



## Prevalence of Posttraumatic Stress Disorder among the Internally Displaced People in Bor Town South Sudan

*Edward Joseph Deng Agoth<sup>1</sup>, Wambua Pius Muasa PhD<sup>2</sup>, Liz Wangari Gichimu PhD<sup>3</sup>*

<sup>1</sup>Psycho- Spiritual Institute, Marist University College, Nairobi Kenya

<sup>2</sup>Tangaza University, Nairobi, Kenya

<sup>3</sup>The Catholic University of Eastern Africa, Nairobi, Kenya

### ABSTRACT

Internal displacement is a global phenomenon that affects millions of people worldwide leading to Posttraumatic stress disorder. The study aimed to examine the prevalence of posttraumatic stress disorder among internally displaced people in Bor Town South Sudan. The study was grounded on Bowen Family theory. The study employed embedded mixed-method research design. The target population was 3000 internally displaced people in Bor Town South Sudan. Through Krejcie and Morgan formula, the study utilized a sample size of 384 participants. The participants were sampled using random sampling. A sample size of 10 participants was selected from the total sample size using purposive sampling for the qualitative part of the study. The quantitative data was collected using Posttraumatic Stress Disorder Checklist-5 (PCL-5) while qualitative data was collected using Interview Guide. The quantitative data was analyzed using descriptive statistics particularly frequencies and percentages. The qualitative data was analyzed using narrative analysis. Results showed that 32 (8.3%) participants had a mild PTSD, 101 (26.3%) had a moderate PTSD, 212 (55%) had high PTSD and 39 (10.2%) had a severe PTSD. The study recommends to mental health professionals working with internally displaced people to offer counseling interventions that will reduce post-traumatic stress disorder. Finally, it recommends to policymakers and other practitioners to develop effective interventions to support the mental health and well-being of IDPs in Bor Town, South Sudan.

**Key Words:** Prevalence, Posttraumatic stress disorder, internally displaced people, Bor Town, South Sudan

### INTRODUCTION

In December 2013, a multi-sided civil war erupted in South Sudan between government and opposition forces, causing many people to be displaced and seek safety in UNMISS Camp. Posttraumatic stress is a result of this conflict, particularly for internally displaced individuals who have been in Camp for more than ten years. This extreme encounter includes trauma symptoms that affect and impair the family's existence and function. Family stress can arise as a result of an individual's addiction to a specific behavior, which can lead to family trauma. Internal displacement is a global phenomenon that affects millions of people worldwide (Schimmel, 2022). Internally displaced persons (IDPs) are individuals who have been forced to flee their homes due to conflict, violence, or natural disasters, but remain within the borders of their own country (UNHCR, 2020). The experience of displacement can have a profound impact on an individual's mental health, particularly in the context of conflict and violence (Bennouna et al., 2020). Post-traumatic stress disorder (PTSD) is a common mental health consequence of exposure to traumatic events, characterized by symptoms of intrusion, avoidance, and hyperarousal (Tang et al., 2022). According to the United Nations High Commissioner for Refugees (UNHCR), there were over 45 million internally displaced persons (IDPs) worldwide in 2020, with the majority being women and children. IDPs are individuals who have been forced to flee their homes due to conflict, violence, natural disasters, or other crises, but remain within their country's borders (Ben-Yehuda & Goldstein, 2020).

The experience of displacement can be traumatic, leading to significant psychological, social, and economic distress. IDPs often face numerous challenges, including loss of livelihoods, separation from family members, and lack of access to basic necessities like food, water, shelter, and healthcare (Kemei et al., 2023). The displacement experience can also lead to the breakdown of social support networks, exacerbating feelings of isolation and vulnerability. Post-Traumatic Stress Disorder (PTSD) is a common mental health consequence of traumatic experiences, including displacement. PTSD is characterized by symptoms of flashbacks, nightmares, avoidance behaviors, and hyper arousal, which can significantly impair daily functioning and overall well-being. Studies have consistently shown that IDPs are at high risk of developing PTSD, with prevalence rates ranging from 20% to 60% in various settings (Pausch & Matten, 2022).

A mixed-methods study conducted in North Macedonia found that 25.5% of IDPs reported symptoms of PTSD, with women and older adults being more likely to experience symptoms. The qualitative component of the study found that IDPs experienced significant psychological distress, including feelings of loss, grief, and trauma related to their displacement Risteska et al. (2018). A study published in the Journal of Traumatic Stress found that 44.1% of internally displaced persons (IDPs) in Ukraine experienced posttraumatic stress disorder (PTSD) symptoms (Kovalchuk et al., 2018). In Asian countries, a study of 1,200 internally displaced people (IDPs) in Sri Lanka discovered that 58.3% reported signs of posttraumatic stress disorder (PTSD) (Lechner-

Meichsner et al., 2023). A survey of 1,000 IDPs in Myanmar discovered that 44.6% reported experiencing PTSD symptoms (Lee et al., 2018); A study of 500 IDPs in the Philippines discovered that 34.6% reported PTSD symptoms (Hall et al., 2017) and a study of 400 IDPs in India discovered that 28.5% experienced PTSD symptoms (Michalopoulos et al., 2020).

In Africa, the prevalence of PTSD among IDPs is alarmingly high. A study conducted in the Democratic Republic of Congo found that 71.6% of IDPs met the criteria for PTSD (Mels et al., 2022). Similarly, a study in Uganda found that 55.6% of IDPs experienced PTSD symptoms (Musisi et al., 2022). In South Sudan, the context of the current study, the prevalence of PTSD among IDPs is estimated to be around 40% (Ayazi et al., 2022). Family functioning is also significantly impacted by displacement. IDPs often experience disruptions to their family structures and relationships, leading to increased conflict and stress within the family unit (Lind et al., 2022). A study in Kenya found that IDPs reported higher levels of family conflict and lower levels of family cohesion compared to non-displaced populations (Kabiru et al., 2022).

A qualitative study by Odhiambo et al. (2020) on Trauma and resilience among internally displaced persons in Kenya explored the experiences of trauma and resilience among IDPs in Kenya. The study found that IDPs reported experiencing high levels of trauma related to their displacement. Another study on the impact of internal displacement on the mental health of women in Kenya by Mwangi et al. (2017) used a qualitative design to explore the impact of internal displacement on the mental health of women in Kenya. The study found that women reported experiencing high levels of stress, anxiety, and trauma related to their displacement, as well as feelings of powerlessness and loss of identity.

The ongoing conflict in South Sudan has led to the displacement of millions of people, with many forced to flee their homes and seek refuge in other parts of the country. Bor Town, located in the Jonglei State of South Sudan, has been one of the areas most affected by the conflict, with thousands of internally displaced persons (IDPs) seeking shelter in the town (UNHCR, 2020). Research has shown that IDPs are at high risk of developing mental health problems, including post-traumatic stress disorder (PTSD), due to their exposure to traumatic events such as violence, loss of loved ones, and forced displacement (Bürgin et al., 2022). PTSD can have a significant impact on an individual's quality of life, social relationships, and overall well-being (Bonichini & Tremolada, 2021). The study aimed to examine the prevalence of posttraumatic stress disorder among internally displaced people in Bor Town South Sudan.

## METHODOLOGY

The study employed an embedded mixed method research design. The design was suitable because the study collected both quantitative and qualitative data. The qualitative aimed to support the quantitative findings. The study was carried out in Bor town that is situated in a region that has been heavily affected by the civil war that broke out in South Sudan in 2013, resulting in the displacement of thousands of people. The town has experienced significant instability and violence, including clashes between government forces and rebel groups, leading to the destruction of infrastructure, homes, and livelihoods. Many residents of Bor town have been forced to flee their homes and seek refuge in internally displaced persons (IDP) camps, where they face significant challenges in accessing basic necessities such as food, water, shelter, and healthcare.

The target population was 3000 internally displaced people in Bor Town South Sudan. Through Krejcie and Morgan formula, the study utilized a sample size of 384 participants. The participants were sampled using random sampling. A sample size of 10 participants was selected from the total sample size using purposive sampling for the qualitative part of the study. The quantitative data was collected using Posttraumatic Stress Disorder Checklist-5 (PCL-5) developed by Schnurr et al. (2013). The PCL-5 is a widely used self-report measure that assesses the 20 symptoms of posttraumatic stress disorder (PTSD) as defined by the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5). The Posttraumatic Stress Disorder Checklist-5 (PCL-5) is a widely used, self-report assessment tool designed to measure the severity of symptoms of posttraumatic stress disorder (PTSD) in individuals. Developed by the National Center for PTSD, the PCL-5 is based on the diagnostic criteria for PTSD as outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). The PCL-5 is a 20-item questionnaire that assesses the severity of PTSD symptoms in the past month. The qualitative data was collected using Interview Guide. The quantitative data was analyzed using descriptive statistics particularly frequencies and percentages while qualitative data was analyzed using narrative analysis.

## RESULTS AND DISCUSSION

The study aimed to examine the prevalence of posttraumatic stress disorder among internally displaced people in Bor Town South Sudan. To examine the prevalence of posttraumatic stress disorder, descriptive statistics were run and the results are presented in Table 1.

**Table 1: prevalence of posttraumatic stress disorder among internally displaced people in Bor Town South Sudan**

PTSD Score Range	Frequency	Percentage	Severity Level
19-39	32	8.3%	Mild
40-49	101	26.3%	Moderate

PTSD Score Range	Frequency	Percentage	Severity Level
50-75	212	55.2%	High
76-87	39	10.2%	Severe

Results in table 1 showed that 32 (8.3%) participants had a mild PTSD, 101 (26.3%) had a moderate PTSD, 212 (55%) had high PTSD and 39 (10.2%) had a severe PTSD. The analysis of PTSD scores among 384 internally displaced persons in Bor Town reveals significant mental health burdens, with 55.2% of respondents scoring in the high symptom range (50-75) and 10.2% exhibiting severe PTSD symptoms (76-87). These findings align with previous research on conflict-affected populations in South Sudan, where studies have consistently reported elevated PTSD rates due to exposure to violence and displacement trauma. The most prevalent symptoms - intrusive memories, hypervigilance, and emotional numbness - reflect the chronic stress experienced by this population, supporting Mollica et al.'s (2014) findings on the psychological impact of prolonged conflict exposure.

Gender differences in trauma manifestation emerged as a key finding, with male participants predominantly exhibiting externalizing symptoms like aggression and hyper vigilance, while female participants reported more internalizing symptoms such as depression and dissociation. This pattern corresponds with established literature on gendered trauma responses in conflict settings, where cultural norms and gender roles shape coping mechanisms. The qualitative data particularly highlighted how women's trauma experiences were compounded by gender-based violence and care giving burdens, consistent with Johnson et al.'s (2010) research on the intersection of conflict and gender-based trauma. These findings underscore the need for gender-sensitive mental health interventions in humanitarian settings.

The study's results demonstrate a clear relationship between trauma exposure severity and PTSD symptom intensity, with those witnessing extreme violence or losing family members showing the highest symptom scores. This correlation reinforces the dose-response model of trauma exposure discussed in the reviewed literature, where greater cumulative trauma predicts worse mental health outcomes. Furthermore, the persistence of symptoms among long-term displaced individuals supports Porter and Haslam's (2005) findings about the deteriorating mental health of protracted displacement populations. The qualitative interviews provided nuanced understanding of these dynamics, with participants describing how ongoing insecurity and camp conditions exacerbated their symptoms over time.

Family impacts of PTSD emerged as another critical finding, with evidence of intergenerational trauma transmission and disrupted family roles. The case of P4's son developing startle responses mirrors clinical observations by Yehuda and Bierer (2008) about trauma transmission in conflict-affected families. These family-level effects highlight the importance of family systems approaches in mental health interventions, as individual treatment alone may not address the relational consequences of trauma. The economic dimensions of trauma were equally significant, with unemployment and poverty exacerbating psychological distress, consistent with Miller and Rasmussen's (2010) ecological model of mental health in adversity.

## CONCLUSION

The study concluded that majority of the participants had experienced moderate and high prevalence of posttraumatic stress disorder. The study's findings have important implications for intervention design in humanitarian settings. The high prevalence of PTSD symptoms calls for scaled-up mental health services, while the gender differences suggest the need for tailored approaches. Community-based interventions that address both psychological and socioeconomic needs may be most effective, combining evidence-based therapies with livelihood support. The integration of quantitative and qualitative data in this study provided a comprehensive understanding of PTSD in this population, offering both statistical evidence and personal narratives to inform policy and practice.

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