan Kidul Kota Semarang*.
- [23] Sanjaya. 2013. *Pengaruh Pemberian Metode Simulasi Siaga Bencana Gempa Bumi Terhadap Kesiapsiagaan Anak Di Yogyakarta*. *Jurnal Keperawatan Soedirman*. Volume 11, No. 3.

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- [24] Saifuddin, dkk. 2015. *Analisis Tingkat Kesiapsiagaan Masyarakat Dalam Menghadapi Bencana Banjir Di Kecamatan Meurebo Kabupaten Aceh Barat*. Jurnal Ilmu Kebencanaan. Volume 2, No.1.
- [25] Shalev, A., Liberzon, I., & Marmar, C. (2017). Post-traumatic stress disorder. *N Engl Med J*. DOI: 10.1056
- [26] Tierney, Sutton. 2015. *Analisis Tingkat Kesiapsiagaan Masyarakat Dalam Menghadapi Bencana Banjir Di Kecamatan Meurebo Kabupaten Aceh Barat*. Jurnal Ilmu Kebencanaan. Volume 2, No.1.
- [27] Tentama, F 2014. "Dukungan Sosial dan *Post-Traumatic Stress Disorder* Pada Remaja Penyintas Gunung Merapi". *Jurnal Psikologi Undip* Vol.13 No. 2 Hal.133-138.
- [28] Undang-Undang Penanggulangan Bencana No.24 2007. Diakses 20 Februari 2019 http://www.bnpb.go.id/ppid/file/UU_24_2007.pdf.
- [29] Yulianto. 2015. "*Guided Imagery* Konsep Konseling Kreatif Untuk Penanganan *Post Traumatic Stress Disorder* (Ptsd)". *Jurnal Focus Konseling* Vol.1 No.1 Hal.70-81.