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# Narrative Exposure Therapy Intervention and Management of Negative Alterations in Cognitions and Mood Symptoms of Traumatic Stress among Young People in Kakuma Division, Turkana County of Kenya.

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ABSTRACT: This study set to assess the effectiveness of narrative exposure therapy intervention in the management of negative alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma division, Turkana County. Kakuma refugee camp currently holds 196,666 people from 21 different countries who fled from their countries due to civil war and organized violence. Young people form 20% (39,960) of Kakuma refugee camp population. These individuals live with negative memories of their traumatic war experience. Against this background, this study sought to assess the effectiveness of narrative exposure therapy in management of negative alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma division, Turkana county of Kenya. Post-traumatic stress disorder checklist for DSM-5 (PCL-5) tool was used for pretest and posttest assessment. The study adopted narrative exposure therapy framework and intervention for traumatic stress management. The study used quasi-experimental research design whereby the researcher adopted a non-equivalent groups design. This design involved one treatment group and one control group. The study sampled 110 participants through multistage cluster and proportionate sampling. While the treatment group received narrative exposure therapy intervention, the control group received normal counselling intervention. Descriptive and inferential statistics were used to analyse the data with the aid of statistical programme for social sciences (SPSS) version 23. Independent sample t-test was used to list the statistical significant differences between the means in the pre-test and post-test scores for the groups. From the results, negative alteration in cognitions and mood symptoms of traumatic stress were higher among young people who were exposed to normal counselling than those who received narrative exposure therapy treatment. The study concluded that narrative exposure therapy intervention is effective in management of negative alteration in cognitions and mood symptoms of traumatic stress among young people in Kakuma division.

**Keywords**: Narrative Exposure Therapy Intervention (NET), Traumatic Stress, Kakuma Refugee, Cognitions and Mood Symptoms.

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## I. INTRODUCTION

Narrative Exposure Therapy (NET) is a trauma-focused psychological treatment designed to address symptoms of traumatic stress among populations who have been exposed to multiple traumas and survivors of traumatic events. (Schauer, Neuner& Elbert, 2011).Individuals who have experienced trauma often manifest symptoms of fragmentation of memory, disorientation, dissociation and other symptoms (Herman, 2015). In trying to avoid reactivation of traumatic memories and fear of being back to the traumatic scene, survivors find it difficult to narrate their experience in a coherent and meaningful manner (Neuner, 2012). In some cases, the disconnection in memory presentation distress is not intentional but owing to dissociative amnesia (Gold & Cook, 2017). Narrative exposure therapy aims at enabling trauma survivors to recall and narrate their traumatization for the purpose of healing and integration.

Trauma as described by VanRooyen and Nqweni (2012), is any life threatening experience that amounts to excessive fear and other psychosomatic reactions that impedes an individual functioning systems. Traumatic stress is a resultant effect of traumatic experience which is diagnosed through assessment of symptoms often manifested after experiencing or witnessing a traumatic event (Hull & Corrigan, 2019). Symptoms of traumatic stress are manifested in form of long-lasting psychological distress, from mild anxiety to

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symptoms that interfere with almost all aspects of individual functioning (Briere & Scott, 2015). This psychological distress affects an individual in four domain symptom clusters, namely; memory intrusion, avoidance of stimuli, changes in thoughts and mood and hyper-arousal/hyper-vigilance (Dimauro, Carter, Folk & Kashdan, 2014).

Kakuma refugee camp currently holds a youth populations of 39,960 (20%) aged 15-24 from 21 countries (UNHCR, 2020). Repeated incidences of organized war in their home country cause movement of people form South Sudan to Kakuma in Kenya. According to UNHCR (2016), Silove, Ventevogel and Rees (2017), in 2016 alone, persons displaced from their homeland were a total of 3.2 million. Syria and South Sudan were the leading source countries. Consequently, they are at risk of developing psychological disturbances (Kelley, Weathers, Mason &Pruneau, 2012). They are equally vulnerable to mental health challenges particularly post-traumatic stress disorder (PTSD) if proper trauma-based, psychological and social supports services are not made available (Spitzer, Vogel, Barnow, Freyberger&Grabe,2007; Koenen, Stellman, Sommer & Stellman, 2008). Against this backdrop, this study sought to examine the effectiveness of narrative exposure therapy intervention in the management of negative alteration in cognitions and mood symptoms of traumatic stress among young people in Kakuma division.

#### II. LITERATURE REVIEW

This third cluster of traumatic stress symptoms according to DSM-5 (APA, 2013) includes changes in how a person thinks and feels. The emotional and mood disturbances associated with this cluster include fear and anxiety, disgust, shame or any other negative emotions including having no interest in previous activities of importance (Dimauro et al., 2014). In some cases, trauma survivors may struggle to remember parts of the events they have experienced. In extreme cases they may not remember the event at all. A traumatized individual may not remember certain important aspect associated with the experience of trauma due to dissociative amnesia (Gold & Cook, 2017). Trauma survivors may have enduring negative and extreme thoughts about themselves, the world and other people. This persistent and exaggerated negative beliefs and unrealistic blame of self or others regarding the cause of the traumatic event or expectation about oneself, others and the world is what Aaron Beck (1967) refers to as Cognitive distortions. These cognitive changes contribute to the severe dysfunction in how a person approaches relationships and many other aspects of life.

The negative effect of traumatic stress is ascertained in many studies. A research by Burri and Maercker, (2014) assessing the rates of traumatic stress in some European countries showed the following statistics; Croatia 6.67%, Netherland 3.30%, UK 3%, France 2.32% and Germany 2.31%. Within the US military officials who serve in Iraq and Afghanistan, 11% to 20% is believed to live with symptoms of traumatic stress (Ghaffarzadegan, Ebrahimvandi, &Jalali, 2016). Another study among secondary school students sampled 403 between the ages of 16-19 years in Bagdad. The outcome of the study showed84% of the respondents living with at least one traumatic event. Further analysis indicated that 61% of the respondents fully endorsed post-traumatic stress symptoms criteria (Al-Hadethe, Hunt, Thomas & Al-Qaysi, 2014).

Furthermore, a research conducted by Sheikh et al. (2014), sampled 258 among internally displaced persons (IDPs). The study investigated psychological distress symptoms and coping in Kaduna, North-western Nigeria. 42.2% among the internally displaced persons (IDPs) had fully diagnosed symptoms of traumatic stress. The most common distress felt by the respondents were destruction of individual property (96.1%), evacuation from home community (96%) and experiencing of victimization and violence (88%). Overall, 58% recorded up to 11-15 traumatic events. The study suggested that some evidence trauma-based interventions could contribute to reducing psychological distress and traumatic reactions felt among the IDPs.

Trauma –focused cognitive behaviour therapy (TF-CBT) has been used to address faulty cognitive schemas of traumatic stress. The study of effectiveness of CBT by Akbarian et al. (2015) showed that a highly standardized CBT programme significantly reduced symptoms of traumatic stress and other disorders like anxiety and depression. Compared to those treated with pharmacopeia only and those in control condition, the study equally demonstrated improved memory performance. The study sampled 40 respondents experiencing traumatic stress symptoms with mean age of 31.64 years, 78.6% of them were female. Random sampling was used to assigned respondents to an experimental group and a control group. In a ten group sessions of 10 weeks of TF-CBT lasting 60-90 minute per session, a reduction of symptoms of traumatic stress, depression and anxiety were recorded. Memory performance showed higher improvement. The study concluded that TF-CBT enhanced reduction of traumatic stress with regards to symptoms and autobiographical memory. Refugees who have resistance to pharmacological treatment of PTSD have benefited from CBT according to a study by Hinton, Hofmann, Pollack and Otto (2009) on efficacy of CBT for Cambodian refugees with PTSD.

A study by Gitau (2018), on effectiveness of Virginia Satir's model was tested against improving rational thinking of integrated internally displaced persons (IIDPs) diagnosed with PTSD. The results showed that the mean scores of respondents on rational thinking were statistically significant with F=15.74 and P<0.00, implying that the experimental groups had higher rational thinking scores than control groups. Processing

negative thoughts using Satir's model helped the IIDPs differentiate between negative and positive thoughts together with their subsequent behaviour. The study findings concluded that Virginia Satir's model enhanced IIDPs rational thinking thereby addressing the symptoms of negative changes in thoughts and feeling cluster of traumatic stress.

Treatment of traumatized refugees remains a challenge (Buhmann, 2014). This is because most treatments approaches are not culturally adaptive and do not target the affected domain of distress (Crawford, Talkovsky, Bormann & Lang, 2019). There is evidence that intentional trauma such as war or assault which refugees faced is associated with high risk of PTSD than unintentional trauma such as natural disaster and traffic accident (Santiago et. al., 2013). Trauma interventions must therefore be intentional. Evidence of improvement in cognitions recorded in other approaches (Lee & Cuijpers 2013) may not address the cause of distress. The researcher sought to address refugees' traumatization in Kakuma through the application of narrative exposure therapy because of its intentionality. The symptoms were assesses before treatment and the procedure were directed towards the 'hot' memories. The intervention was culturally adaptable to rural and low income settlements like Kakuma.

#### III. METHODOLOGY

## 3.1 Research Design

This study used quasi-experimental design in which the researcher adopted a Non-equivalent groups design. This design involved one experimental group and one control group. The treatment group received a pre-test for traumatic stress, narrative exposure intervention and a post-test. The control group received a pre-test and post-test and a normal counselling intervention. This design is suitable for testing the effect of a single independent variable that can be used as a treatment (Leavy, 2017). Table 1 shows Nonequivalent group control group design.

Table 1: Nonequivalent group control group design

Group	Pre-test	Treatment	Post-test
Experimental Group	N	X	0
Control Group	N		0

## 3.2 Population of the Study

The study used the multistage cluster and proportionate sampling techniques to determine population for the study. Five settlements in Kakuma were identified through cluster sampling. The five settlements had five Secondary Schools which form another cluster. Form three students were selected from the Five Secondary Schools to participate in the study. This forms another cluster. Participants were selected through proportionate sampling from Form three to form the sample size of the study. Form three has a population of 3,143 distributed across the five secondary schools (Windle International Kenya, School Data, 2020). A sample size of 110 respondents was obtained through proportionate sampling. According to Kathuri and Pals (1993), a minimum of 100 is recommended for a survey research.

## 3.3 Sampling Procedures and Sample Size

Sampling size refers to selected items from the entire group to make up a sample (Kothari, 2004). Those who met the criteria for traumatic stress were selected into the control group and experimental group. While the experimental group received treatment representing the independent variable by being subjected to narrative exposure therapy intervention, the control group was subjected to normal counselling intervention. Both the treatment and control groups underwent post-test assessment to determine statistical significant differences after the experiment. The sample size of the study is shown in Table 2.

Table 2: Sample Size of the Study

Cluster/ Schools	Population of students in Form 3	Proportion	Sample Size
Cluster A/ Kakuma Refugees' Secondary School (KRSS)	879	0.31	31
Cluster B/ Green Light Refugee Secondary School (GLSS)	670	0.23	23
Cluster C/ Somali Bantu Secondary School (SBSS)	786	0.28	28
Cluster E/ Vision Secondary School (VSS)	713	0.25	25

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Cluster E/ Morneau Secondary School (MSS)	Shappel 95	0.03	3
Total	3,143	1.10	110

#### 3.4 Data Analysis

Descriptive and inferential statistics were used to analyse the data with the aid of statistical programme for social sciences (SPSS) version 23. Independent sample t-test was used to list the statistical significant differences between the means in the pre-test and post-test scores for the groups.

#### IV. RESULT

An assessment of the effectiveness of the narrative exposure therapy intervention in management of negative alterations in cognitions and mood symptoms was carried out. The pre-test was conducted to determine any significant difference between the two groups.

### 4.1 Pre-test Results of the Negative Alternations in Cognitions and Mood Symptoms

The researcher assessed whether there were differences in the levels of negative alterations in cognitions and mood symptoms between young people that were exposed to the narrative exposure therapy and those exposed to normal counselling before the intervention. Table 3 has the results of the group scores.

Table 3:
Pre-test Group Statistics of Negative Alterations in Cognitions and Mood Symptoms

		<u> </u>	Control/	N	Mean	Std.	Std.	Error
			Treatment			Deviation	Mean	
Negative	alterations	in	Treatment	53	2.38	.740	.102	
cognitions a	and mood symp	toms	Control	51	2.25	.771	.108	

From the results, the mean negative alterations in cognitions and mood symptoms among young people in the narrative exposure therapy group was 2.38 with a standard deviation of 0.740, while the mean among those in the normal counselling group was 2.25 with a standard deviation of 0.771. The results showed the mean difference of 0.122. Table 4 presents the results on whether the reported mean difference was statistically significant.

Table 4:
Pre-test Independent Samples T-test Scores of Negative Alteration in Cognitions and Mood Symptoms

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence	e Interval of the
	·	G1	turica)	Billerence	Lower	Upper
Negative alterations in cognitions and mood symptoms	.827	102	.410	.122	171	.416

The independent samples t-test results showed that there was no statistically significant difference in negative alterations in cognitions and mood symptoms between young people in the narrative exposure therapy group and those in the normal counselling group before intervention. The mean difference was 0.122 (95% CI = -0.171 to 0.416), t(102) = 0.827, p = .410 > 0.05.

## 4.2 Post-test Results of Negative Alterations in Cognitions and Mood Symptoms

The researcher assessed whether there were differences in levels of negative alterations in cognitions and mood symptoms between young people who received narrative exposure therapy intervention in the treatment group and those who received normal counselling in the control group after the intervention. Table 5 shows the post-test mean results.

Table 5:
Post-test Group Statistics of Negative Alterations in Cognitions and Mood Symptoms

						, , , , , ,	
		Control/	N	Mean	Std.	Std.	Error
		Treatment			Deviation	Mean	
Negative alter	ations in	Treatment	53	.79	.743	.102	
cognitions an	d mood	Control	51	2.10	.539	.075	

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symptoms

The results indicated that the mean negative alterations in cognitions and mood symptoms among young people in the treatment group of narrative exposure therapy was 0.79 with a standard deviation of 0.743, while the mean among those in the normal counselling group was 2.10 with a standard deviation of 0.539. Therefore, there was a mean difference of -1.306. Table 6 presents the results on whether the reported mean difference was statistically significant.

Table 6:
Post-test Independent Samples T-test Scores of Negative Alterations in Cognitions and Mood Symptoms

						nfidence Interval
			Sig. (2-		of the Dif	ference
			tailed)	Mean		
	t	df		Difference	Lower	Upper
Negative alterations	-10.224	102	.000	-1.306	-1.559	-1.052
in cognitions and						
mood symptoms						

From the findings on Table 6, the independent samples t-test results confirmed that negative alterations in cognitions and mood symptoms were higher among young people that were exposed to normal counselling. The mean difference was -1.306 (95% CI = -1.559 to -1.052), t(102) = -10.224, p = < 0.00. Therefore the hypothesis that stated that there is no significant statistical effectiveness of narrative exposure therapy in the management of negative alterations in cognitions and mood of traumatic stress among young people in Kakuma division was rejected in favour of the alternative hypothesis. The researcher went further to test the next hypothesis.

## V. DISCUSSION

Findings of this study revealed that negative alterations in cognitions and mood symptoms were higher among young people that were exposed to normal counselling compared to those exposed to narrative exposure therapy. Therefore, narrative exposure therapy intervention was effective in management of negative alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma Division. According to the third symptoms cluster of DSM-5 traumatic stress symptoms criteria (APA, 2013), an individual diagnosed with traumatic stress shows persistent negative thoughts and emotions about self, others and the surroundings. The negative self-perception leads to loss of interest in activities previously enjoyed. Equally the presence of dissociation outside other physical injury or drugs use causes inability in traumatized persons to remember important aspects of their life experience. This negative approach to life makes them stuck and unable to move forward because of pessimistic view. Effective trauma-based interventions reduce negative perception and improve individual functioning.

The effect of trauma on cognitive functioning has been captured in many studies especially in the area of neuropsychology (Hans, 2011). There is an undisputable interaction between trauma and brain functioning. The hippocampus area of the brain is undeniably sensitive to the effect of stress (Bremner, 2006). In addition to diseases like Alzheimer and other pathophysiological factors causing neuro-degeneration, trauma affects brain functioning with diminished memory performance (Kalat, 2019). In the same vein, post-traumatic amnesia (PTA) and impaired capacity to recall certain events have been associated with traumatic experience (Gold, 2015). Accordingly, a longer period of post-traumatic memory loss signifies a serious cognitive deficiency. As Boeree (2009) postulated, trauma affects to a larger extent the emotional nervous system which is made up of the limbic system and the autonomic nervous system. The implication of this effect results in a loss of body homeostasis and dysfunctional memory presentation. The brain areas that are usually highly affected by traumatic stress include the functioning of amygdala, hippocampus and prefrontal cortex (Rubin de Celis et al., 2016). The submission against this findings in brain functioning and traumatic experience is that if effective intervention is not administered, traumatic stress can result in lifelong brain impairment and mental health challenges. In this regard, trauma-focused cognitive behavioural therapy (TF-CBT) has been found to target this symptom cluster of traumatic stress.

Akbarian et al., (2015) confirmed this through a study which found out that TF-CBT addresses faulty cognitive schemas and mood disturbances. The study showed that a highly standardized TF-CBT programmes significantly reduced symptoms of disorders and enhanced memory functioning among clients diagnosed with PTSD as compared to a control condition treated pharmacologically only. The study sampled 40 respondents who endorsed traumatic stress symptoms with an average age of 31.64 years, 78.6% of them were female. The respondents were randomly assigned to an intervention group or control condition. The intervention consisted of

ten group sessions of TF-CBT of 60-90 minute session per week. At 10 week period, the results showed a reduction of symptoms of traumatic stress, depression and anxiety. Much improvement was recorded on memory performance. The study concluded that TF-CBT enhanced traumatic stress symptoms management and autobiographical memory performance.

In a meta-analysis and systematic review study on the efficacy of psychosocial interventions, Turrini et al. (2019) sampled 1959 participants in 26 studies. Randomized controlled trails (RCTs) meta-analysis revealed that psychosocial interventions have beneficial significant clinical effectiveness on traumatic stress, depression and anxiety with standardized mean difference (SMD) of -0.71, -1.02, and -1.05 respectively. Post-migration stressor was assessed and found that the clinical beneficial effectiveness was maintained at one month or more. The study concluded that psychosocial interventions with trauma-focused and evidence based supported interventions with cognitive behavioural therapy components should be routinely made accessible to refugees and asylum seekers as part of health care systems for distressed individuals.

Purgato et al. (2018) on the management of trauma-related disorders using psychological therapies in low and middle income countries supported the already mentioned position. The study sampled 3523 participants who were affected by humanitarian crisis from sub-Saharan Africa, the Middle East, North Africa and Asia. In 36 studies, the study adopted an experimental designs in measuring the efficacy and suitability of psychological interventions with control conditions involving psychological placebo, wait list, treatment as usual, no treatment at all and attention placebo. The study applied psychological treatments to people with traumatic stress, major depressive, anxiety and related disorders. The results of treatments showed traumatic stress symptoms reduction compared to control condition with standardized mean difference (SMD) of -1.07. At one to four months SMD was -0.49 and at six months SMD was -0.37. Depressive symptoms reduction was recorded accordingly with SMD of -0.86. At one to four month, SMD was -0.42 while anxiety symptoms was SMD -0.74 and at one to four months -0.53. The study recorded evidence of psychological therapies effectiveness on reduction of traumatic stress symptoms, depressive symptoms and anxiety symptoms in adult population living in humanitarian crisis setting.

The present study affirmed the recommendations of NET by Fazel et al. (2020) for management of post-traumatic stress disorder among children and adolescents. The study is also in line with the previous experiment of narrative exposure therapy with Ugandan and Somalia refugees by Neuner et.al (2008). This study also supported the previous findings of Cohen, Mannarino, Jankowski, Rosenberg, Kodya, and Wolford (2016) on adjusted teens in residential treatment services using trauma-focused cognitive behavioural therapy with effectiveness in reducing trauma symptoms and enhancing mental function performance among young people.

## VI. CONCLUSION AND RECOMMENDATION

In conclusion, the study set out to assess the effectiveness of narrative exposure therapy intervention in the management of negative alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma division, Turkana County, Kenya. The results of the study among respondents at post-test showed a reduction in negative alterations in cognitions and mood. The study therefore concluded that narrative exposure therapy intervention is effective in the management of negative alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma division, Turkana County. Based on the findings and conclusion of the study, the researched recommends for counselors, psychotherapist and other mental health workers working with traumatized population to apply narrative exposure therapy intervention as an effective intervention in management of alternations in cognitions and mood symptoms of traumatic stress among young people. Narrative exposure therapy can be tested against other traumatized populations in Kenya like the Kenya defense Forces returning from Somalia, survivors of rape and communal clash among others.

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