Associations between childhood violence and mental health in refugee settings in Uganda

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ABSTRACT
Background: Childhood violence and mental health remain concerning public health issues globally yet there is limited evidence on the associations between experiences of such violence and mental health in refugee settings.
Objective: To assess the association between experiences of childhood violence (sexual, physical, and emotional violence) and mental health (severe mental distress, self-harm, suicidal ideation and/or attempted suicide) in refugee settings in Uganda.
Data and methods: Data are from the 2022 Uganda Humanitarian Violence against Children and Youth Survey (HVACS) conducted among 1338 females and 927 males aged 13–24 years between March and April 2022. Cross-tabulation with chi-square tests and multivariate logistic regression analysis were used to assess the association between experiencing childhood violence and mental health.
Results: The results show a high prevalence of experiencing childhood violence (females 40.8% vs males 55.2%) and mental distress (45% for both males and females). Females who experienced childhood sexual violence had significantly higher odds of reporting severe mental distress (aOR = 1.989; CI = 1.216–3.255), suicidal ideation and/or attempted suicide (aOR = 4.119; CI = 2.157–7.864) and self-harm (aOR = 3.734; CI = 1.619–8.609) compared to those who did not experience such violence. Experiencing childhood physical or emotional violence was also significantly associated with increased odds of reporting suicidal ideation and/or attempts and self-harm among females. Among males, childhood emotional violence was significantly associated with increased odds of reporting suicidal ideation or attempts (aOR = 9.233; CI = 2.293–37.177) or severe mental distress (aOR = 2.823; CI = 1.115–7.148).
Conclusion: Childhood exposure to violence was associated with poor mental health, with a higher risk observed among females. The findings of this paper provide critical insights to facilitate the development or strengthening of violence prevention and response interventions on violence against children in refugee settings.

1. Introduction

Violence against children (VAC) entails all forms of abuse or maltreatment directed towards individuals younger than 18 years. It includes physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment, commercial and other exploitation, which result in actual or potential harm to the child's health, survival, development, or dignity (WHO, 2022). Globally, an estimated one billion children 2–17 years of age experience some form of violence each year (Hillis, & Saul, 2017) with Asia (64%) and Africa (50%) bearing the greatest burden compared to other regions (Hillis, Mercy, Amobi, & Kress, 2016).

Despite Uganda having an enabling policy landscape with national laws and policies enacted and implemented to protect children (UBOS & ICF International, 2018), VAC is widespread (Ochen et al., 2022). According to the 2015 Uganda Violence Against Children and Youth Survey (VACS), which excluded children and youth living in refugee settlements, three in four young adults aged 18–24 years experienced some form of maltreatment in childhood (before the age of 18 years). Girls were twice as likely as boys to have experienced sexual violence while boys were more likely than girls to experience physical violence (MGLSD, 2018).
Estimates of the prevalence of VAC in humanitarian settings are very limited; however, the magnitude of VAC in humanitarian settings is presumed to be higher or resulting in more adverse consequences than in development settings due to several factors including heightened risk, resource scarcity, and the mobile or transient nature of populations (Stark & Landis, 2016). There is need for context-specific surveys to more rigorously measure VAC to understand the magnitude, consequences, risk, and protective factors of VAC in humanitarian settings.

VAC remains a concerning problem in refugee settings (Stark & Reis, 2021), with unaccompanied refugee children being at a higher risk of experiencing physical and sexual violence (Versteele et al., 2022), disruptions in social life and living a life of uncertainty in new environments (Kronick, Jarvis, & Kirmayer, 2021), social norms that condone violence (Klika & Linkenbach, 2019), and weakened community cohesion due to displacement (Rubenstein & Stark, 2017). In turn, exposure to violence can lead to poor mental health outcomes (Buckner, Beardalee, & Basuk, 2004; Mohammad, Shapiro, Wainwright, & Carter, 2015; Olaya, Ezpeleta, de la Osa, Granero, & Domènech, 2010). Yet, there is limited evidence about children’s mental health in the context of violence in humanitarian settings (Rubenstein & Stark, 2017; Stark & Landis, 2016; Tol et al., 2011).

Uganda hosts the largest number of refugees in the East and Horn of Africa region, estimated at 1.5 million refugees as of August 2023 (UNHCR, 2023). More than half (57%) of this refugee population are children (GOU & UNHCR, 2023). Moreover, the number of unaccompanied refugee minors (URMs) was estimated at more than 50,000 by 2022 (SOS Children’s Village & MGLSD, 2023). Children in humanitarian settings may face an increased risk to violence and poor mental health due to a combination of factors such as disrupted living conditions, displacement, and the breakdown of social structures and support systems (Rubenstein & Stark, 2017; Stark & Landis, 2016; Versteel et al., 2024). Poor mental health has a detrimental effect on the well-being of children and youth, resulting in adverse health and social outcomes, including alcohol and substance abuse, negative sexual and reproductive behaviours, school dropout, and engagement in delinquent behaviours (Ferrari et al., 2014). Studies have also shown that adverse childhood experiences are closely linked to violence perpetration later in life, depression, victimization, and a range of poor physical and mental health outcomes into adulthood (Babad, Zwilling, Carson, Fairchild, & Nikulina, 2022; Nikulina, Gelin, & Zwilling, 2021; Thulin, Heinze, & Zimmerman, 2021).

While there is a vast body of evidence on the association between childhood violence and mental health, most of these studies are based on data from development rather than humanitarian settings, which limits efforts by humanitarian actors in the design of appropriate interventions to prevent and respond to childhood violence and its health consequences (Stark & Landis, 2016). Studies and rigorous surveys on the association between experiences of childhood violence and mental health in humanitarian settings are rare or absent largely due to the challenges of conducting them in humanitarian settings (Karakad, Kiliç, Kaya, & Uner, 2021; Meyer, Yu, Hermosilla, & Stark, 2017). To bridge this gap, we apply a rigorous VAC survey to examine the associations between childhood experiences of violence (sexual, physical, and emotional) and mental health (severe mental distress, suicidal ideation and/or attempted suicide, and self-harm) among females and males aged 13–24 years in refugee settings in Uganda. Understanding the association between the experience of childhood violence and mental health in humanitarian settings could inform prevention of violence and mitigation of its impact on mental health, which may be exacerbated by the disruption of protective social structures in such settings.

2. Methods

2.1. Source of data

This paper uses data from the first-ever Humanitarian Violence Against Children and Youth Survey (HVACS). This was a representative cross-sectional household survey targeting children and youth aged 13–24 years in refugee settlements in Uganda.

2.2. Study settings

Data collection took place between March and April 2022. We collected data from all 13 refugee settlements in the country, namely, Adjumani in Adjumani district, Bidibidi in Yumbe district, Imvepi in Terego district, Kiyandongo in Kiyandongo district, Kyaka II in Kyegwa district, Kyangwali in Kikuube district, Lobelle in Koboko district, Nakivale in Isingiro district, Oruchinga in Isingiro district, Palabek in Lamwo district, Palorinya in Moyi district, Rwamwanja in Kamwenge district, and Rhino in Madi-Okojo and Terego districts (see Fig. 1). The settlements are divided into zones and the zones into blocks. The main economic activity for refugees is subsistence agriculture (Kadigo & Maystadt, 2023). With support from the United Nations High Commissioner for Refugees (UNHCR) and the World Food Programme (WFP), refugees in Uganda receive support in the form of cash and food aid for survival (Zhu et al., 2016). Uganda’s refugee policy is considered one of the most progressive in the world (Bashaasha, Enegu, & Yamashita, 2021; Betts, 2021). It provides homestead land for all refugees for residential, farming, and livelihood purposes (Zhu et al., 2016).

2.3. Training and data collection

Training of research assistants (26 team leaders, 56 interviewers and 6 study coordinators) and 32 case workers took place over a period of three weeks in March 2022. Team leaders provided leadership to teams of interviewers in the field; study coordinators played a coordination role largely entailing community entry, while case workers provided counselling and referral services to study participants who needed such services. Female interviewers were assigned interviews in female zones while male interviewers conducted interviews solely in male zones. Research assistants consisted of both refugees and individuals from host communities.

The survey tool was programmed using the Open Data Kit (ODK) software and interview responses recorded electronically. In this paper, we considered questions on demographics (age sex and marital status), socioeconomic status (educational attainment and work status in the past one year), orphanhood, country of origin, experiences of childhood physical, sexual, and emotional violence and mental health (severe mental distress, suicidal ideation and/or attempted suicide, and self-harm). Interviews were conducted in one of the following languages: English, Kinyawisha, Kiswahili, Acholi, and Juba Arabic.

2.4. Sample size and sampling

The survey targeted 1993 completed interviews with females and 1148 completed interviews with males aged 13–24 years from 8646 households. Sample size calculations took into account a higher non-response rate (30%) than typically observed for VACS in non-humanitarian settings (5%–10%) given the high levels of mobility among households in refugee settings (MGLSD, 2018). Like standard VACS, the HVACS employed a three-stage cluster sampling design to identify and recruit females and males aged 13–24 years for individual interviews. The first stage entailed a random selection of fifty-six zones.
Experiences of childhood violence: To capture experiences of childhood sexual, physical, or emotional violence, we used questions posed to individuals aged 13–17 years regarding whether they had ‘ever experienced’ any of these forms of violence as well as questions pertaining to experiences of violence ‘before the age of 18’ for youth aged 18–24 years.

Sexual violence was measured from responses to the question: ‘Has anyone ever touched you in a sexual way against your will (touching without permission)?’, ‘Has anyone tried to make you have sex against your will (attempted forced sex)?’, ‘Has anyone physically forced you to have sex against your will (physically forced)?’, and ‘Has anyone pressured you to have sex (pressured into sex)?’ Participants who reported ‘yes’ to any of these questions were categorized as having experienced sexual violence.

Physical violence was measured from affirmative responses to any of these questions: ‘Has anyone ever slapped, pushed, shoved, shoked you?’, ‘Has anyone ever punched, kicked, whipped or beat you with an object?’, ‘Has anyone ever choked, smothered, threatened to drown you or burn you intentionally?’ and ‘Has anyone ever used or threatened you with a knife/gun or other weapon?’.

Participants who reported ‘yes’ to any of these questions were categorized as having experienced physical violence.

Emotional violence was measured from responses to questions: ‘Has anyone ever told you that you were not loved, or did not deserve to be loved?’, ‘Has anyone ever wished you had never been born or were dead?’, ‘Has anyone ever excluded you from their group of friends, or completely ignored you?’.

Mental health: Mental health was assessed based on three measures: severe mental distress, suicidal ideation and/or attempted suicide and self-harm.

Severe mental distress: We generated a mental distress variable using six questions from the Kessler Psychological Distress Scale (K6) (Andrews & Slade, 2001): “During the past 30 days, how often did you feel the following ways, whether all the time, most of the time, some of the time, a little of the time, or none of the time? A) Nervous? B) Hopeless? C) Restless? D) So sad that nothing could cheer you up? E) That everything was an effort? F) Worthless?”.

Responses to each of these
six questions for any individual were scored between 0 (for none of the time) and 4 (for all of the time) and summed for a total possible score of between 0 and 24 points. The resulting scores were then categorized into ‘none or less severe mental distress’ for scores of less than 13, and ‘severe mental distress’ for scores of 13 points or higher (Prochaska et al., 2012).

**Suicidal ideation and/or attempted suicide:** We computed a suicidal ideation and/or attempted suicide variable using two questions: ‘Have you ever thought about killing yourself?’ and ‘Have you ever tried to kill yourself?’. Participants who answered in the affirmative to either question were categorized as having had suicidal ideation and/or as having attempted suicide.

**Self-harm:** This was based on the question that asked participants if they had ever intentionally hurt themselves in any way. Those who answered ‘yes’ to this question were categorized as experiencing self-harm.

### 2.6 Analysis

The analysis involved generating descriptive statistics (frequencies and percentages) to show the distributions of study participants by selected background characteristics for females and males; bivariate chi-square tests to compare mental health (severe mental distress, suicidal ideation and/or attempted suicide, self-harm) by experience of childhood violence (sexual, physical, emotional and any violence); and, estimation of a multivariable logistic regression model to identify the magnitude and direction of association between experiencing childhood violence and mental health adjusting for individual characteristics (age, educational attainment, marital status, orphanhood, ever work for payment in the past one year and country of origin). The results are presented as adjusted odds ratios (aOR) with 95% confidence intervals (CI), and all estimates with \( p < 0.05 \) were considered to reflect statistically significant associations between the variables of interest and mental health. We conducted sensitivity analyses (see Table A1) to check the robustness of the correlation results found in aORs analysis (Ozler et al., 2020; Zhang et al., 2019), by combining the different measures of violence (sexual, physical, and emotional) into a single measure (index): anyone who had ever experienced either childhood sexual, physical, or emotional violence was categorized as having experienced childhood violence (coded 1), while those who did not experience any form of childhood violence were coded 0. Results (Table A1) indicate few discrepancies between the main analysis and the sensitivity analysis – showing same direction of correlation, although with different magnitude of the coefficients.

We conducted a weighted analysis to account for the complex survey structure and derived representative estimates using the svy command in STATA. Data were analyzed using STATA Version 15.1 (Stata Corp., College Station, TX).

### 2.7 Ethical considerations

The study was approved by the Population Council Institutional Review Board (Protocol 986), Mildmay Uganda Research Ethics Committee (MUREC) (Reference Number REC REF 0310-2021) and Uganda National Council of Science and Technology (UNCST) (Reference Number SS11308S). All study participants provided verbal informed consent and assent (for children younger than 18 years) to participate in the study and key ethical principles including confidentiality, anonymity and referral signposting were adhered to. All respondents were informed about the risks and benefits of the study as well as the need for voluntary participation.

### 3. Results

#### 3.1 Background characteristics

Table 1 shows the distribution of participants in the study by selected background characteristics. There were significant differences observed between females and males in terms of educational achievement, marital status and working for pay in the past 12 months. Significantly more males than females had not completed primary education (41.5% vs 32.8%) and worked for money or other payments in the past 12 months (47.2% vs 30.7%). More females than males indicated that they had ever been married or lived with a partner (22.3% vs 9.5%). More than a third of respondents, both females and males, had lost one or both parents and about two-third originated from South Sudan.

<table>
<thead>
<tr>
<th>Background characteristics</th>
<th>Females Unweighted n</th>
<th>Weighted % [95% CI]</th>
<th>Males Unweighted n</th>
<th>Weighted % [95% CI]</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-17</td>
<td>716</td>
<td>51.4 [47.2-55.6]</td>
<td>532</td>
<td>48.5 [44.5-52.5]</td>
<td>0.319</td>
</tr>
<tr>
<td>18-24</td>
<td>622</td>
<td>48.6 [44.4-52.8]</td>
<td>395</td>
<td>51.5 [47.5-55.5]</td>
<td></td>
</tr>
<tr>
<td><strong>Education status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary incomplete or less</td>
<td>914</td>
<td>67.2 [63.2-71.1]</td>
<td>600</td>
<td>58.5 [54.5-62.4]</td>
<td>0.006</td>
</tr>
<tr>
<td>Primary completed or higher</td>
<td>424</td>
<td>32.8 [28.9-36.8]</td>
<td>327</td>
<td>41.5 [37.6-45.5]</td>
<td></td>
</tr>
<tr>
<td><strong>Ever married or lived with a partner</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>994</td>
<td>77.7 [73.4-81.4]</td>
<td>826</td>
<td>90.5 [84.9-94.2]</td>
<td>0.003</td>
</tr>
<tr>
<td>Yes</td>
<td>338</td>
<td>22.3 [18.6-26.6]</td>
<td>89</td>
<td>9.5 [5.8-15.1]</td>
<td></td>
</tr>
<tr>
<td><strong>Worked for money or other payment in the past 12 months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>915</td>
<td>69.3 [63.4-74.6]</td>
<td>537</td>
<td>52.8 [40.8-64.5]</td>
<td>0.013</td>
</tr>
<tr>
<td>Yes</td>
<td>423</td>
<td>30.7 [25.4-36.6]</td>
<td>390</td>
<td>47.2 [35.5-59.2]</td>
<td></td>
</tr>
<tr>
<td><strong>Orphanhood status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.912</td>
</tr>
<tr>
<td>Not an orphan</td>
<td>733</td>
<td>56.7 [51.0-62.3]</td>
<td>518</td>
<td>57.4 [49.8-64.7]</td>
<td></td>
</tr>
<tr>
<td>Lost one parent</td>
<td>368</td>
<td>26.8 [24.9-32.5]</td>
<td>255</td>
<td>28.1 [22.6-34.2]</td>
<td></td>
</tr>
<tr>
<td>Lost both parents</td>
<td>307</td>
<td>7.7 [6.6-9.0]</td>
<td>99</td>
<td>8.4 [5.4-12.9]</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>99</td>
<td>7.0 [5.9-12.2]</td>
<td>55</td>
<td>6.1 [3.2-11.2]</td>
<td></td>
</tr>
<tr>
<td><strong>Country of origin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.889</td>
</tr>
<tr>
<td>South Sudan</td>
<td>658</td>
<td>66.0 [40.9-84.5]</td>
<td>458</td>
<td>66.9 [43.1-84.3]</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>74</td>
<td>5.7 [1.3-21.8]</td>
<td>51</td>
<td>8.1 [2.5-23.0]</td>
<td></td>
</tr>
<tr>
<td><strong>Total (N)</strong></td>
<td>1338</td>
<td>100.0</td>
<td>927</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: DRC – Democratic Republic of Congo.

* Estimates with a Relative Standard Error (RSE) greater than 30% were considered moderately unreliable.
3.2. Experience of childhood violence and mental health

Table 2 shows the prevalence of childhood violence (sexual, physical, and emotional) and mental health (severe mental distress, suicidal ideation and/or attempted suicide, and self-harm). There were no statistically significant differences between females and males experiencing severe mental distress, suicidal ideation and/or attempted suicide, or self-harm. There were statistically significant differences in the proportions of females and males experiencing sexual violence (13.9% vs 9.9%), physical violence (26.3% vs 48.6%), emotional violence (18.1% vs 25.3%), or any form of violence (40.8% vs 55.6%). A family member, neighbor or friend constituted the highest proportion of perpetrators for the first incident of sexual violence among males (63.0%) compared to only 20.7% among females. A current or previous intimate partner was the highest reported perpetrator of the first incident of sexual violence among females (29.7%) compared to only 23.3% among males. Peer or friend was reported as the highest perpetrator of recent incident of sexual violence for both females (24.6%) and males (45.8%) while parent, adult caregiver or relative was the highest reported perpetrator for the recent incident of emotional violence among both females (17.2%) and males (23.5%).

3.3. Association between experience of childhood violence and mental health

Table 3 presents the prevalence of severe mental distress, suicidal ideation and/or attempted suicide, and self-harm by experience of childhood violence for females and males. Among females, the proportion reporting severe mental distress was significantly higher among those who experienced childhood sexual violence compared to those with no such experience (67.8% vs 41.6%). The proportion of females reporting suicidal ideation and/or attempted suicide was significantly higher among those who had experienced childhood sexual violence (17.9% vs 4.1%), physical violence (9.5% vs 4.7%) or emotional violence (13.1% vs 4.4%) compared to those who had not experienced such violence. The proportion of females reporting self-harm was also significantly higher among those who had experienced childhood sexual (12.6% vs 4.1%) or emotional (12.8% vs 3.6%) violence compared to peers who had not.

Among males, the proportion reporting suicidal ideation and/or attempted suicide was significantly higher among those who had experienced childhood sexual violence (20.6% vs 4.8%) or emotional violence (17.9% vs 2.4%) compared to those who had not experienced such violence. The results indicate that more females than males who experienced sexual, physical, or emotional violence were associated with suicidal ideation and/or attempted suicide.

Table 4 presents the odds of reporting severe mental distress, suicidal ideation and/or attempted suicide and self-harm among females and males by experience of childhood sexual, physical, and emotional violence, controlling for background characteristics (age, education, marital status, orphanhood status, working for pay in the past year and country of origin). Among females, experiencing sexual violence was associated with higher odds of reporting severe mental distress (aOR = 1.989; CI = 1.216–3.255), suicidal ideation and/or attempted suicide (aOR = 4.119; CI = 2.157–7.864), and self-harm (aOR = 3.734; CI = 1.619–8.609) compared to those who did not experience such violence. Females who experienced childhood physical violence had higher odds of reporting suicidal ideation and/or attempted suicide (aOR = 2.377; CI = 1.420–3.979), and females who experienced childhood emotional violence had higher odds of reporting suicidal ideation and/or attempted suicide (aOR = 3.633; CI = 1.929–6.942) and self-harm (aOR = 4.972; CI = 1.898–10.072) when compared to peers who had not experienced such violence.

Among males, those who experienced emotional violence in childhood had higher odds of reporting suicidal ideation and/or attempted suicide (aOR = 9.233; CI = 2.293–37.177) or severe mental distress (aOR = 2.823; CI = 1.115–7.148) compared to those who did not experience such violence.

4. Discussion

The findings in this paper point to significant differences between females and males by socio-economic background factors (educational achievement, marital status and working for pay in the past 12 months). These results indicate that females in refugee settlements in Uganda may...
Emotional violence may also be under-reported due to two reasons: factors such as shame, guilt, stigma, threats from perpetrators, fear of being disowned by family or community, complicit caregivers, and ineffective (patriarchal, sociocultural) systems. These may include challenges such as obtaining decent accommodation, education, food, employment, medical care, as well as the long duration of stay in humanitarian settings. These challenges may include emotional violence may precede other forms of violence (Palmer, Keilholtz, Vail, & Spencer, 2024; Shorey, Brasfield, Febres, & Stuart, 2011).

The prevalence of mental distress is relatively high for both female and males. Previous research has shown that a high prevalence of poor mental health outcomes among refugees is likely due to the effects of forced migration, and post-migration stresses related to settling in a new environment. These may include challenges such as obtaining decent accommodation, education, food, employment, medical care, as well as the long duration of stay in humanitarian settings (Dangmann, Dybdahl, & Solberg, 2022; Ermansons, Kienzler, Asif, & Schofield, 2023; Grasser, 2022). Mental distress in humanitarian settings could be due to missing out on parental and family support systems – often disrupted due to forced migration – that are important in providing protection (Olanrewaju, Jeffery, Crossland, & Valadez, 2015).

For both females and males, the findings show statistically significant associations between experiences of childhood violence and reports of severe mental distress, suicidal ideation and/or attempted suicide, and self-harm, with adverse mental health more frequently reported for the different forms of violence among females. The findings are consistent with those from studies in non-humanitarian settings and imply that violence has profound negative mental health consequences for children.

### Table 3

<table>
<thead>
<tr>
<th>Childhood Violence</th>
<th>Females (N = 1338)</th>
<th></th>
<th>Males (N = 927)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted n</td>
<td>Weighted % [95% CI]</td>
<td>p-value</td>
<td>Unweighted n</td>
</tr>
<tr>
<td>Sexual violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>544</td>
<td>41.6 [34.9-48.7]</td>
<td>0.001</td>
<td>337</td>
</tr>
<tr>
<td>Ever experienced</td>
<td>118</td>
<td>67.8 [53.0-79.7]</td>
<td>0.179</td>
<td>37</td>
</tr>
<tr>
<td>Physical violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>456</td>
<td>43.3 [35.1-51.8]</td>
<td></td>
<td>217</td>
</tr>
<tr>
<td>Ever experienced</td>
<td>206</td>
<td>50.8 [38.3-63.2]</td>
<td></td>
<td>157</td>
</tr>
<tr>
<td>Emotional violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>521</td>
<td>43.7 [35.8-51.9]</td>
<td>0.302</td>
<td>273</td>
</tr>
<tr>
<td>Ever experienced</td>
<td>141</td>
<td>52.2 [34.8-69.1]</td>
<td>0.021</td>
<td>101</td>
</tr>
<tr>
<td>Any violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>358</td>
<td>40.7 [34.3-47.6]</td>
<td>0.262</td>
<td>184</td>
</tr>
<tr>
<td>Ever experienced</td>
<td>304</td>
<td>51.8 [40.6-63.4]</td>
<td>0.001</td>
<td>190</td>
</tr>
</tbody>
</table>

**Note:** Estimates with a Relative Standard Error (RSE) greater than 30% were considered moderately unreliable.

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be systematically disadvantaged in education and earning. Our findings are in line with results reported elsewhere on low economic conditions and educational attainment among young refugee women (Ivanova, Rai, & Kemigisha, 2018; Mourtada, Schlecht, & Kemigisha, 2022). Mental distress in humanitarian settings could be due to missing out on parental and family support systems – often disrupted due to forced migration – that are important in providing protection (Olanrewaju, Jeffery, Crossland, & Valadez, 2015).

The findings further reveal the gendered nature of violence. Physical and emotional violence were more prevalent among males and sexual violence more prevalent among females. Girls may be more vulnerable to sexual violence compared to boys in humanitarian setting owing to socioeconomic inequalities (Wado et al., 2021), power dynamics in decision-making, and socio-cultural norms such as those that assume male dominance over women (Barbara et al., 2022). Sexual violence against male adolescents is also a major concern in refugee settlements in Uganda – about 10% of the males indicated experiencing childhood sexual violence. A tendency to under-report sexual violence among males is expected and may be due to shame, guilt, stigma, threats from perpetrators, fear of being disowned by family or community, complicit caregivers, collusive and ineffective (patriarchal, sociocultural) systems with limited intention, capacity to protect children from violence and limited rehabilitative mechanisms for violence survivors (Araujo et al., 2019; Clarke et al., 2016; Goessmann, Ssenyonga, Nkuba, Heremans, & Hecker, 2020; Katzenstein & Fontes, 2017; Meinick, Cluer, Boyes, & Mthongo, 2015; Vu et al., 2014; Zinnow, Littleton, Muscari, & Sall, 2022). Emotional violence may also be under-reported due to two reasons: children may not express themselves well emotionally in patriarchal contexts where they are meant to be seen but not heard. They may lack the knowledge to understand that they were victimized and fear negative reactions to disclosure from family and others (Fray et al., 2019; Ochen et al., 2022). Moreover, there is a complexity in dealing with emotional violence in terms of identification, tracking, validation, and measurement – since some emotions are socially constructed and the likelihood that emotional violence may precede other forms of violence (Palmer, Keilholtz, Vail, & Spencer, 2024; Shorey, Brasfield, Febres, & Stuart, 2011).

The prevalence of mental distress is relatively high for both female and males. Previous research has shown that a high prevalence of poor mental health outcomes among refugees is likely due to the effects of forced migration, and post-migration stresses related to settling in a new environment. These may include challenges such as obtaining decent accommodation, education, food, employment, medical care, as well as the long duration of stay in humanitarian settings (Dangmann, Dybdahl, & Solberg, 2022; Ermansons, Kienzler, Asif, & Schofield, 2023; Grasser, 2022). Mental distress in humanitarian settings could be due to missing out on parental and family support systems – often disrupted due to forced migration – that are important in providing protection (Olanrewaju, Jeffery, Crossland, & Valadez, 2015).

For both females and males, the findings show statistically significant associations between experiences of childhood violence and reports of severe mental distress, suicidal ideation and/or attempted suicide, and self-harm, with adverse mental health more frequently reported for the different forms of violence among females. The findings are consistent with those from studies in non-humanitarian settings and imply that violence has profound negative mental health consequences for children.
and youth. The findings suggest a need to integrate screening for mental health problems among refugee children into humanitarian response programs to identify and adequately respond to those in need of mental health services because of exposure to childhood violence or due to the disruption of protective social structures.

Another major finding of the paper is the gendered nature of the negative result of childhood violence on mental health. For females, experiencing any form of childhood violence (sexual, physical, or emotional) was significantly associated with higher odds of reporting poor mental health; while for males, experiencing childhood emotional violence was the only form of violence that was significantly associated with higher odds of reporting poor mental health. Higher vulnerabilities among female children experiencing violence have been previously reported, albeit in non-humanitarian settings (MGLSD, 2018). The higher proportions of females reporting poor mental health, even while females were less likely than males to experience any form of violence except sexual violence, suggests that sexual violence specifically, results in more adverse mental health outcomes. Prevention and response programs should include screening of children in these settings for exposure to particularly sexual violence and linking them to mental health services (Bartlett & Smith, 2019).

We caution against estimates from the 2022 HVACS being directly compared to the 2015 Uganda VACS study, for three main reasons. First, both studies use different sampling methodologies: the 2015 Uganda VACS sampling frame was based on the 2014 Uganda Population and Housing Census while the 2022 HVACS used refugee population as of 2022 as provided by UNCHR-Uganda and the Department of Refugees under the OPM. Second, the two surveys (2015 Uganda VACS and 2022 HVACS) were conducted seven years apart and differences in violence prevalence could be due to temporal variations, possibly influenced by whether interventions to address VAC were carried out during this period. Third, it is important to note that the two surveys collect data on distinct populations, that is Ugandans (2015 VACS) and refugees from several countries as detailed in Table 1 (2022 HVACS).

Given that experiences of childhood violence was associated with poor mental health outcomes, it is important to embed an interdisciplinary and intersectoral approach, drawing on success stories of the collaborative mental health care (CMHC) model elsewhere (Versteeg et al., 2024), which incorporates mental health experts or specialists in refugee settings to help in the identification, diagnosis, and management of mental health problems (Bean, Eurelings-Bontekoe, Mooijaart, & Spinhoven, 2006). The heightened risk to violence in humanitarian settings (Meyer, Hermosilla, & Stark, 2017 calls for prioritising screening and treatment of poor mental health outcomes among refugee children (Gadeberg, Montgomery, Frederiksen, & Norredam, 2017). The results reported in this study call for alternative approaches that mostly target children in school, including counselling, peer education, that can be employed to manage violence, particularly sexual violence, and poor mental health outcomes among refugee children (Fazel & Betancourt, 2018; Henley & Robinson, 2011; Hjern & Angel, 2000; Miller & Rasmussen, 2017).

5. Limitations

Some notable limitations exist. Survey questions explore experiences of violence that occurred in the past, and therefore recall bias may affect the validity of responses. It is also likely that sexual violence was under-reported due to stigma associated with it. Emotional violence may also be under-reported due an inability of children to express themselves entirely, or due to socialization as to the acceptability of some forms of emotional violence in these communities. This study also considered a limited number of mental health disorders, yet the effects of violence may manifest in other forms of mental health not measured in the survey. Lastly, due to the cross-sectional nature of the survey, causality cannot be
inferred from the data.

6. Conclusions

Experiences of violence, particularly in populations with heightened vulnerability, have the potential to exacerbate poor mental health. The findings of this paper underscore the need to strengthen child protection efforts to ensure that they are robust and able to effectively identify, mitigate, and respond to the complex nature of violence among refugee children and youth. Gendered, culturally conscious, and age-appropriate strategies and interventions, as well as awareness creation about childhood experiences of violence with children and youth, caregivers, service providers, leaders, and the wider community, may present the earliest avenues for success.

Data availability

Data are available on reasonable request.

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Consent for publication

Not applicable.

CRediT authorship contribution statement

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Declaration of competing interest

None.

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Appendix A. Sensitivity Analysis

Table A1

Adjusted odds ratios for mental health by experiences of childhood violence among females and males ages 13–24 years

<table>
<thead>
<tr>
<th>Childhood Violence</th>
<th>Females</th>
<th>Males</th>
<th>p-value</th>
<th>Females</th>
<th>Males</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe mental distress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced childhood violence</td>
<td>1.432 [1.091–1.881]</td>
<td>0.013</td>
<td>1.307 [0.727–2.349]</td>
<td>0.346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal ideation and/or attempted suicide</td>
<td></td>
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<tr>
<td>Self-harm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced childhood violence</td>
<td>2.484 [1.126–5.478]</td>
<td>0.027</td>
<td>1.377 [0.409–4.629]</td>
<td>0.582</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The reference category is never experienced.

References


