Disability, childhood experiences of violence and associated health outcomes in refugee settlements in Uganda

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ABSTRACT

Background: There is limited evidence regarding the associations between disability, childhood experiences of violence, and associated health outcomes in humanitarian settings.

Objective: We examined the prevalence of childhood sexual, physical, and emotional violence by disability status, explored associations between childhood violence and type of disability (limitation), perpetrator types, and the negative health outcomes associated with experiencing childhood violence by disability status.

Participant and Setting: Participants included 1338 females and 927 males aged 13–24 years living in refugee settings in Uganda.

Methods: Data were from a cross-sectional Humanitarian Violence against Children and Youth Survey (HVACS) conducted between March and April 2022 in Uganda. Analysis entailed cross-tabulation with a chi-square test and estimation of bivariate and multivariate logistic regression models.

Results: For both females and males, the prevalence of sexual violence in childhood was higher among those with disabilities compared to those without disabilities (23.2% vs. 11.5% for females; and 15.7% vs. 7.6% for males). The odds of experiencing sexual violence were higher among females with physical limitations (self-care [AOR:2.1; 95%CI-1.0-4.3] and task performance [AOR:2.5; 95%CI = 1.3–5.2]) and males with both physical [AOR:4.4; 95%CI = 1.4–13.7] and communication [AOR:4.1; 95%CI = 1.3–12.9] limitations compared to those without such limitations. Experiencing violence and having disabilities increased the odds of reporting negative health outcomes including severe mental distress and symptoms or being diagnosed with STI among females by three times.

Conclusion: In Uganda’s refugee settings, the prevalence of childhood violence is higher among children and youth with disabilities compared to those without disabilities. Females with disabilities and who had experienced childhood violence were considerably more susceptible to negative health outcomes. These findings underscore the need for targeted child protection and response interventions to address the vulnerabilities of children and youth, and particularly for those with disabilities and female children.

1. Background

Persons with disabilities (PWDs) include those who have long-term physical, mental, intellectual and/or sensory impairments that, along with other barriers, affect their full and effective participation in society on an equal basis with others (UN Department of Economic Affairs, 2008). Various social and environmental factors often serve to further exclude PWDs, for example, where discriminatory barriers such as rejection by others, or a lack of accessibility to buildings and facilities is occurring (Rohwerder, 2017). About 1.3 billion people, accounting for 16% of the global population – 80% of whom live in low and middle-income countries (LMICs) with a large majority of them (80%) living in extreme poverty – are PWDs (World Health Organization, 2011). It is also estimated that globally, more women (19%) than men (12%) have a disability (World Health Organization, 2011).

Estimates of the prevalence of developmental disabilities among...
children and youth living in LMICs are very limited and therefore poorly understood (Damiano & Forssberg, 2019). The multidimensional nature of disability, co-occurrence of conditions, extensive heterogeneity in criteria and methods used to estimate the prevalence of developmental disabilities across studies, and the limitations in geographical coverage, all contribute to this obscurity (World Health Organization and the United Nations Children’s Fund, 2023). Even then, the number of children with disabilities globally is estimated to be around 240 million (United Nations, 2021), and while there are no official statistics on the global prevalence of PWDs in humanitarian settings, it is postulated that the prevalence in such contexts could be higher than in development settings. Children and youth with developmental disabilities, many of whom live in resource-limited, low-income, or humanitarian settings, may similarly experience various barriers and contextual factors that together hinder their full and effective participation in society on an equal basis with others (Cavallera, Nasir, & Munir, 2020; United Nations Children’s Fund, 2021; World Health Organization and the United Nations Children’s Fund, 2023). Due to their disabilities, they are likely to disproportionately lack access to basic services and facilities, including health care, assistive devices, and accessible transportation, and face greater difficulties than other children in removing themselves from harm or in coping with the impact of a humanitarian crisis when compared to those without disabilities (Irish Consortium on Gender Based Violence & CBM Ireland, 2020). They are also likely to experience stigmatization, prejudice, institutionalization, abuse, and social, economic, educational or other forms of exclusion (World Health Organization and the United Nations Children’s Fund, 2023). Yet, equal participation and the health and well-being of children and youth with developmental disabilities, have been promoted internationally as a rights issue by the United Nations Convention on the Rights of the Child (UNCRC) (United Nations, 1989), and United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), reaffirming that all persons with all types of disabilities must enjoy all human rights and fundamental freedoms (United Nations, 2006).

Global estimates show that approximately one billion children younger than 18 years experienced either physical, emotional, or sexual past-year violence (Hills, Mercy, Amobi, & Kress, 2016). Evidence shows that PWDs are 4–10 times more likely to experience violence compared to their peers without disabilities (World Health Organization, 2011). A systematic review of the prevalence and risk of violence against children with disabilities found that children with disabilities are 3–4 times more likely to experience all forms of violence, or 3 times more likely to experience sexual violence compared to their counterparts without disabilities (Jones et al., 2012). However, evidence on the relationship between disability and childhood violence in humanitarian settings is scarce owing to the lack of well-designed research studies and standardized measurement of disability and violence amongst other factors (Jones et al., 2012). It is presumed that incidents of violence may be prevalent in humanitarian situations and higher among children with disabilities due to marginalization and broken social and protective networks (Pearce, Paik, & Robles, 2016). Recent global discourse has bolstered interest in generating reliable and internationally comparable data on children with disabilities, with renewed efforts to fill data gaps for those living in humanitarian settings (United Nations Children’s Fund, 2021). Several global agencies have further called for the development of monitoring and evaluation frameworks to track efforts in the improvement of health outcomes including the consideration of children and youth with developmental disabilities who have experienced sexual or any other violence, and use of this data to inform policies, services, and advocacy (World Health Organization and the United Nations Children’s Fund, 2023).

Studies exploring gendered differences in the experiences of violence among PWDs are limited (Namatovu, Preet, & Goicolea, 2018; World Bank, 2019), and more so among children with disabilities, particularly those living in humanitarian settings. Reviews of the scant evidence on experiences of gender-based violence (GBV) among adolescent girls in humanitarian settings found that they were at a higher risk for violence owing to the intersectionality of age and gender, additional risk factors relevant to emergencies, gaps in access to humanitarian GBV or child protection assistance, and barriers to effective evaluation of promising programmes and existing approaches to reduce GBV incidence for this population (Pearce et al., 2016; Stark, Seff, & Reis, 2021). The situation may be worse for adolescent girls with disabilities living in humanitarian settings. Taken together, while evidence has shown that PWDs are particularly vulnerable to violence, there are intersections between violence and gender for this population, and experiences of violence for PWDs may differ for males and females by type of disability (Ozemela, Ortiz, & Urban, 2019; World Bank, 2019). Women with disabilities, for instance, experience up to 10 times more violence than those without disabilities, and they also face higher risk of violence compared to men with disabilities (Ozemela et al., 2019; World Bank, 2019). Research has shown a high burden of sexual violence among women with disabilities compared to their counterparts without disabilities in urban African contexts (De Beauvrap et al., 2022). Men with physical disabilities report higher risks of physical and psychological violence compared to those without disabilities (Namatovu et al., 2018). In addition, individuals with intellectual or psychological disability are more likely to experience violence than their peers with a physical disability (Australian Bureau of Statistics, 2021; Jones et al., 2012).

Research also confirms that PWDs are more vulnerable to multiple forms of violence from multiple perpetrators, including intimate partners, family members, and other members of their communities (Cramer, Plummer, & Ross, 2019; Namatovu et al., 2018). More women than men with disabilities are likely to report violence perpetrated by an intimate partner compared to those without disabilities (Anyango, Goicolea, & Namatovu, 2023; Cramer et al., 2019; Hughes et al., 2019; Namatovu et al., 2018).

Violence, in its various forms, can affect the health of individuals both biologically (brain, immune response) and cognitively (depression, anxiety, suicide ideation), and these health consequences may vary by various factors such as age, sex, and form of violence experienced (Rivara et al., 2019). For instance, children and persons with developmental disabilities experiencing violence have lower levels of psychological and physical health (Hughes et al., 2019). Similarly, disability has been associated with higher scores for depression and anxiety among women who have experienced GBV and who are living in humanitarian settings (Hossain et al., 2020).

Against the backdrop of limited research on the linkage between disability and childhood violence in humanitarian settings, and the poorly understood health consequences, we examined the prevalence of childhood sexual, physical, and emotional violence by disability status among females and males aged 13–24 years with and without disabilities in refugee settings in Uganda. We also explored the associations between exposure to violence, disability, and health outcomes, in order to inform inclusive GBV prevention and response strategies and programming in humanitarian settings.

2. Methods

2.1. Study design and sample

We used data from the first-ever Violence Against Children and Youth Survey (VACS) conducted in a humanitarian setting in Uganda, hereafter referred to as the Uganda HVACS. Typically, VACS are nationally representative, multistage, cross-sectional household surveys of children and youth aged 13–24 implemented by national governments with technical assistance from the U.S. Centers for Disease Control and Prevention as part of the Together for Girls partnership to end violence against children (Chiang et al., 2016). These surveys have documented the prevalence, nature, and consequences of sexual, physical, and
emotional violence against children and youth in more than twenty LMICs, with a view to informing national prevention and response programming (Nace, Maternowska, Fernandez, & Cravero, 2022).

The Uganda HVACS was a representative, multi-stage, cross-sectional household survey of children and youth aged 13–24 years in all 13 refugee settlements in Uganda, namely, Adjumani, Bidibidi, Imvepi, Kryandongo, Kyaka II, Kyangwali, Lobule, Nakivale, Oruchinga, Palabek, Palorinya, Rhino, and Rwamwanja. The survey excluded urban refugees living in Kampala and other urban areas since they do not live in settlements, and as such, may be uniquely different from those in the settlements, as well as more difficult to trace.

### 2.2. Sampling

As with the standard VACS, a three-stage cluster and split sampling design was used. In the first and primary sampling stage, 56 zones (28 for female and 28 for male interviews) were randomly sampled from a list of 109 zones covering all 13 refugee settlements. These lists were provided by the United Nations High Commissioner for Refugees (UNHCR) and the Department of Refugees in the Office of the Prime Minister (OPM), organisations responsible for the enumeration of refugees in Uganda. The split sampling design was applied to ensure that in each settlement, zones sampled for female interviews were distinct from those sampled for male interviews. This approach safeguards participant confidentiality and eliminates the possibility of both a perpetrator and a survivor from the same community being interviewed (Chiang et al., 2016). In the second sampling stage, a fixed number of households (193 for female zones and 134 for male zones) was randomly sampled from each of the selected zones. In the third stage, one eligible 13–24-year-old participant was randomly selected from each sampled household to participate in the survey. To be included, respondents also had to speak one of the study languages (English, Kiswahili, Kinyabwisha, Acholi or Juba Arabic); not be pregnant; and, physically forced sex, perpetrated by any person.

Physical violence included having experienced one or more incidents of slapping, pushing, shoving, shaming, or of having something thrown at the respondent to intentionally hurt them; punching, kicking, whipping, or being beaten with an object; choking, smothering, trying to drown them, or burning them intentionally; and, using or threatening them with a knife, gun or other weapon, perpetrated by an intimate partner, peer, parent or adult caregiver or other adult relative, and/or other adults in the community.

Emotional violence included having experienced one or more incidents of being told that they were not loved or did not deserve to be loved; being told that they should never have been born or should have died; and, being ridiculed or put down, for example, being told that they were stupid or useless, perpetrated by a parent or adult caregiver or other adult relative, an intimate partner, or peer.

**Disability:** Disability was assessed based on the Washington Group Short Set on Functioning (WG-SS) questions, which are designed to determine whether people have difficulty performing basic activities such as seeing, hearing [which was excluded from the Uganda HVACS], walking, cognition, self-care, and communication (Washington Group on Disability Statistics, 2020). The disability data collected allow for the estimation of the prevalence of different types of disability, and the multiplicity of types of disability through simple, brief, universal, and comparable questions. The construct of disability should be identified on a continuum from enablement to disablement; however, for the purposes of our analyses, and our consideration of the likelihood that any extent of disablement may have profound consequences for PWDs living in refugee settlements, the sub-population ‘with disabilities’ includes everyone with at least one domain that is coded as having ‘some difficulty’, ‘a lot of difficulty’, and/or ‘or cannot do it at all’.

**Health Outcomes:** We explored the association between experience of childhood violence, disability, and health outcomes (severe mental distress and reporting symptoms of being diagnosed with sexually transmitted infection [STI]). Mental distress was assessed based on the Kessler Psychological Distress Scale (K6), which consists of six questions – feeling nervous, hopeless, restless, so sad that nothing could cheer them up, that everything was an effort, worthless – that determine a person’s general emotional state in the past 30 days (Kessler et al., 2003). Responses to each of the questions for an individual are 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. The data were categorized into ‘none or less severe mental distress’ for scores of less than 12, and ‘severe mental distress’ for scores of 13 points or higher.

We examined self-reports of having tested positive for an STI or disease (syphilis, gonorrhoea, chlamydia, herpes, other infections besides HIV) and/or of having symptoms (unusual discharge or oozing from vagina/penis, unexplained sores or bumps on vagina/penis, pain when
urinating, and other pain) when they thought they might have an STI or disease.

2.5. Analysis

The analysis sample is based on data from 2217 respondents (1311 females and 906 males) aged 13–24 years who answered disability questions, excluding those who declined or did not state their disability status (n = 48). The analysis involved 1) descriptive statistics (frequency and percentage distribution); 2) cross-tabulation with Chi-square tests to examine the prevalence of exposure to childhood violence (sexual, physical, emotional) by disability status; and 3) bivariate and multivariate logistic regression models to examine the association between exposure to violence before age 18, disability, and health outcomes (severe mental distress and reporting symptoms or being diagnosed with an STI). We conducted subgroup analyses to examine whether associations between the occurrence of childhood violence and disability varied according to the nature of the limitation(s), that is, visual, cognitive, mobility, self-care, physical task performance, and communication. In the multivariate logistic regression model, we adjusted for the effects of socio-demographic factors including age, level of education, marital status (ever been married or lived with a partner as if married), employment (worked for money or other payment in the past 12 months), and country of origin. We considered a p-value <0.05 as indicative of statistically significant associations with 95% confidence intervals. All analyses were performed using Stata® version 15.1, accounting for the complex survey design by applying weights to the estimates.

2.6. Ethical considerations

The Uganda HVACS was approved by the Population Council Institutional Review Board (Protocol 986 dated 21 October 2021) and the Mildmay Uganda Research Ethics Committee (MUREC), REF 0310–2021 dated 24 November 2021. The research was also granted regulatory approval by the Uganda National Council for Science and Technology (UNCST) – REF SS1130ES dated 10 January 2022. All participants provided verbal consent or assent to participate in the research and this process was electronically recorded on the ODK platform.

3. Results

3.1. Socio-demographic characteristics by disability status

There were no major socio-demographic differences in females and males without disabilities when compared to those with disabilities (Table 1). Considering all categories of participants – females and males with and without disabilities – majority of the participants (between 72.4% and 82.6%) had completed primary or lower levels of education, between 30.6% and 50.3% reported having worked for money or other payments in the past 12 months, and between 20.8% and 27.5% of females and 7.8% and 13.2% of males indicated that they had ever been married or lived with a partner. Most of the participants were nationals of South Sudan, followed by the Democratic Republic of Congo (DRC), and other countries including Rwanda, Burundi, Somalia, Ethiopia, Eritrea, and Sudan. There was no significant difference between females and males by disability status.

### Table 1

Socio-demographic characteristics by disability status for females and males – Uganda HVACS 2022.

<table>
<thead>
<tr>
<th></th>
<th>Females Without disabilities</th>
<th>Females With disabilities</th>
<th>Males Without disabilities</th>
<th>Males With disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted n</td>
<td>Weighted % (95% CI)</td>
<td>Unweighted n</td>
<td>Weighted % (95% CI)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-17</td>
<td>541</td>
<td>51.8</td>
<td>158</td>
<td>48.8 [40.6, 57.2]</td>
</tr>
<tr>
<td>18-24</td>
<td>459</td>
<td>48.2</td>
<td>153</td>
<td>51.2 [42.8, 59.4]</td>
</tr>
<tr>
<td><strong>Education (completed)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>101</td>
<td>6.5 [4.4, 9.6]</td>
<td>26</td>
<td>7.0 [2.6, 17.4]</td>
</tr>
<tr>
<td>Primary or less</td>
<td>251</td>
<td>82.0</td>
<td>251</td>
<td>82.6 [77.9, 86.5]</td>
</tr>
<tr>
<td>Secondary or more</td>
<td>101</td>
<td>11.5</td>
<td>34</td>
<td>10.8 [8.4, 13.7]</td>
</tr>
<tr>
<td><strong>Ever married/lived with a partner</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>759</td>
<td>79.2</td>
<td>219</td>
<td>72.5 [66.3, 78.0]</td>
</tr>
<tr>
<td>Yes</td>
<td>241</td>
<td>20.8</td>
<td>92</td>
<td>27.5 [22.0, 33.7]</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>
</tr>
<tr>
<td>No</td>
<td>686</td>
<td>68.9</td>
<td>207</td>
<td>69.4 [58.7, 78.3]</td>
</tr>
<tr>
<td>Yes</td>
<td>314</td>
<td>31.1</td>
<td>104</td>
<td>30.6 [21.7, 41.3]</td>
</tr>
<tr>
<td><strong>Country of origin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sudan</td>
<td>507</td>
<td>68.4</td>
<td>133</td>
<td>57.7 [31.1, 80.4]</td>
</tr>
<tr>
<td>DRC</td>
<td>437</td>
<td>26.9</td>
<td>161</td>
<td>32.7 [21.8, 53.9]</td>
</tr>
<tr>
<td>TOTALb</td>
<td>1000</td>
<td>76.9</td>
<td>311</td>
<td>23.1 [19.3, 27.4]</td>
</tr>
</tbody>
</table>

a - Others include Rwanda, Burundi, Somalia, Ethiopia, Eritrea, and Sudan.

b - The overall p-value [0.079] for the difference in the total number of females and total number of males with and without disabilities was not significant.
3.3. Experiences of childhood violence by type of disability

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Prevalence of sexual, physical, and emotional violence by disability status for females and males – Uganda HVACS 2022.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unweighted</td>
</tr>
<tr>
<td>Experienced any type of sexual violence before age 18</td>
<td>1000</td>
</tr>
<tr>
<td>Unwanted sexual touch</td>
<td>1000</td>
</tr>
<tr>
<td>Unwanted attempted sex</td>
<td>428</td>
</tr>
<tr>
<td>Pressured sex</td>
<td>428</td>
</tr>
<tr>
<td>Physically forced sex</td>
<td>428</td>
</tr>
<tr>
<td>Experienced physical violence before age 18</td>
<td>1000</td>
</tr>
<tr>
<td>Experience emotional violence before age 18</td>
<td>1000</td>
</tr>
</tbody>
</table>

Notes: AOR-adjusted for age, level of education, ever-been married/lived with a partner as if married, worked in the past 12 months and country of origin.

3.2. Experiences of childhood violence by disability status

A statistically significantly higher proportion of children and youth with disabilities had experienced sexual violence in childhood compared to those without disabilities – (23.2% compared to 11.5% for females, and 15.7% compared to 7.6% for males; Table 2). Among females, a significantly higher percentage of those with disabilities (24.3%) compared to those without disabilities (9.1%) had experienced ‘unwanted sexual touch’. Among males, a higher proportion of those with disabilities (15.5%) compared to those without disabilities (5.7%) had experienced ‘unwanted sexual touch’. Unlike for males, a statistically significantly higher percentage of females with disabilities compared to those without disabilities had experienced physical violence (39.5% and 29.1%, respectively) and emotional violence (22.6% and 15.0%, respectively).

3.3. Experiences of childhood violence by type of disability

In Table 3 we explore the odds of experiencing violence by type of functional limitation (that is, visual, cognitive, mobility, self-care, task performance, and communication). For both females and males, the odds of reporting an experience of sexual violence in childhood were 2.3 times higher among those with disabilities (any limitation) compared to those without disabilities (no limitations). Among females, the odds of reporting an experience of sexual violence in childhood were higher for those with self-care (AOR = 2.1; 95% CI = 1.0–4.3) and task performance (AOR = 2.6; 95% CI = 1.3–5.2) related disabilities compared to those without such limitations. Among males, the odds of reporting an experience of sexual violence in childhood were higher for those with mobility (AOR = 3.2; 95% CI = 1.1–9.5), task performance (AOR = 4.4; 95% CI = 1.4–13.7), or communication (AOR = 4.1; 95% CI = 1.3–12.9) related disabilities compared to those without such limitations.

Females with disabilities (any limitation) had higher odds of reporting an experience of childhood physical violence (AOR = 2.2; 95% CI = 1.2–3.9) or emotional violence (AOR = 2.3; 95% CI = 1.4–3.8) compared to those without disabilities (no limitations). For females, the odds of reporting an experience of childhood physical violence were higher among those with mobility and self-care related disabilities compared to those without such limitations. For both males and females, the odds of reporting an experience of physical violence in childhood was higher among those with
without such limitations. Self-care, or task performance related limitations compared to those experiencing emotional violence were higher among those with mobility, compared to those without these limitations. Among males, the odds of reporting an experience of

3.4. Perpetrator types by disability status

In Table 4, we examined perpetrator types by disability status for females and males. We report on perpetrator type by category of offenders for the first incident of sexual violence and most recent incident of physical and emotional violence (in the past 12 months). There were no statistically significant differences in types of perpetrators of sexual and physical violence between females with and without disabilities or

Table 5
Health outcomes associated with experiencing childhood violence and disability status for females and males – Uganda HVACS 2022.

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th></th>
<th>Males</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without disabilities</td>
<td>With disabilities</td>
<td>p-value</td>
<td>Without disabilities</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced</td>
<td>2.12</td>
<td>[1.24, 3.57]</td>
<td>0.04</td>
<td>1.26</td>
</tr>
<tr>
<td>Unexperienced</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>Emotional</td>
<td>2.36</td>
<td>[1.48, 3.78]</td>
<td>0.001</td>
<td>1.30</td>
</tr>
<tr>
<td>Unexperienced</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>Physical</td>
<td>2.55</td>
<td>[1.61, 3.99]</td>
<td>0.005</td>
<td>1.62</td>
</tr>
<tr>
<td>Unexperienced</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>Other</td>
<td>2.68</td>
<td>[1.76, 4.09]</td>
<td>0.001</td>
<td>1.41</td>
</tr>
<tr>
<td>Unexperienced</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: * AOR-adjusted for age, level of education, ever-been married/lived with a partner as if married, worked in the past 12 months and country of origin.
between males with or without disabilities. Females with and without disabilities were vulnerable to sexual violence from any type of perpetrator, while among the males with and without disabilities, ‘family members, neighbors, and friends’ were the most common perpetrators of sexual violence. Following childhood experiences with emotional violence, a statistically significantly higher percentage of females with disabilities (80.7%) compared to those without disabilities (61.1%) reported perpetration by a ‘current or previous intimate partner’, while a significantly higher percentage of males with disabilities (98.3%) compared to those without (89.5%) reported perpetration by a ‘parent, adult caregiver, or other adult relative’.

3.5. Health outcomes associated with experiencing childhood violence by disability status

In Table 5, we examine the association between experiencing childhood violence (one or more of sexual, physical, and/or emotional childhood violence), disability status, and health outcomes (severe mental distress and reporting symptoms or being diagnosed with an STI). Among females, the odds of reporting severe mental distress in the past 30 days were 3.2 times higher for those with disabilities and who had also experienced childhood violence compared to those without disabilities and who had not experienced childhood violence, after adjusting for any socio-demographic differences. The odds of reporting severe mental distress in the past 30 days were 2.0 times higher for females without disabilities but who had experienced childhood violence compared to those without disabilities and who had not experienced childhood violence. For males, the association between experiencing childhood violence, having disabilities, and reporting severe mental distress was positive but not statistically significant. The odds of reporting severe mental distress in the past 30 days were 2.2 times higher for males with disabilities but who had not experienced childhood violence compared to those without disabilities and who had not experienced childhood violence.

The odds of reporting symptoms or being diagnosed with an STI among females were 3.0 times higher for those with disabilities and who had experienced childhood violence when compared to those without disabilities and who had not experienced childhood violence, after adjusting for any socio-demographic differences. For females (AOR 1.8) and males (AOR 2.5), the odds of reporting symptoms or being diagnosed with an STI were higher for those without disabilities but who had experienced childhood violence compared to those without disabilities and who had not experienced childhood violence.

4. Discussion

Experiences of childhood violence and the intersections between childhood violence and gender among PWDs have received limited attention in the literature (Namatovu et al., 2018; Ozemela et al., 2019; World Bank, 2019), particularly in humanitarian settings and among children with disabilities. In this paper, we examined the experiences of childhood violence by disability status, explored associations between childhood violence and type of disability (limitation), perpetrator types, and the health outcomes associated with experiencing childhood violence by disability status for females and males aged 13–24 years in refugee settings in Uganda.

Our findings show no statistically significant differences between females and males aged 13–24 years by disability status with respect to socio-demographic factors such as age, formal educational attainment, or working for earnings. The literature does however show that social, economic, and structural inequalities may further exclude PWDs from meaningful participation in society (Rohwerder, 2017). We found no statistically significant differences between the proportions of females and males with disabilities, which may seem misaligned with global estimates showing a higher prevalence of disabilities among women than men (Lee, Meijer, Phillips, & Hu, 2021; World Health Organization, 2011); however, age may factor into this since women generally live longer and may be more likely to do so with disabilities. A further plausible explanation is that children and youth in refugee settings are inherently and comparably vulnerable, with limited social mobility, regardless of their sex and disability status (Beltramo, Calvi, De Giorgi, & Sarr, 2023).

Our findings – drawn from the results of a well-designed study with validated measures of disability and childhood violence on a representative sample of refugee settlements in Uganda – confirm that female and male children and youth with disabilities experience a significantly higher prevalence of sexual violence in childhood compared to those without disabilities. Variations by type of sexual violence show that among females, experience of ‘unwanted attempted sex’ was significantly higher among those with disabilities than those without, while among males, ‘unwanted sexual touch’ was more common among those with disabilities than those without. These variations notwithstanding, the high proportions of sexual violence experienced by females and males in these settings is concerning and warrants attention, reflecting the needs and vulnerabilities of children with disabilities. Additionally, our findings reveal significantly higher percentages of females with disabilities compared to those without disabilities reporting childhood experiences of physical and emotional violence. Research has shown that women with disabilities experience more violence than women without disabilities (Ferre, Megías, & Expósito, 2013) and men with or without disabilities (Ozemela et al., 2019; World Bank, 2019).

Females had significantly higher odds of experiencing sexual, physical, and emotional violence if they had disabilities (any limitation), while for males the differences were statistically significant in the case of sexual violence. This finding further highlights the increased vulnerability of female children with disabilities to all forms violence compared to female children without disabilities and to male children with or without disabilities. The odds of experiencing different forms of childhood violence varied by type of disability or functional limitation for both females and males. Females with physical (self-care and task performance) limitations, and males with physical (mobility and task performance) and communication disabilities were more predisposed to sexual violence than their counterparts without such limitations. Females with physical (visual, mobility, self-care, task performance) and communication related limitations and males with task performance and communication limitations were more susceptible to physical violence. In addition, females with visual, self-care, and communication limitations, and males with physical (mobility, self-care, and task performance) related disabilities were more vulnerable to emotional violence. Our findings are similar to prior findings in older populations, which showed that men with physical disabilities reported higher risks of physical and emotional violence compared to those without disabilities (Namatovu et al., 2018). Intellectual disabilities, particularly cognitive limitations among young people and especially girls have been shown to be associated with higher susceptibility to all types of violence (Jones et al., 2012).

The findings show that there were no differences in perpetrator types associated with childhood sexual or physical violence among females and males by disability status, which contrasts with some earlier reports (Anyango et al., 2023; Cramer et al., 2019; Hughes et al., 2019; Namatovu et al., 2018). Rather, we found that for both females and males, all perpetrator types were commonly reported as offenders of sexual and physical violence, drawing our attention to the extent of broken social and protective networks in these settings. There was a significantly higher perpetration of childhood emotional violence by ‘current or previous intimate partners’ among females, and by ‘parents, adult caregivers, or other adult relatives’ among males. Children in these refugee settlements are exposed to perpetration of sexual, physical, and emotional violence largely by individuals situated in close proximity to them, and particularly in and around their home environments.

Exploration of the associations between experiencing childhood violence for those with or without disabilities and negative health outcomes revealed unique patterns. Experiencing childhood violence and
having disabilities increased the odds (by three times or higher) of reporting severe mental distress in the past 30 days and reporting symptoms or being diagnosed with an STI among females. For males, the association was positive but not statistically significant. Other notable differences were that females who had experienced childhood violence and males with disabilities had higher odds of reporting severe mental distress in the past 30 days, while females with disabilities and males and females who had experienced childhood violence had higher odds of reporting symptoms or being diagnosed with an STI. Mental health disorders, including severe mental distress, have been shown to have substantial comorbidity with experiencing sexual, physical, and mental violence (Villaveces, Shankar, Palomeque, Padilla, & Kress, 2022). Our results are consistent with existing literature highlighting intersections between childhood violence and reporting of STIs (Rivara et al., 2019).

Our findings further underscore the heightened vulnerability of children with disabilities and who have experienced violence, to negative health outcomes in these settings, similar to reports in the literature emphasizing the significant impact of violence, in its various forms, on individuals' physical and psychological well-being (Hossain et al., 2020; Hughes et al., 2019; Rivara et al., 2019). Finally, while data from females and males were analyzed separately, these findings may be indicative of differences in the coping strategies, or survival mechanisms employed by females and males with disabilities in response to violence victimization. This is an area for further research.

5. Strengths and limitations

This study has several strengths. It utilized a robust, representative, dataset from children and youth aged 13–24 years, drawn from all 13 refugee settlements in Uganda, which is unique relative to standard VACS. It represents the first of its kind, examining the prevalence of childhood violence by disability status, exploring perpetrator types, and the associated negative health outcomes among children and youth in humanitarian settings. In addition to advancing our understanding of the temporal relationship between childhood violence and disability, our study also assessed the association between specific types of disabilities (visual, cognitive, mobility, self-care, task performance, and communication limitations) and vulnerability to sexual, physical, and emotional violence. These strengths are aligned with global calls for the development of measurement frameworks to track efforts in the improvement of health outcomes including the consideration of children and youth with developmental disabilities who have experienced sexual or any other violence.

Limitations of the Uganda HVACS are similar in some respects to those of the standard VACS. For example, as with the standard VACS, the cross-sectional nature of the Uganda HVACS does not allow for causal inferences about relationships observed in the data generated. There is a potential for recall bias since participants reported on events that occurred in the past, or a reporting bias due to the sensitive nature of violence that participants are self-reporting. As with any household survey, interviewer bias might be a limitation although interviewers were extensively trained prior to data collection. Unique limitations include the exclusion of those with hearing disabilities (one of the eligibility criteria), and that in the refugee settlements unlike in the standard VACS, there is a high mobility of households, which resulted in a low response rate at the household level (53.3%) compared to overall response rates in the standard VACS, where both household and individual response rates are over 80% in most countries (Chiang et al., 2016).

While a reflection of the challenges related to tracing sampled households are expected in refugee settings, once these households were identified, the likelihood of eligible participants consenting to participate in the survey was high for both females (87.5%) and males (90.1%).

6. Conclusion

The findings of this study confirm that in Uganda refugee settlements, the prevalence of childhood violence is higher among children and youth with disabilities compared to those without disabilities. While there are some variations in the type of sexual violence experienced, we raise alarm about the high proportions of sexual violence experienced by females and males in these settings, reflecting a dire need to consider the heightened vulnerabilities of children and youth with disabilities in preventing and responding to sexual violence. We also found significantly higher percentages of females with disabilities compared to those without reporting childhood experiences of both physical and emotional violence, suggestive of a higher susceptibility to violence of all forms among female children with disabilities compared to female children without disabilities and male children with or without disabilities. With all perpetrator types commonly reported as offenders of sexual, physical, and emotional violence, the pervasiveness is suggestive of an acceptability of violence against children in these settings, and a need to tackle social norms at multiple community levels. There were some notable differences in the probability of experiencing various forms of violence by type of functional limitation, and the negative consequences of violence varied by sex and by the form of violence experienced. Females with disabilities and who had experienced childhood violence had increased odds of reporting severe mental distress and symptoms or being diagnosed with STI, indicating a higher vulnerability compared to females and males who without disabilities and who had not experienced childhood violence.

Taken together, these findings have implications for policy and practice, and could further strengthen the targeting of preventative and response measures in humanitarian settings to improve the health, well-being, and equal participation of children with disabilities, thereby reducing their lifetime cost of care and ending cycles of poverty. To better identify and support all children, including those with disabilities, and who have experienced childhood violence in humanitarian settings, the collection of reliable and robust data is needed in more of these settings. This first-ever HVACS has shown that this can be done in such unique (refugee) settings, providing critical and actionable data on these vulnerable populations. Our findings underscore the need to advance disability inclusion in the implementation of targeted interventions and GBV and child protection service provision through humanitarian assistance programs. Such interventions may include awareness training targeted at those in close proximity to children, screening for childhood violence in spaces such as schools where high numbers could be reached, and tailoring interventions for those with disability through engagement of advocacy groups. Furthermore, our findings could inform context-specific discussions about policies and guidelines regarding how GBV and child protection actors across all institutions operating in refugee settings could more effectively respond to the vulnerabilities of children with disabilities.

Data availability

Data are available upon reasonable request. Requests to access the data may be sent to Population Council, Dataverse, email: publicatio ns@popcouncil.org for information on data access.

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Declaration of competing interest

All authors declare that they have no competing interests.

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