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Posttraumatic Cognitions, Avoidance Coping, Suicide, and Posttraumatic Stress Disorder Among Adolescent Refugees

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Abstract

This cross-sectional survey examined posttraumatic cognitions, avoidance coping, suicide and trauma-related disorders of Congolese adolescent refugees in Nakivale refugee settlement. We interviewed 89 adolescents (aged 18-24 years; 62.9% females) using the Posttraumatic Cognitions Inventory, Coping Response Inventory, MINI suicidality scale and Posttraumatic Stress Diagnostics Survey. Forty-four (49.4%) adolescent satisfied the PTSD diagnostic criteria. Twenty-six adolescents (29.2%) had moderate to high current suicide risk. Significant predictors including negative cognitions about self, emotional discharge, and acceptance or resignation explained 33.6 percent of the variance in PTSD symptom severity. About 50.8 percent of the variance in PTSD was explained by risk factors including age, trauma load, and negative cognitions about self. The findings suggest that for the adolescent refugees, negative appraisal and avoidance coping strategies used subsequent to trauma exposure have implication for current psychological wellbeing. Therefore there is need to provide psychological intervention to address these maladaptive posttraumatic problems.

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1. Introduction

Epidemiological studies have documented high prevalence rates of Posttraumatic Stress Disorder (PTSD) among refugees in Uganda. The authors point out the role of demographic variables including sex and age as risk factors that contributed to the observed poor mental health of refugees. However, the outstanding predictor of PTSD was trauma load that is the cumulative exposure to a number of traumatic war-related events (Karunakara et al., 2004; Neuner et al., 2004; Onyut et al., 2009; Peltzer, 1999).

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Other researchers argue that the prevalence of mental health problems results from ongoing daily stressors, non-traumatic events and post-migration difficulties experienced by the trauma survivors (Cardozo et al., 2004; Hinton & Lewis-Fernandez, 2011; Miller et al., 2002; Miller & Rasmussen, 2010). Traumatized people are also hyperactive to stressors and worry which in turn lead to negative emotions, catastrophic cognitions, activation of the trauma network and the onset of PTSD (Hinton, Nickerson, & Bryant, 2011). Environmental cues easily trigger the activation trauma-related network in the memory leading to PTSD symptoms (Foa, Steketee, & Rothbaum, 1989).

Other risk factors are associated to PTSD including posttraumatic cognitive alterations and difficulties. In the aftermath of trauma exposure survivors with maladaptive appraisals such as perceiving themselves as inadequate and unable to cope in the current situations are at a higher risk of PTSD. In such situations trauma survivors are not willing to change their irrational cognitions (Ehlers & Clark, 2000; Elsesser & Sartory, 2007; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999; Startup et al., 2007).

The coping mechanism in relation PTSD results from the culturally acceptable ways of dealing with distress (Hinton & Lewis-Fernandez, 2011). Therefore, the use of avoidance coping strategies such as denial, substance abuse and withdrawal from others, were associated with greater distress and PTSD severity (Gibbs, 1989; Littleton, Horsley, Siji, & Nelson, 2007; Tiet et al., 2006; Yehuda & Flory, 2007).

Suicide is a common problem among trauma survivors that is associated with PTSD. Past studies have found a relationship between PTSD and suicide risk. Trauma survivors with PTSD have an increased risk of suicide. This could be a suicide threat, suicide attempts and suicidal thoughts (Breslau, 2001; Spinazzola, Blaustein, & van der Kolk, 2005). Researchers have provided evidence that there is a plausible link between trauma and suicide.

Trauma literature points to possible associations among posttraumatic cognitions, avoidance copings, suicide and PTSD. However, the interaction of these factors among adolescent refugees in low-developing nations is largely unknown. In the present study, we explored the role of these risk factors in relation to PTSD.

2. Methods

2.1. Participants

The sample consisted of 89 registered adolescent randomly selected from 22 villages in Nakivale Refugee camp. Adolescent were aged 18–24 years, comprising of 56 females and 33 males, aged 21.08 years (SD = 1.98). The majority of the adolescents were married (50.6%), Protestant by religious affiliation (43.8%), with either no formal education at all or primary-level education (62.9%).

2.2 Measures

The questionnaire incorporated the social demographic variables of the respondents including age, gender, level of education and marital status among others.

The 33-item Posttraumatic Cognitions Inventory (PTCI) developed by Foa et al. (1999) assessed trauma-related thoughts and beliefs. Respondents indicate how much they agree or disagree with each statement using a seven-point Likert-type rating scale (from 1 = totally disagree, to 7 = totally agree). The PTCI generates subscales for negative cognitions about self, negative cognitions about the world, and self-blame in addition to a total score. The PTCI has excellent internal consistency ($\alpha = .97$) among a population including a subgroup with no trauma, group that had experienced a traumatic event with no PTSD and a group with PTSD.

The 24-item Coping Responses Inventory (CRI-Adult) assessed avoidance coping strategies of the refugees. Respondents were asked how often they used avoidance coping in response to the traumatic situation during the past six months, and each avoidance coping item rated on a four-point Likert scale (from 1 = no to; 4 = fairly often). The CRI divides avoidance coping responses to stressful life events into four subscales including

cognitive avoidance, acceptance or resignation, seeking alternative rewards, and emotional discharge. The coefficient alpha of the avoidance coping scale was .85 (Moos, 1993).

Mini International Neuropsychiatric Interview (MINI) suicidality section was used to assess the suicide risk (Sheehan et al., 1998). Respondents rate the 6-item using the dichotomous yes/no format.

The Posttraumatic Stress Diagnostics Survey (PDS) measured the severity of PTSD symptoms and PTSD. A diagnosis of PTSD using the PDS is based on the satisfaction of criteria A-F of PTSD using the DSM-IV. The test–retest reliability of the PDS was .83 (Foa, Cashman, Jaycox, & Perry, 1997).

The reliabilities of the PTCI, CRI, MINI-suicidality and PDS were .91, .77, .78 and .87 respectively.

2.3 Procedure

The questionnaire was translated from English to Kiswahili by trained interviewers who were knowledgeable in the Congolese culture. The questionnaire was independently back translated by bilingual translators who were Kiswahili teachers. Informed consent was obtained from all the selected respondents before the interviews that lasted for about two hours. Mbarara University of Science and Technology Institutional Review Committee approved the study protocol. The Refugee Desk Officer on behalf of the Office of the Prime Minister-Uganda granted us permission to conduct this research at Nakivale Refugee Settlement.

3. Results

Overall 49.4 percent of the adolescents satisfied the PTSD diagnostic criteria. Results indicate that PTSD was higher among the females compared to males (75% vs. 25%). Refugees with PTSD had more negative appraisal compared to refugees without PTSD ($t(87) = 4.858$; $p = .000$). Furthermore, the PTCI subscales of self ($t(87) = 5.389$; $p = .000$), world ($t(87) = 3.257$; $p = .002$) and self-blame ($t(87) = 42.144$; $p = .035$) provided significant group differences where refugees with PTSD showing more negative appraisal than refugees without PTSD with regard to all the subscales.

Refugees with PTSD used more of acceptance or resignation ($t(87) = 3.127$; $p = .002$) and emotional discharge avoidance ($t(87) = 2.187$; $p = .031$) coping strategies compared to refugees with no PTSD. There was no significant difference between refugees with no PTSD and refugees with PTSD in the use of avoidance coping strategies of cognitive avoidance ($t(87) = 1.320$; $p = .190$) and seeking alternative rewards ($t(87) = .442$; $p = .660$).

The negative cognitions about self-subscale made the most significant independent contribution to PTSD symptom severity among the refugees with a beta weight of .542. The model explains 33.6 percent of the variance in PTSD symptom severity (see Table 1).

Table 1. Predictors of PTSD symptom severity

Predictor	r	β	t	p
Constant			-900	.371
Trauma load	.240*	.081	.860	.392
Acceptance/Resignation	.231*	-.244	-2.153	.034
Emotional discharge	.379**	.298	2.486	.015
Negative cognitions about self	.548**	.542	4.026	.000
Negative cognitions about world	.235*	.091	.788	.433
Self blame	.270*	-.050	-.462	.645

Note: Pearson correlation; ** $p < .01$; * $p < .05$; Adjusted R Square = .336.

All The Wald Chi-Square statistics show that negative cognitions about self (OR = 3.053) was the greatest significantly factor that contributed to PTSD diagnosis in the model (χ^2 (13; N = 89) = 42.737; $p = .000$). The model accounted for 50.8 percent of the difference in PTSD diagnosis among adolescent refugees (see Table 2).

Table 2. Predictors of PTSD diagnosis

Predictor	OR	Wald	Sig.
Sex (male)	.314	2.600	.107
Level of education		1.111	.574
Level of education (primary)	.609	.350	.554
Level of education (secondary)	.401	1.073	.300
Trauma load	1.487	4.955	.026
Negative cognitions about self	3.053	6.646	.010
Negative cognitions about world	1.197	.174	.677
Self blame	.954	.038	.846
Cognitive avoidance	1.033	.082	.774
Acceptance	.947	.299	.585
Seeking alternative rewards	.943	.397	.529
Emotional discharge	.929	.424	.515
Age	1.396	4.026	.045
Number of displacements	.787	.866	.352
Constant	.000	5.386	.020

Note: OR, odds ratio; Nagelkerke R Square = .508

Only 26 adolescents had moderate to high suicide risk, that was common especially among adolescents with PTSD (N= 23). Females had a higher suicide risk compared to the males (88.5% vs. 11.5%). The suicide risk was associated with PTSD symptom sum score ($r = .464$, $p < .01$) and trauma load ($r = .345$, $p < .01$).

4. Discussion

The high rates of PTSD among adolescent refugees is attributable to the high number of traumatic events experienced (M= 4.04; SD =2.07) and their tender age. The current results are comparable to other refugees studies conducted in Uganda that also documented a high prevalence of PTSD among refugees (Karunakara et al., 2004; Neuner et al., 2004; Onyut et al., 2009).

Negative cognitions about self were associated with an increases risk of PTSD and PTSD symptom severity among adolescent refugees. Previous research reports also confirmed the role of self in PTSD and symptom severity among trauma survivors with PTSD (Foa et al., 1997; Startup et al., 2007).

High prevalence of PTSD is expected given the numerous reminders of the past traumas available in the environmental of the refugees. These reminders can lead to the activation of the trauma-related network. Additionally, refugees with PTSD may have trouble dealing with non-traumatic stressors. Current stressors may also activate trauma-related distress resulting into PTSD symptoms (Foa et al., 1989; Hinton & Lewis-Fernandez, 2011; Hinton et al., 2011; Miller & Rasmussen, 2010).

PTCI discriminated well between PTSD and non-PTSD groups. Adolescent refugees with PTSD experienced more negative appraisal in the current study a finding that has been documented (Ehlers & Clark, 2000; Foa, et al., 1999). Adolescent refugees with PTSD also used more avoidance coping strategies that increase PTSD

symptom severity. The findings agree with past studies that also documented a relationship between avoidance coping strategies and PTSD (Littleton et al., 2007; Tiet et al., 2006; Yehuda & Flory, 2007).

Suicide risk among adolescent refugees is the range of the estimates of suicide among trauma survivors with PTSD (Breslau, 2001; Spinazzola et al., 2005). Suicide was also high among the female refugees.

Limitations of the current study include a small number of participants that limits the extent to which the results can be generalized. The study did not measure the camp stressors that are stressful to refugees. The sample had a high number of female refugees compared to the male refugees.

The finding revealed that adolescent refugees had a high prevalence of PTSD, negative posttraumatic cognitions, use of avoidance coping strategies, and a considerable high risk of suicide. The factors are easily modifiable and can be targets for various psychological interventions aimed at the decrease of the aftereffects of trauma exposure.

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