

Sociodemographic and Associated Risk Factors for PTSD and Depression Among Select Urban Refugees in Nairobi

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Abstract: This study investigated the sociodemographic and trauma-related risk factors associated with post-traumatic stress disorder (PTSD) and depression among urban refugees seeking services at an international organization in Nairobi. Using PCL-5 and BDI-II, and a sociodemographic questionnaire, data were collected from refugee participants to assess the prevalence and predictors of mental health conditions. The findings revealed that gender and education level were significant predictors (gender: $\chi^2(2) = 10.23, p = .006$; education: $\chi^2(4) = 9.90, p = .042$), with female refugees and those with lower educational attainment showing higher rates of PTSD and depression. While variables such as country of origin, marital status, and age did not significantly predict mental health outcomes, having family in Kenya and a higher number of children were associated with elevated symptoms (Wilks' $\Lambda = .953, F = 4.666, p = .011$, effect size was partial $\eta^2 = .047$). Specific traumatic experiences—particularly torture (torture: $F(1, 264) = 7.189, p = .008, \eta^2 = .027$), sexual assault (sexual assault: $F(1, 264) = 10.368, p = .001, \eta^2 = .038$), and abduction (abduction: $F(1, 264) = 6.511, p = .011, \eta^2 = .024$)—were strong predictors of PTSD and depression, with the nature of the perpetrator influencing symptom severity. A cumulative trauma effect was observed, although resilience appeared to increase among those with extensive trauma exposure. Post-migration stressors, including unemployment, housing insecurity, and lack of access to services, were positively correlated with poor mental health. The study recommends targeted psychosocial interventions, education and income-generating programs, and stronger enforcement of refugee rights to mitigate these risks and improve mental health outcomes among urban refugee populations.

Key words: Urban refugees PTSD, Depression, Risk Factors

1. INTRODUCTION

The UNHCR 2024 annual results report on Kenya recorded that “in 2024, Kenya hosted 830,000 refugees and asylum seekers, a 16 per cent increase from 2023, making it the fourth-largest refugee-hosting country in the region” (p. 4).

Studies (Koenen et al., 2017; Silove et al., 2009) have found that PTSD is higher in persons who have experienced conflict as compared to other lifetime events. War-related events frequently result in psychological problems such as posttraumatic stress disorder (PTSD) and depressive disorders (Kizilhan et al., 2020). Pejuskovic et al. (2020) state that two of the most commonly acknowledged consequences of traumatic events are depression and post-traumatic stress disorder. Epidemiologic research has demonstrated that PTSD is not a necessary consequence of exposure. Indeed, Silove et al. (2017) assert that, despite their traumatic experiences, not all refugees will develop PTSD. In order to understand why some people who experience traumatic stress acquire PTSD while others who are similarly exposed do not, research has been conducted to identify the contributing factors (Brewin et al., 2000; Sahin & Sevil, 2023). According to researchers, predictions should be limited to two categories: elements of the traumatic event or its aftermath, and personal characteristics crucial for psychological functioning and processing (Brewin et al., 2000; Ozer et al., 2003). Studies (Fitch et al., 2018; Obuobi-Donkor et al., 2022) have shown a positive correlation between the number and type of traumatic events that an individual is exposed to and the development of PTSD. The study found that there were more incidents of PTSD among participants who reported over three traumatic events. Studies by Neuner et al. (2004), Obuobi-Donkor et al. (2022) and Mollica et al (2018) also reported a positive correlation between the number and severity of potentially traumatising events as a determinant of PTSD.

Koenen et al. 2017 also explain factors correlated to PTSD, such as exposure to a higher number of traumatic events, being female living in developed countries (Haagen, 2017), the type, severity, and the number of exposures to the traumatic event (de Jong et al., 2001; Kaushalya, & Ponnampereuma, 2017). Refugees face extra challenges that exacerbate their past traumas and worsen their PTSD and depression, in addition to the terrible events that precipitated them in their home countries. These stressors include poverty, exploitation, harassment, xenophobia, discrimination, the denial of work permits, loneliness, a lack of social support, and poverty (Haagen et al., 2017; Getnet, Medhin, & Alem, 2019). Other issues include difficult refugee determination processes, troubled relationships with host communities, limited access to resources, and a lack of employment or educational prospects. When taking into account all of their past traumas, the aforementioned issues increase the trauma's load, which exacerbates PTSD and depressive symptoms (Laban et al., 2004; Reesp, 2003; Momartin et al., 2006; Morina et al., 2018). Regarding age, Obuobi-Donkor et al. (2022) in a systematic review indicated that some studies found that younger participants were up to four times as likely to develop PTSD, while others found that older men were more likely to develop PTSD. While it is clear that gender has been established as a factor in PTSD, studies have yielded varying results (Tolin & Foa, 2006). Early studies found that males are more likely to experience potentially traumatic events (Breslau et al., 1998). Contrary to this finding, studies have also found that women are twice as likely to develop PTSD as compared to their male counterparts, irrespective of the type of traumatic event (Breslau et al., 1991, 1998). This study sought to assess associated risk factors for PTSD and depression among urban refugees living in Nairobi.

2. METHOD

Permission for the study was obtained from Daystar University Institutional Scientific and Ethical Review Committee (DU-ISERC), and the National Commission for Science, Technology and Innovation (NACOSTI), and permission from the research site. The study was conducted in different sites hired for the meeting of the refugees to take place.

2.1. Data Collection and Study Sample

The target population in the study were 356 urban refugees from Sub-Saharan African countries seeking services at an international organisation in Nairobi, Kenya, during 6 month period. Participants were drawn from the organisations's database of beneficiaries. A census approach was used to screen all of the 356 from the sampling unit of all beneficiaries of the organisation's programmes, to determine those who meet the cut-off point of and depression on PCL-5 while that of Depression were those that met the cut-off point. Those that had met the cut-off point ≥ 33 on the PCL-5, and depression based on cut-off point of ≥ 13 on BDI-II were included in the study.

2.2. Instruments

Using a questionnaire that largely consisted of "Yes" or "No" questions, demographic data was collected. Other answers were categorized for quantitative analysis. All refugees who took part in the screening process filled out the PCL-5, BDI-II, and sociodemographic questionnaire in order to assess PTSD symptoms related to trauma. The researcher conducted the assessments together with a qualified assistant. Pre-testing of the questionnaire allowed the researcher to refine the data collection tools based on feedback from a small group of participants.

3. RESULTS

Scores on the PCL-5 showed that 99 participants (28.3%) scored below the clinical cutoff (score < 32), suggesting no PTSD, whereas 251 participants (71.7%) hit the threshold for probable PTSD (score ≥ 33). Valid data for this item was given by all 350 respondents. In order to determine the prevalence of likely PTSD based on the respondents' various sociodemographic attributes, additional analysis was conducted after this. Table 1 displays the analysis's conclusions. An analysis using a chi-square test of independence indicated no statistically significant association between country of origin and PTSD prevalence, $\chi^2(9) = 14.98$, $p = .092$. Females comprised 68.2% of the PTSD group, compared to 51.6% of the non-PTSD group, suggesting higher PTSD prevalence among women. No significant association was found between age group and PTSD prevalence, $\chi^2(9) = 13.14$, $p = .156$. The distribution of PTSD was relatively even across age groups, with the highest prevalence in the 36–40 age range (18.8%). Education level was not significantly associated with PTSD prevalence, $\chi^2(4) = 2.79$, $p = .594$. However,

participants with secondary education represented the largest proportion of both PTSD (30.8%) and non-PTSD (40.8%) groups. Marital status did not significantly influence PTSD prevalence, $\chi^2(5) = 6.01$, $p = .306$. Married individuals were the largest subgroup in both PTSD (42.2%) and non-PTSD (46.5%) categories. Additionally, no significant association was found between number of children and PTSD prevalence, $\chi^2(10) = 13.54$, $p = .195$. However, individuals with no children were more prevalent in the non-PTSD group (31.3%) than in the PTSD group (19.6%). A Fisher's exact test revealed a marginally significant association between having family members in Kenya and PTSD prevalence, $p = .050$. Those without family in Kenya were slightly more represented in the PTSD group (38.8%) than in the non-PTSD group (33.3%). No significant association was found between duration in the organisation's programme and PTSD prevalence, $\chi^2(4) = 5.02$, $p = .285$. Most participants had been in the programme for 0–5 years (82.6%). A significant association was found between the number of trauma categories experienced and PTSD prevalence, $\chi^2(3) = 26.88$, $p < .001$. Participants reporting 6–8 trauma categories were most likely to meet PTSD criteria (47.5%), compared to only 25.9% in the non-PTSD group.

A further analysis was done to assess the prevalence of depression symptoms according to participants' sociodemographic characteristics. These findings are shown in table 2. A chi-square test revealed no significant association between country of origin and depression prevalence, $\chi^2(9) = 10.73$, $p = .295$. The Democratic Republic of Congo (DRC) accounted for the largest proportion of both depressed (50.3%) and non-depressed (50.9%) individuals. There was no significant relationship between age and depression prevalence, $\chi^2(9) = 4.69$, $p = .860$. Depression was most prevalent among individuals aged 36–40 years (19.6%), though this pattern was not statistically significant. However, a significant association was found between gender and depression prevalence, $\chi^2(2) = 10.23$, $p = .006$. Females represented a higher proportion of the depressed group (67.4%) compared to males (31.5%), suggesting increased vulnerability among women. Education was also significantly associated with depression prevalence, $\chi^2(4) = 9.90$, $p = .042$. Participants with secondary education were the most represented in both depressed (34.0%) and non-depressed (35.7%) groups. On the other hand, individuals with no formal education showed a higher proportion of depression (10.9%) relative to their representation in the non-depressed group (5.4%).

The results further found no significant association between marital status and depression prevalence, $\chi^2(5) = 2.66$, $p = .752$. Married individuals comprised the largest subgroup in both depressed (41.9%) and non-depressed (49.1%) categories. However, the association between number of children and depression approached significance, $\chi^2(10) = 18.24$, $p = .051$. Notably, individuals with no children were more prevalent in the non-depressed group (36.8%) than in the depressed group (20.7%). No significant relationship was found between having family members in Kenya and depression prevalence, $\chi^2(1) = 0.91$, $p = .341$, although, those without family in Kenya were more likely to be depressed (38.6%) than non-depressed (24.6%). Similarly, duration in the organisation's programme was not significantly associated with depression prevalence, $\chi^2(4) = 8.16$, $p = .086$. Most participants had been in the programme for 0–5 years (82.6%). A significant association was found between the number of trauma categories experienced and depression prevalence, $\chi^2(3) = 26.40$, $p < .001$. Participants reporting 6–8 trauma categories were most likely to be depressed (45.4%), while those with 0–2 trauma categories were least likely (10.0%). To analyze the risk factors associated with PTSD and depression symptom severity among the selected sample of refugees at the organization, a multivariate analysis of variance (MANOVA) was conducted to examine the effects of demographic and contextual variables on PTSD and depression. Findings from the study are shown in table 3.

The overall model was statistically significant, as indicated by all four multivariate test statistics for the intercept (e.g., Wilks' $\Lambda = .699$, $F(40.617)$, $p < .001$, $\eta^2 = .301$), confirming meaningful variation across the dataset. The study found that Country of Origin had a statistically significant multivariate effect on PTSD and depression (Wilks' $\Lambda = .787$, $F = 2.670$, $p < .001$), with a moderate effect size (partial $\eta^2 = .113$). Gender also showed a significant effect (Wilks' $\Lambda = .930$, $F = 3.471$, $p = .008$), though with a smaller effect size (partial $\eta^2 = .035$). Education level was similarly significant (Wilks' $\Lambda = .913$, $F = 2.199$, $p = .027$), with partial $\eta^2 = .044$. Further to that, having family members in Kenya emerged as a significant predictor (Wilks' $\Lambda = .953$, $F = 4.666$, $p = .011$), with a modest effect size (partial $\eta^2 = .047$).

However, other variables, including the duration as a refugee, age, marital status, number of children, and duration with the organisation, all did not yield statistically significant multivariate effects (all $p > .05$), though some showed small to moderate effect sizes, for instance, duration as a refugee ($\eta^2 = .155$);

length of time since becoming affiliated to the organisation ($\eta^2 = .130$), suggesting potential relevance for future modeling or subgroup analysis. An analysis was done to determine whether various sociodemographic variables show statistically significant differences on the levels of PTSD and depression symptoms in the study population. The between-subjects analyses further showed the influence of the independent variables on PTSD and depression symptoms as shown in table 4. The corrected model was statistically significant for both outcomes: PTSD ($F(95, 190) = 1.876, p < .001$, partial $\eta^2 = .484$) and depression ($F(95, 190) = 1.564, p = .005$, partial $\eta^2 = .439$), indicating that the combined predictors explained a substantial proportion of variance in mental health outcomes. The intercept was significant for both PTSD ($F(1, 190) = 81.567, p < .001, \eta^2 = .300$) and depression ($F(1, 190) = 41.826, p < .001, \eta^2 = .180$), confirming differences in symptom levels. The results indicated that the respondents' country of origin significantly predicted both PTSD ($F(9, 190) = 3.128, p = .002, \eta^2 = .129$) and depression ($F(9, 190) = 4.301, p < .001, \eta^2 = .169$), with moderate effect sizes. Gender also showed significant effects on PTSD ($F(2, 190) = 5.868, p = .003, \eta^2 = .058$) and depression ($F(2, 190) = 4.097, p = .018, \eta^2 = .041$).

Education level was also found to be a significant predictor of PTSD ($F(4, 190) = 2.853, p = .025, \eta^2 = .057$), though its effect on depression was not statistically significant ($p = .121$). Having family members in Kenya also significantly influenced both PTSD ($F(1, 190) = 7.330, p = .007, \eta^2 = .037$) and depression ($F(1, 190) = 8.448, p = .004, \eta^2 = .043$), suggesting relational proximity may buffer or exacerbate mental health outcomes. However, other variables—including refugee duration, age, marital status, number of children, and duration with the organisation—did not yield statistically significant effects (all $p > .05$), though some showed small to moderate effect sizes, indicating potential relevance for future modeling. In order to explore differences in PCL-5 and BDI-II scores across the dependent variables, Bonferroni-adjusted pairwise comparisons were additionally conducted as shown in table 5.

Although the overall effect of marital status on PTSD scores was not statistically significant ($F(4, 190) = 1.686, p = .155, \eta^2 = .034$), one pairwise comparison reached significance. For PTSD, participants who were separated reported significantly higher scores than those who were married. Mean difference = 10.10, SE = 3.47, $p = .040$, with a 95% confidence interval of [.25, 19.96]. This suggests that individuals who are separated may experience elevated trauma-related symptoms compared to their married counterparts. No other comparisons between marital status groups were statistically significant (all $p \geq .301$), and confidence intervals for most comparisons included zero, indicating limited precision. For depression, no pairwise comparisons reached statistical significance (all $p = 1.000$). Mean differences between groups were small and confidence intervals were wide, suggesting no reliable differences in depression scores across marital status categories.

These findings indicate that while marital status may not exert a strong overall influence on psychological outcomes, individuals who are separated may be at increased risk for trauma-related symptoms compared to those who are married. A multivariate analysis of variance (MANOVA) was conducted to examine the effects of various trauma exposure types on combined mental health outcomes. The overall model was statistically significant (Wilks' $\Lambda = .399, F = 198.302, p < .001$, partial $\eta^2 = .601$), indicating that the trauma variables collectively explained a substantial proportion of variance in the dependent measures. Findings of this analysis are shown in table 6. Among individual trauma types, several yielded statistically significant multivariate effects: Sexual assault by a stranger was a significant predictor (Wilks' $\Lambda = .961, F = 5.382, p = .005$, partial $\eta^2 = .039$), suggesting a meaningful impact on mental health outcomes. Abduction also showed a significant effect (Wilks' $\Lambda = .976, F = 3.285, p = .039$, partial $\eta^2 = .024$). Torture had the strongest individual effect (Wilks' $\Lambda = .949, F = 7.139, p = .001$, partial $\eta^2 = .051$). Other traumatic events were statistically significant (Wilks' $\Lambda = .974, F = 3.530, p = .031$, partial $\eta^2 = .026$). Other trauma types—including natural disasters, non-sexual assault (by known or unknown persons), sexual assault by family members, warzone exposure, and displacement—did not reach statistical significance (all $p > .05$), though some showed small effect sizes (e.g., sexual assault by family, partial $\eta^2 = .022$). A series of between-subjects analyses were conducted to examine the influence of specific trauma exposure types on PTSD (PCL-5 scores) and depression (BDI-II scores). The corrected model was statistically significant for both outcomes: PTSD ($F(13, 264) = 8.269, p < .001$, partial $\eta^2 = .289$) and depression ($F(13, 264) = 7.521, p < .001$, partial $\eta^2 = .270$), indicating that the trauma variables collectively explained a substantial proportion of variance in mental health symptoms. The between-subjects effects are shown in table 7.

The intercept was highly significant for both PTSD ($F(1, 264) = 364.295, p < .001, \eta^2 = .580$) and depression ($F(1, 264) = 266.657, p < .001, \eta^2 = .503$), confirming strong baseline symptom levels. Among individual trauma types: Sexual assault by a stranger significantly predicted PTSD scores ($F(1, 264) = 10.368, p = .001, \eta^2 = .038$), though its effect on depression was not significant. Sexual assault by a family member significantly predicted depression scores ($F(1, 264) = 4.255, p = .040, \eta^2 = .016$), but not PTSD. Abduction was a significant predictor of PTSD ($F(1, 264) = 6.511, p = .011, \eta^2 = .024$), with no significant effect on depression. Torture significantly predicted both PTSD ($F(1, 264) = 7.189, p = .008, \eta^2 = .027$) and depression ($F(1, 264) = 14.112, p < .001, \eta^2 = .051$). Other traumatic events significantly influenced PTSD scores ($F(1, 264) = 7.055, p = .008, \eta^2 = .026$), but not depression. Other trauma types—including natural disasters, non-sexual assault (by known or unknown persons), warzone exposure, and displacement—did not yield statistically significant effects on either outcome (all $p > .05$), though some showed small effect sizes. The results indicate that specific trauma types—particularly torture, sexual assault by a stranger, and abduction—are associated with elevated posttraumatic stress symptoms. Torture also emerged as the strongest predictor of depression symptoms. These findings highlight the need for trauma-specific screening and support interventions, especially for survivors of interpersonal and conflict-related violence. A multivariate analysis of variance (MANOVA) was conducted to assess the effects of refugee status, duration with the organisation, cumulative trauma exposure, and number of children on combined mental health outcomes. Findings are displayed in table 8.

The overall model was statistically significant (Wilks' $\Lambda = .399, F = 3681.071, p < .001$, partial $\eta^2 = .999$), indicating that the predictors collectively explained nearly all variance in the dependent variables. The length of time as a refugee (Refugee status) showed a significant multivariate effect (Wilks' $\Lambda = .007, F = 3.414, p = .007$, partial $\eta^2 = .927$), suggesting strong associations with mental health outcomes. Duration with the organisation was also significant (Wilks' $\Lambda = .018, F = 3.225, p = .018$, partial $\eta^2 = .763$), indicating that length of engagement with support services influenced psychological distress.

Total trauma exposure yielded a robust effect (Wilks' $\Lambda = .001, F = 6.222, p = .001$, partial $\eta^2 = .889$), confirming its predictive strength. Number of children showed marginal significance across tests, with Roy's Largest Root indicating a significant effect ($F = 8.277, p = .004$, partial $\eta^2 = .892$). Additionally, a series of between-subjects analyses were conducted to examine the effects of refugee status, duration with the organisation, cumulative trauma exposure. The between subjects effects are shown in table 9. The corrected model was statistically significant for both outcomes: PTSD ($F(234, 8) = 3.392, p = .033$, partial $\eta^2 = .990$) and depression ($F(234, 8) = 5.275, p = .008$, partial $\eta^2 = .994$), indicating that the combined predictors explained a substantial proportion of variance in mental health symptoms. The intercept was highly significant for both PTSD ($F(1, 8) = 1774.872, p < .001, \eta^2 = .996$) and depression ($F(1, 8) = 2088.065, p < .001, \eta^2 = .996$), reflecting strong baseline symptom levels. Refugee status significantly predicted depression scores ($F(26, 8) = 5.041, p = .011, \eta^2 = .942$) and was marginally significant for PTSD ($p = .051$). Duration with THE ORGANISATION was marginally significant for PTSD ($F(7, 8) = 3.506, p = .050, \eta^2 = .754$), but not for depression. Total trauma exposure was a strong predictor of both PTSD ($F(9, 8) = 7.831, p = .004, \eta^2 = .898$) and depression ($F(9, 8) = 13.936, p = .001, \eta^2 = .940$). Number of children significantly predicted depression scores ($F(8, 8) = 3.649, p = .043, \eta^2 = .785$), but not PTSD. These results underscore the need for trauma-informed, family-sensitive psychosocial interventions tailored to refugee populations.

Pearson correlation coefficients were computed to examine the relationships among refugee status, number of children, duration of engagement with THE ORGANISATION services, total trauma exposure, number of deceased children, and psychological outcomes. Results of the analysis are shown in table 10. The results of the analysis showed that higher PTSD scores were significantly correlated with: the length of time as a refugee ($r = -.110, p = .045$), indicating increased PTSD scores among respondents with shorter duration as refugees; higher number of children ($r = .121, p = .024$), and exposure to multiple traumatic events ($r = .476, p < .001$), with a strong positive association between multiple traumas and higher PTSD scores. Depression was significantly correlated with Refugee status ($r = -.210, p < .001$), indicating lower depression scores among respondents with longer duration as refugees. Similarly, significantly correlated were the number of children ($r = .171, p = .002$), suggesting higher depressive symptoms among refugees with more children. 'Total trauma exposure' ($r = .455, p < .001$) also showed a strong positive association, hence the more the traumatic events the

participants had experienced, the higher the depression scores. 'Number of deceased children' ($r = .116$, $p = .038$) showed a small but significant positive correlation, thus the more the number of deceased children the participants had, the more the depression. Finally, a Pearson product-moment correlation was conducted to examine the relationships among PTSD symptoms (PCL-5), depressive symptoms (BDI-II-II), and the number of stressors. The current stressors were accommodation, police, employment and other, whereby some had more than one current stressor. Results of this analysis are displayed in table 11. PTSD and number of stressors showed a small but significant positive correlation, $r(344) = .245$, $p < .001$, suggesting that individuals reporting more stressors also tended to report higher PTSD symptoms. Depression and number of stressors were also positively correlated, $r(337) = .188$, $p = .001$, indicating a modest association between depressive symptoms and the number of stressors.

4. DISCUSSION

The study revealed a significant link between gender and depression, with females comprising 67.4% of the depressed group. Gender also significantly influenced PTSD and depression scores, indicating that female refugees are more prone to these mental health issues than males. This aligns with prior research (Ainamani, 2020; Askanew et al., 2019; Hossain et al. 2021; Mholongo, 2018; Ng et al., 2020; Nickerson et al., 2017; Shook et al. 2018; and Vu et al., 2014)) who also found gender to be a predictor of mental health challenges, especially depression and PTSD in refugee populations. This is often due to females experiencing more traumatic events such as sexual assault and abduction. However, some studies found no gender differences in PTSD prevalence.

Additionally, education level was significantly associated with depression but not PTSD. These findings are supported by findings from a study by Khalil et al. (2024) who found a significant relationship between educational level and PTSD severity ($p = 0.031$). Higher education appeared to buffer against PTSD severity, possibly by offering better resettlement opportunities and reducing post-migration stress. The study explored various predictors of mental health outcomes among refugees, focusing on PTSD and depression. It found that several sociodemographic variables—including country of origin, duration as a refugee, marital status, age, and number of children—did not significantly predict PTSD or depression.

This contrasts with earlier findings by Bogic et al. (2015), who emphasized the influence of pre-migration trauma levels and country-specific conflict histories on mental health. However, family dynamics played a notable role. Having family members in Kenya significantly predicted both PTSD and depression, suggesting that while family presence may offer support, it can also heighten emotional strain. Similarly, the number of children a refugee had was associated with elevated PTSD and depression scores, echoing findings by Acarturk (2020) and the World Bank (2023), which linked caregiving stress and post-migration hardship to poor mental health outcomes.

Traumatic experiences were strong predictors of mental health conditions. Sexual assault by a stranger significantly predicted PTSD but not depression, whereas assault by a family member was linked to depression but not PTSD. Abduction was a significant predictor of PTSD, while torture emerged as the strongest individual predictor of both PTSD and depression. Respondents identified natural disasters, physical violence, war and conflict, sexual violence, torture, and abduction as their most traumatizing experiences, with some reporting multiple traumas—highlighting trauma load as a key factor in mental health deterioration. Cumulative trauma showed a strong positive correlation with PTSD scores.

Participants who had experienced six to eight trauma categories were most likely to meet PTSD criteria. Interestingly, those who reported ten or more trauma categories showed reduced PTSD prevalence, suggesting the development of resilience over time. Duration as a refugee also influenced mental health: shorter stays in Kenya were associated with higher PTSD and depression scores, while longer durations correlated with lower symptoms, indicating adaptation to the host environment. Although married women aged 30 to 40 were more represented in the PTSD group, marital status itself was not statistically significant, likely due to the sample's composition. Post-migration stressors were also significant predictors of mental health outcomes. PTSD and depression were positively correlated with the number of stressors reported, which included language barriers, discrimination, family concerns, and unemployment. These findings align with previous research and systematic reviews, reinforcing the idea that both pre- and post-migration experiences critically shape refugee mental health.

5. RECOMMENDATIONS

The study recommends that governments and humanitarian organizations implement psychosocial interventions targeting key social risk factors such as unemployment, inadequate housing, and limited access to essential services. Emphasis should be placed on income-generating programs, especially for women, who are both the majority and more vulnerable to mental health issues. Expanding access to formal and informal education is also advised, as higher education can improve opportunities and reduce stress. Additionally, the study calls for stronger policies that uphold refugee rights as human rights, including protection from harassment, to enhance safety and quality of life. It advocates for policies that support employment and welfare services, and promote refugee integration into host communities to reduce post-migration stressors. Strict enforcement of these rights is essential, as harassment by authorities and local communities can worsen PTSD and depression, leading to chronic mental health conditions.

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Citation: Murunga, Beatrice Atieno, et al. " Sociodemographic and Associated Risk Factors for PTSD and Depression Among Select Urban Refugees in Nairobi" *International Journal of Humanities Social Sciences and Education (IJHSSE)*, vol 12, no. 12, 2025, pp. 12-20. DOI: <https://doi.org/10.20431/2349-0381.1212002>.

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