Original Paper

Narrative Exposure Therapy Intervention and Management of Memory Intrusion Symptoms of Traumatic Stress among Young People in Kakuma Division, Turkana County of Kenya

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Abstract
Kakuma refugee camp is currently the home of 196,666 people who fled from their various countries due to civil war and organized violence. Young people form 20% of this population. These young people live with constant reminders of negative memories of their traumatic experience. Against this background, this study sought to assess the young people’s traumatic stress with the use of post-traumatic stress disorder checklist for DSM-5 (PCL-5) tool. 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. 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. The researcher established that Narrative exposure therapy intervention was effective in management of memory intrusion symptoms of traumatic stress among young people in Kakuma division, Turkana County of Kenya.

Keywords
narrative exposure therapy intervention (net), memory intrusion symptoms, traumatic stress, kakuma refugees
1. Introduction

Trauma as described by Van Rooyen 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 symptoms that interfere with almost all aspects of individual functioning (Briere & Scott, 2015). This psychological distress affects an individual in four domain symptom clusters according to DSM-5 (APA, 2013), namely; memory intrusion, avoidance of stimuli, changes in thoughts and mood and hyper-arousal/ hyper-vigilance (Dimauro, Carter, Folk, & Kashdan, 2014).

Young people in Kakuma refugee camp are basically those who fled their own countries due to traumatic events of civil war and organized violence (Sanghi, Onder, & Vemuru, 2016). 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). The United Nations posit that refugees are at increased risk of developing mental health problems due to a range of risk factors including experiences of violence and upheaval in their home and in refugees’ settlements (UNHCR, 2015; Silove, Ventevogel, & Rees, 2017). It was against this backdrop that this study sought to examine the effectiveness of narrative exposure therapy intervention in the management of memory intrusion symptoms of traumatic stress among young people in Kakuma division, Turkana County.

2. Literature Review

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 difficulty 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. The emphasis on time and place of the event is maintained while at the same time re-experiencing the emotions until habituation is achieved.

Dual Representation Theory (DRT) of Brewin, Dalgleish and Joseph (1996) maintains that traumatic memories are retrieved by means of activation. Distressing intrusive memory is one of the symptoms that indicate traumatization. The memories often intrude upon a person’s mind in different forms and affect
functioning. These memories come in variations such as nightmares, dissociative flashbacks whereby the person’s state of consciousness is altered. Consequent upon intrusion, the individual acts and feels the same way during the first experience of the traumatic event. Intrusive traumatic memories equally include recurrent distressing dreams in which the content of the dream are related to traumatic events (Herbst et al., 2016). The intrusions typically take the form of visual images but can also include sounds, smells, tastes and bodily sensations. An individual experiences the recurrent flashbacks with a lot of unpleasant feelings connected with the “hot” memory of the traumatic event (Kessler et al., 2018). Intrusive memories for most people decrease over time while for others they persist, causing significant level of psychological distress.

Iyadurai et al. (2019), posit that intrusive memory are capable of causing clinical malfunctioning in an individual either at the early stage of traumatic experience or later on in life. In a research on the psychiatric effect of automobile accidents by Mayou, Bryant, and Duthie (1993) as cited by Iyadurai et al., intrusive memories in the first few weeks were recorded to be 76%, after three months it dropped to 25% and 24 % in one year. As Van Rooyen and Nqweni (2012) observed, trauma in its clinical sense is extremely difficult and overwhelming for individuals. In some cases traumatic memories may not be associated with psychological distress for some people (Berntsen, 2009).

Cognitive approaches to understanding traumatic stress has it that intrusive memories of trauma is at the center of symptomatology, influencing other traumatic symptoms within the symptom clusters of traumatic stress (Brewin, 2014). When intrusive memories occur, they ignite higher levels of physiological and psychological reactions. This inevitably disrupts an individual functioning and attentiveness to daily operation (Clark & MacKay, 2015). Network theories of traumatic stress assert that intrusive memories are intrinsically associated with other symptom clusters in the trauma network and are probably able to cue other symptoms of psychological disorders (Bryant et al., 2017). This is in line with the fear/trauma network developed by Foa and Kozak (1986).

In a study by Kessler et al. (2018) on recurrent intrusive traumatic memory reduction using a visuospatial interference intervention, 20 participants took part in the study. Those who met the criteria for intervention response were 16. The outcomes of the study revealed 64% average reduction in targeted intrusion from pre-test level to the post-test phase. Conversely, intrusions that were not aimed at, reduced by an average of 11% over a similar time frame. Commenting on the general approach to intrusive memory healing, Holmes, Sandberg and Iyadurai, (2010) maintained that a successful therapeutic outcome of memory intrusion intervention is not for the traumatized person to expunge from consciousness the traumatic memory. On the contrary, it is to intentionally remember the event without functional impairment or having recurrent disruptive and distressing feeling. This is what in narrative exposure therapy intervention is called habituation (Schaurer et al., 2011).

Among Liberian refugees in Nigeria, Olubunmi and Dogbahgeen (2013) conducted a research with a sample size of 167 refugees. Ninety four (94) of them were male and 73 female. The posttraumatic stress disorder checklist (PCL civilian version) was administered to measure the level of PTSD. The
first five questions of this tool capture intrusion symptoms. 74% (127) reported re-experiencing with a mean score of 60.18. The study concluded that there is a PTSD probability high level among people with untreated trauma. Interventions to traumatized individuals may not yield effective result if they are not trauma-focused. A case in point is Tibetan refugees with 20% rates of PTSD who coped well with loss and other events using traditional coping and spiritual coping but did not recover from trauma using the same mechanism (Paula & Bonnie, 2004; Varkey, 2010). Intervention for traumatized individuals must therefore be trauma-specific interventions and must target the source of distress. Individuals with severe symptoms like refugees population due to multiple traumas when left untreated develop greater vulnerability to PTSD and comorbid disorders (Chloe, Chessen, Comtois, & Landes, 2011). In narrative exposure therapy, clients who manage to construct a coherent narrative of the traumatic event during exposure therapy profit most from treatment (Neuner, 2012). The focus of Narrative Exposure Therapy (NET) approach therefore is to encourage the activation of painful memories through narration and to prevent the client’s strategies of avoiding or ending activation (Schaurer et al., 2011).

3. 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 | O |
| Control Group | N | | O |

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          |
| Cluster E/Morneau Shappel Secondary School (MSS) | 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.

4. Result

4.1 Pre-test Results of Memory Intrusion Symptoms

The study sought to determine the effectiveness of the narrative exposure therapy intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma Division. The study has results from analysis of pre-test and post-test data. The researcher assessed
whether there were significant differences in the levels of memory intrusion symptoms between young people in the treatment group exposed to narrative exposure therapy intervention and those in the control group exposed to normal counselling. Table 3 presents the pre-test group statistics of memory intrusion symptoms.

Table 3. Pre-test Group Statistics of Memory Intrusion Symptoms

|                  | Control/ | Std. | Std. | Error |
|------------------|----------|------|------|-------|
|                  | Treatment| N    | Mean | Deviation | Mean |
| Memory Intrusion | Treatment| 53   | 2.64 | .834   | .115 |
| symptoms         | Control  | 51   | 2.43 | .806   | .113 |

The results indicated that the mean memory intrusion symptoms among young people in the narrative exposure therapy intervention group was 2.64 with a standard deviation of 0.834, while the mean among those in the normal counselling group was 2.43 with a standard deviation of 0.806. This therefore means that there was a minimal mean difference of 0.21. Table 4 presents results on whether the reported mean difference was statistically significant.

Table 4. Pre-test Independent Samples T-test Scores of Memory Intrusion Symptoms

|                  | t    | df  | Sig. (2-tailed ) | Mean Difference | 95% Confidence Interval of the Difference |
|------------------|------|-----|------------------|-----------------|-----------------------------------------|
| Memory Intrusion | 1.305| 102 | .195             | .210            | -.109 to .529                           |
| symptoms         |      |     |                  |                 |                                         |

The mean difference was 0.210 (95% CI = -0.109 to 0.529), $t(102) = 1.305$, $p = .195 > 0.05$. From the statistics, the independent t-test results showed that there was no statistically significant difference in memory intrusion symptoms between young people in the narrative exposure therapy group and those in the normal counselling group before intervention.

4.2 Post-test Results of Memory Intrusion Symptoms

A post-test was conducted after the intervention. The aim of the post-test was to examine whether there were significant differences in the levels of memory intrusion symptoms between young people exposed to the narrative exposure therapy and those exposed to normal counselling. Table 5 presents the post-test group statistics under memory intrusion symptoms objective.
Table 5. Post-test Group Statistics of Memory Intrusion Symptoms

| Control/ Treatment | N  | Mean | Std. Deviation | Std. Error Mean |
|--------------------|----|------|----------------|-----------------|
| Memory Intrusion   |    |      |                |                 |
| Treatment          | 53 | 1.19 | .761           | .105            |
| Control            | 51 | 2.06 | .705           | .099            |

The post-test results indicated that the mean of memory intrusion symptoms among young people in the narrative exposure therapy group was 1.19 with a standard deviation of 0.761, while the mean among those in the normal counselling group was 2.06 with a standard deviation of 0.705. There was a mean difference of -0.87. An independent t-test was carried out. Table 6 presents the t-test results on whether the reported mean difference was statistically significant.

Table 6. Post-test Independent Samples T-test Scores of Memory Intrusion Symptoms

| t     | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |
|-------|-----|-----------------|-----------------|------------------------------------------|
| Memory Intrusion symptoms | -6.045 | 102 | .000 | -.870 | -1.156 to -0.585 |

From the report, the independent t-test showed memory intrusion symptoms being higher among young people who received normal counselling than those in the narrative exposure therapy intervention group. The mean difference was -0.870 (95% CI = -1.156 to -0.585), t(102) = -6.045, p < 0.000. The hypothesis stating that there is no significant effectiveness of narrative exposure therapy intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma division was rejected and the study concluded that there is statistical significant effectiveness of narrative exposure therapy intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma Division.

5. Discussion

The study findings revealed that memory intrusion symptoms were higher among young people that were exposed to normal counselling as compared to those exposed to the narrative exposure therapy intervention. The therapy intervention was therefore effective in management of memory intrusion symptoms of traumatic stress among young people in Kakuma division with a mean difference of 0.870 and a p-value of 0.000 (p < 0.001). This study confirmed the previous narrative exposure therapy
intervention carried out by Hensel-Dittmann et al. (2011) with asylum seekers in Germany with demonstrated significant reduction in traumatic stress symptoms. Persons with memory intrusion symptoms suffer a range of psychological distress which manifests in forms of repeated, distressing and unwanted memories of the traumatic experience. They equally suffer sleep disturbances in form of nightmares and dissociative reactions in form of flashbacks whereby an individual feels the traumatic events were in reality happening again. These are constitutive elements of this cluster symptoms. DSM-5 (APA, 2013) has it that the presence of one or more of these symptoms in an individual who has experienced a traumatic event endorses post-traumatic stress disorder diagnosis. In ameliorating and mitigating symptoms of traumatic stress, depression and anxiety, Nickerson, Bryant, Silove, and Steel (2011) averred that the mainstay of treatment and management of mental disorders among refugees and asylum seekers remains counselling and psychotherapy. In addition to past traumatic effects, refugees are confronted with severe human conditions in their new environment. These include ongoing insecurity, access to mental health, educational services and host society attitudes of hostility. The consequent effect is that refugees do not have the support of nuclear family or extended family or other support traditional to them. Against these backdrops Silove, Ventevogel, and Rees (2017) maintained that social programmes for refugees as adjunct services to psychotherapy have the capacity to improve in them a sense of connection and promotion of self-help activities.

In addressing mental health challenges resulting from trauma and other life events, Bickman (2020) is of the opinion that mental health service can be improved if evidence-based services are made available. According to the findings, fewer clients are exposed to effective evidence-based interventions that are sufficiently qualitative. Those who administer evidence-based mental health services at time do not do so with utmost commitment. Consequently as observed by Costello et al. (2014), more than 60% of youth populations suffering mental health challenges like major depressive disorder do not receive interventions aimed at reducing their distress. The situation becomes alarming when it comes to low and middle income countries like Kenya and other African countries. Esponda et al. (2020) observe that in this low income countries, mental health interventions become severely limited. Kakuma refugee population belongs to this group of individual across the world with challenges accessing basic human needs. As Hodgkinson (2017), puts it, less than 15% of those in the margin of the society receive needed mental health support.

Trauma survivors avoid coming in contact with cues of their past traumas which may include people, places or events due to strong physical reactions associated with being reminded of the painful experience. Survivors may also try to avoid the therapeutic process due to labelling or stigmatization or when they are not sure of the outcome. This is why Schaurer et al. (2011) incorporate psycho-education in the beginning of the therapeutic process in NET intervention. Here trauma survivors are prepared with the help of the therapist to embark on a journey of remembering the painful experience for the purpose of healing and integration of fragmented trauma memories into a holistic narration.
6. Conclusion and Recommendation

The study findings have proven that narrative exposure therapy intervention is effective in the management of memory intrusion symptoms of traumatic stress by causing a significant reduction of symptoms level at post-test among respondents who were subjected to treatment as compared to those who were in the control group. Based on the findings and conclusion of the study, the researcher recommends to counselors, psychotherapist and other mental health workers working with traumatized population the use of narrative exposure therapy intervention as an effective intervention in management of memory intrusion symptoms of traumatic stress among young people. Narrative exposure therapy may also be tested on children using KIDNET version and other traumatized population since the focus here was on young refugees.

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