Original Article

Sexual Violence against Children in Rwanda: Prevalence and Associated Factors

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Abstract

Background

Information and data on the burden and factors associated with violence against children are critical in designing and implementing preventive strategies and interventions. This study aimed to examine patterns of the prevalence of sexual violence (SV) against children in Rwanda and investigate associated factors to contribute to the knowledge about violence against children in Rwanda.

Methods

A sample of 1,110 children aged 13-17 years from a cross-sectional national survey done in Rwanda in 2015 was analysed. Weighted descriptive statistics were applied to describe the prevalence of SV against children, and weighted logistic regression allowed us to investigate factors associated with it.

Results

Over eight percent (8.4%) of all children, including about three percent (2.8%) of male children and around five percent (5.6%) of female children, reported having experienced SV within the last twelve months. Being a female child, having a romantic partner, and not attending school were some factors associated with SV against children in Rwanda.

Conclusion

Female children reported more SV than male children. Factors associated with sexual violence pertained to the child's characteristics, family or household background characteristics, and community relations. The study findings call for an urgent need to prevent SV against children through awareness raising about it amongst children and the general public.

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Keywords: Sexual Violence, Sexual Abuse, Children, Child Abuse, Rwanda, Children protection

Background

It took time for the world to understand that Sexual Violence (SV) was a severe human rights issue and a significant public health problem.[1] It was only towards the end of the twentieth century that several international legal instruments started denouncing SV as a human rights violation issue and encouraged countries to protect their citizens against it.[2] The Convention on the Elimination of All Forms of Discrimination against Women, the Declaration on the Elimination of Violence against Women, and the United Nations Convention on the Rights of the Children have been so specific and singled out women and children as the most vulnerable groups to SV.[3–5] The adoption of these three legal instruments by the United Nations and their ratification by several Member States led to the mobilisation of efforts to understand SV, support its victims, and prosecute and punish its perpetrators.

Nevertheless, despite noticeable advancements in the definitions of SV, the care, treatment and justice for identified victims of SV, there are still gaps in the primary prevention of SV, especially when victims are children.[6,7] Most importantly, the lack of national estimates of SV in children has made several countries unable to establish relevant, proactive interventions for the primary prevention of violence against children.[8]

In Rwanda, for instance, a national conference on child protection in 2011 highlighted significant data gaps and challenges regarding violence against children in the country.[9] The same data gaps and challenges were also observed and highlighted by the Committee on the Rights of the Child in its concluding observations on Rwanda's Report on the Convention of the Rights of the Child in 2013.[10,11] Both the conference and the Committee, as well as other forums, recommended to the Government of Rwanda to regularly collect and avail data on child protection, including comparable national population-based estimates that describe the prevalence and risk factors associated with violence against children.[12,13] Rwanda conducted its first national survey on violence against children in 2015. The survey produced national estimates of the prevalence of physical, sexual and emotional violence against children and youth. [14] However, the final survey report did not provide details on factors associated with these three types of violence assessed in children and youth.

To fill the data gap observed in the report on the Violence Against Children and Youth Survey in Rwanda, this study used the Rwanda survey datasets to describe further the prevalence and types of SV reported by children; and to investigate factors associated with SV in children.

Methods

Description of the Violence against Children and Youth Survey in Rwanda

Data in this study were drawn from the violence against children and youth survey conducted in Rwanda in 2015.[14] The survey was a cross-sectional national representative study that assessed the prevalence of physical, sexual and emotional violence amongst children and youth aged 13-24.

The survey used a three-stage, split-sample design to collect data from nationally representative samples of female and male respondents aged 13-24. In the first stage, 250 enumeration areas (EAs) were selected from the 14,837 villages, using a probability proportional to size approach. The 250 selected EAs were stratified by sex, and nationally representative female and male samples were independently drawn. This split-sample approach was intended to cater for the calculation of separate male and female estimates of SV and to avoid the possibility of interviewing both the perpetrator and victim of SV in a given community. In the second stage, a fixed number of 25 households were selected by equal probability systematic sampling in each EA.

In the third stage, one eligible respondent (female or male, depending on the selected EA) was randomly selected for an interview from the list of all eligible respondents available in each selected household.

Eligible respondents were males and females aged 13-24 who spoke Kinyarwanda or English. A total of 1,180 males and 1032 females participated in the survey. The overall response rate was 98% for males and 97% for females.[14] Individuals with any disability preventing them from participating in an oral interview were excluded from the survey. However, a qualitative study on violence was conducted separately among children and youth with disability to ensure that no one was left behind.[15]

The Rwanda Survey adapted and used methods and tools from Violence against Children Surveys (VACS). VACS are household-based surveys designed by the Centers for Disease Control and Prevention (CDC) and UNICEF to collect data on physical, sexual and emotional violence.[16] VACS use household and individual questionnaires. In Rwanda, both questionnaires were considered and used. The household questionnaire was administered to the head of the household and collected data on basic household demographics. The individual questionnaire was administered to the selected respondent in each household. Its general section asked about respondents' work, relationship with parents, marriage and romantic partnership, gender attitudes, and perceptions towards community safety. Its core sections asked about experiences of physical, emotional and sexual violence. [16–19] Survey tools were translated into Kinyarwanda and back-translated into English.

Before interviews, permission to conduct the survey in the selected household and to speak to the selected respondents was obtained from the head of the household. Informed consent was also obtained from each participant. There was a two-step process to obtain consent.

The first step consisted of obtaining permission from the head of household or any other adult acting as the head of household for the household questionnaire by the survey date. After the head of household/adult had agreed to participate in the household questionnaire, the interviewer conducted the head of the household interview. The second step consisted in obtaining the consent of child/youth respondents. The interviewer got informed assent in households where the selected respondent was a minor (13-17 years old). [14] A similar consent process was used in households where the selected respondent was an adult (18-24 years old), an emancipated minor, or lived in a child-headed household, except that parental/caregiver permission was not necessary. [14]

Trained male interviewers conducted interviews for male respondents and trained female interviewers for female respondents. After field data collection, data was extracted from the netbooks, checked and cleaned for missing or incomplete data and outliers. STATA 13 was used for all data-cleaning processes.

The survey protocol and data collection tools were independently reviewed and approved by the CDC's Institutional Review Board and the Rwanda National Ethics Committee (RNEC).

Outcome measure: Sexual Violence (SV)

Four types of SV were asked about in the survey: unwanted sexual touching, unwanted attempted sex, physically forced sex and pressured sex. In table one, we presented the definition of each type of SV and a question that was asked to respondents about it.

Table 1. Definition and questions that were asked to respondents for each type of S

Type of SV	Definition	Questions asked of respondents
Unwanted sexual touching	It is touching in a sexual way without a person's permission (e.g., fondling, pinching, grabbing or touching on or around a person's sexual body parts without trying or forcing to have sex).	Has anyone ever touched you in a sexual way without you wanting to but did not try and force you to have sex? Touching in a sexual way without permission includes fondling, pinching, grabbing, or touching you on or around your sexual body parts.
Unwanted attempted sex	It is an unsuccessful attempt to make a person have sex against their will.	Has anyone ever tried to make you have sex against your will but did not succeed?
Physically forced sex	It is making someone have sex against their will by physical force.	Has anyone ever physically forced you to have sex, and did succeed?
Pressured sex	It is making someone have sex against their will through harassment, threats or tricks.	Has anyone ever pressured you to have sex through harassment, threats or tricks?

Respondents who reported having experienced SV were also asked if that had happened to them within the last 12 months before the survey date. Based on types of SV and the time at which reported SV had happened, an outcome variable called "Sexual Violence" was constructed for this study. It was defined as having experienced at least one of the four types of SV assessed by the survey in Rwanda. [14]

Independent variables

The following independent variables commonly assessed for association with Child sexual abuse were considered in our analyses: [20]

- Child demographics: Age, gender, sexual activity (having had sex or not).
- Parental relations: Orphanhood status (single or double orphan), living with parents (living with either parent, neither parent, or a single parent), closeness with mother (very close, close, not close), closeness with father (very close, close, not close), closeness with biological parents (very close, close, not close).
- Household characteristics: household size, household wealth index, and household health insurance (has insurance, no insurance).
- Community relationships: Friendship (has no friend, has one friend and more), community safety (very safe, somewhat safe, not safe), romantic partnership (has a romantic partner, no romantic partner), community trust (trust much, some trust, no trust), and the schooling status (going or not going to school by the study time).

Analyses

While a total sample of 2,212 children and youth aged 13-24 participated in the Violence Against Children and Youth Survey in Rwanda, analyses presented in this study are only about a total of 1,110 respondents who were aged 13-17. Respondents aged 18-24 were considered young adults and excluded from our analyses. This move was based on the United Nations Convention on the Rights of the Child and Rwanda's legal system, which consider anyone younger than 18 as a child.[5,21]

Weighted descriptive analyses were performed to describe the characteristics of children who participated in the survey and to assess patterns of the prevalence of the SV reported by children. Factors associated with SV were investigated using multivariable logistic regression models. A manual backwards elimination model selection was applied to construct the unadjusted and adjusted logistic regression models for male children, female children, and the total sample of all children. Odds ratios (ORs) produced in the unadjusted logistic regression models were considered statistically significant at an alpha <=0.1

and were included in the adjusted logistic regression models.

However, the adjusted logistic regression models were statistically significant at an alpha <0.05. Like descriptive statistics, all logistic regression models in this study incorporated sampling weights to correct for unequal probability of selection, adjust for non-response, and produce results representative of the national population of children aged 13-17 years in Rwanda. Analyses were performed in Stata 14.2.

Results

Descriptive Characteristics

In total, 618 male children and 492 female children who participated in the Violence Against Children and Youth Survey in Rwanda were included in the analyses. One in four children surveyed (25.6%) did not attend school by survey time. The same proportion of children in the study (25.0%) lived with a single parent only. More details about children's background characteristics are presented in Table 2.

Table 2. Background characteristics of study participants

Background characteristics	All children (n=1110)	Males(n=618)	Females(n=492)
	%[a]	%[a]	%[a]
Orphan hood			
Not an orphan	83.6	42.9	40.7
Orphan single or double	16.4	9.2	7.2
Romantic relations			
No romantic partner	75.8	38.0	37.8
Has a romantic partner	24.2	14.3	9.9
Sexually active			
Never had sex	90.5	45.7	44.8
Has had sex	9.5	6.3	3.3
Schooling status			
Attends school	74.4	39.3	35.1
Does not attend school	25.6	12.6	13.1
Number of friends			
One friend and more	92.9	48.7	44.2
No Friend	7.1	3.3	3.9
Talking to friends			
Talks to friends a lot	26.9	14.6	12.3
Talks to friends a little	49.0	26.3	22.7
Does not talk to people at all	24.2	11.2	13
Trusting people in the community			
Trust people a lot	30.8	19.3	11.5
Trust people somewhat	43.0	20.7	22.3
Does not trust people	26.2	11.9	14.3
Community safety			
Feels very safe	39.0	23.6	15.5
Feels somewhat safe	57.0	24.1	32.9
Does not feel safe	4.0	1.2	2.7

[a] **Nationally representative weighted percentage.**

Table 2. Background characteristics of study participants

Background characteristics	All children (n=1110)	Males(n=618)	Females(n=492)
	%[a]	%[a]	%[a]
Living with parents			
Lives with both parents	59.3	30.2	29.1
Live with neither parent	15.7	7.9	7.8
Live with a single parent	25.0	13.9	11.1
Closeness with father			
Very close with father	39.0	22.7	16.3
Close with father	28.1	13.7	14.4
Not close with father	32.9	15.6	17.3
Closeness with mother			
Very close with mother	69.7	37	32.7
Close with mother	19.2	10.4	8.8
Not close with mother	11.2	4.6	6.5
Closeness with biological parents			
Very close with biological parents	28.8	16.2	12.6
Close with biological parents	26.9	13.3	13.6
Not close with biological parents	44.3	19.4	24.9
Household size			
1-4 People	27.7	14.9	12.8
Five people and more	72.3	37.1	35.2
Household wealth index			
Higher wealth quintile	33.2	18.6	14.6
Middle wealth quintile	32.9	18.0	14.8
Lower wealth quintile	34.0	15.3	18.7
Health Insurance			
Has a health insurance	75.2	38.4	36.9
No health insurance	24.8	13.6	11.2

[a] **Nationally representative weighted percentage.**

Prevalence of SV against children in Rwanda

Over eight percent (8.4 %) of children reported having experienced SV within twelve months before the survey date. The reported prevalence of SV was higher among females than males for each of the four types of SV assessed. For every kind of SV assessed by this study, the reported prevalence was about two times higher in female children than in male children. Among both male and female children, unwanted sexual touching and unwanted attempted sex were the most common types of SV experienced.

The reported prevalence of physically forced sex was below one percent (0.5 %) in female children. Pressured sex against children was almost non-existent. Details of SV prevalence in children in Rwanda are presented in Table 3.

Table 3. Sexual violence reported by 13–17-year-old children by gender

Types of SV	All children (n=1109)	Males (n=617)	Females (n=492)
	%[a]	%[a]	%[a]
Unwanted sexual touching	5.0	1.7	3.3
Unwanted attempted sex	4.8	1.7	3.1
Physically forced sex	0.5	0.0	0.5
Pressured sex	0.1	0.0	0.1
Sexual violence (i.e., reported any form of SV)	8.4	2.8	5.6

*Reported percentages are weighted to account for sample design.

Factors associated with sexual violence against children

Table 4 presents unadjusted and adjusted regression models for children altogether, male children and female children. The final adjusted regression model in all children indicated that being a female child (aOR = 2.40, 95% CI= [1.50-3.83], p-value: 0.001), having a romantic partner (aOR = 3.19, 95% CI = [1.99-5.12], p-value: 0.001), not attending school (aOR = 1.78, 95% CI = [1.09-2.91], p-value: 0.02) and not being close with biological parents (aOR = 2.2, 95% CI = [1.06-4.563], p-value: 0.04), were significantly associated with SV.

In male children, the likelihood of reporting SV was observed in male children who reported not attending school (aOR = 3.62, 95% CI = [1.79-7.30], p-value: 0.001), and being less close with both biological parents (aOR = 3.88, 95% CI = [1.15-13.04], p-value: 0.03).

Among female children, reporting SV was associated with having a romantic partner (aOR = 3.91, 95% CI = [2.14-7.13], p-value: 0.001), being sexually active (aOR = 3.11, 95% CI = [1.04-9.28], p-value: 0.04), not trusting people in the community (aOR = 3.65, 95% CI = [1.3-10.2], p-value: 0.02), and coming from a household in the middle wealth quintile (aOR = 2.26, 95% CI = [1.05-4.86], p-value: 0.04).

Table 4. Multivariate analysis association between SV and participants' characteristics

Child characteristics	All Children		Male children		Female Children	
	uOR[95% CI]	aOR [95% CI]	uOR [95% CI]	aOR [95% CI]	uOR [95% CI]	aOR [95% CI]
Child gender						
Male	ref.	Ref.				
Female	**2.51[1.58-4.00]***	**2.40[1.50-3.83]***				
Romantic partnership						
No romantic partner	ref.	Ref.	Ref.		Ref.	Ref.
Has a romantic partner	**2.64 [1.54-4.53] ***	**3.19 [1.99-5.12]***	1.66 [0.75-3.66]		**4.19[1.97-8.95]***	**3.91[2.14-7.13]***
Sexually active						
Never had sex	ref.		Ref.		Ref.	Ref.
Has had sex	1.59 [0.77-3.27]		1.20 [0.48-3.03]		**2.93[0.95-9.05] ***	**3.11[1.04-9.28]***
Schooling status						
Attend school	ref.	Ref.	Ref.	Ref.	Ref.	
Does not attend school	**1.87 [1.12-3.11]**	**1.78 [1.09-2.91]***	**4.11 [1.89-8.96]***	**3.62[1.79-7.30]***	1.12[0.54-2.33]	
Trusting people in the community						
Trust people a lot	ref.		Ref.		Ref.	Ref.
Trust people somewhat	0.76 [0.40-1.43]		0.62 [0.26-1.48]		1.35[0.42-4.33]	1.47[0.49-4.45]
Does not trust people	1.38 [0.74-2.57]		0.53 [0.17-1.61]		**3.49[1.24-9.77] ***	**3.65[1.3-10.2]***
Living with parents						
Lives with both parents	ref.		Ref.		Ref.	Ref.
Live with neither parent	0.72 [0.32-1.65]		0.52[0.14-1.98]		0.84[0.28-2.45]	0.87[0.32-2.36]
Live with a single parent	1.60 [0.92-2.78]		1.22 [0.48-3.08]		**2.25[1.13-4.49] ***	**2.08[1.18-3.68]***
Closeness with biological parents						
Very close with biological parents	ref.	Ref.	Ref.	Ref.	Ref.	
Close with biological parents	**3.37[1.12-10.13]***	**2.09[1.03-4.24]***	**7.91[1.40-44.63]***	**3.88[1.15-13.04]***	2.64[0.57-12.2]	
Not close with biological parents	2.91 [0.53-16.09]	**2.2 [1.06-4.56]***	3.18 [0.27-37.76]	3.69[0.62-22.15]	2.52[0.24-26.1]	
Household wealth index						
Higher wealth quintile	ref.		Ref.		Ref.	Ref.
Middle wealth quintile	1.71 [0.98-3.00]		0.78[0.31-1.94]		**2.63[1.14-6.09] ***	**2.26[1.05-4.86]***
Lower wealth quintile	1.00 [0.55-1.85]		0.83[0.34-2.02]		1.01[0.42-2.47]	0.91[0.4-2.03]
Health Insurance						
Has a health insurance	ref.		Ref.		Ref.	Ref.
No health insurance	1.51 [0.93-2.47]		1.34[0.54-3.35]		**1.86[1.02-3.36] ***	**1.9[1.04-3.48]***

uOR: Unadjusted odds ratios
aOR: Adjusted odds ratios
ref.: Reference
CI: Confidence Interval
*Estimated Odds Ratios highlighted in bold are statistically significant at P-value < .05.

Discussion

This study indicated that nearly one in ten children in Rwanda experienced SV and that female child were more likely to be sexually abused than male children.

Unwanted sexual touching and unwanted attempted sex emerged as the most common forms of SV perpetrated against children. The prevalence of the other two forms of SV we examined, namely physically forced sex and pressured sex, was close to zero.

Female children were twice more likely to report any forms of SV assessed than male children. The prevalence of SV against children observed in Rwanda was similar to that of SV reported in other African countries like Botswana, Uganda, Zimbabwe, and Lesotho, where similar surveys were conducted.[22–25] Higher rates of unwanted sexual touching and unwanted attempted sex that were observed in female children than in males in Rwanda also followed similar trends in the above-mentioned African societies. We think this would partly be explained by the effect of gender roles commonly found in socially and sexually conservative societies.[26] In such settings, men tend to misinterpret women's nonsexual interactions and expect and require them to tolerate their abusive attitudes like unwanted sexual touching and unwanted attempted sex.[27,28] For Rwanda, these findings would also mean that despite promising advancements in gender equality promotion, the society remains socially conservative on matters related to gender equality and that women remain more exposed to sexual abuse than men.[29,30]

Based on evidence from previous studies, factors associated with SV against children in Rwanda would be grouped into individual characteristics, family or household background, and child-community relations.[31,32] On individual characteristics, it appeared that being in a romantic relationship was a predictor of SV against children. Additionally, female children who reported being sexually active were more prone to reporting SV than their fellows who were not yet sexually active. These findings corroborate UNICEF's observation that adolescents, mainly girls, face a significant risk of experiencing sexual abuse when in private spheres, including in intimate partner relationships.[33]

In the family or household background characteristics category, not being close to biological parents was a predictor of SV. This is consistent with findings from other similar studies, which concluded that poor parent-child relations or parent-child disconnection results in social isolation for children, prevents them from receiving adequate parental protection, and exposes them to different forms of child abuse, including sexual abuse. It has also been demonstrated that not living with biological parents and not being close to one biological parent decreases the child's level of well-being and contributes to an increased risk of SV. [7,32,34–37]

Under the same family or household background characteristics category, we found that children from households without health insurance and those in the middle wealth quintile had increased risks of SV. In Rwanda, households without health insurance are often ranked among the socioeconomically disadvantaged households. The above two characteristics imply that these children were from socioeconomically underprivileged households, which explains their vulnerability to SV. It has been proven that there is a correlation between low socioeconomic status and the risk of being sexually abused.[38,39]

At the level of community relationships, we found that not attending school and not trusting people in the community, for female children, were predictors of SV against children. It is also worth noting that the proportion of children who were not attending school was unexpectedly high in Rwanda. About one in 4 children surveyed was not attending school by the survey time. It was unexpected because Rwanda is lauded for achieving Universal Primary Education in the Millennium Development Goals.[40] Moreover, for the past fifteen years, the Government of Rwanda has been investing much effort in promoting free and universal primary education.[41] The Rwanda basic education program includes six years of primary education and six years of high school or secondary education. With primary education starting at six or seven years, all surveyed children (13-17 years old) would have been expected to be in school by the survey time, but it was not

the case. Since almost all surveyed children reported having been to school, our findings indicate that there were school dropouts in children in Rwanda. It would, therefore, be interesting to explore potential barriers to the full coverage of primary education among children in Rwanda.

Lastly, we found that female children who reported not trusting people in the community were more likely to experience SV than their colleagues who trusted people in their community. Such a finding would be an indication that these female children were sexually abused by people known to them and living in their community neighbourhoods; and that these bad experiences would have made them lose trust in people in their community. As documented in several reports, violence against children is often perpetrated by people in the close neighbourhood in their living environment.[42–44]

Study limitations

Some limitations in this study are related to its design, and these should be considered when interpreting its findings. First of all, data collected by this study were self-reported. Some biased responses might have been provided due to a misunderstanding of what was asked or the social-desirability bias for respondents who would have wanted to be perceived positively.[45] Secondly, being a cross-sectional study, it was impossible to determine direct causal relationships of factors studied for association with SV.

Conclusion

This study aimed to examine patterns of the prevalence of SV against children in Rwanda and investigate associated factors to contribute to the knowledge about violence against children in Rwanda. We found that approximately one in ten children in Rwanda experienced SV yearly; and that females were twice as likely to experience SV as males. On factors associated with SV against children, we found that they included individual characteristics, family or household background, and child-community relations. Thus, strategies or measures to prevent SV against children should be comprehensive enough to cover the abovementioned factors associated with SV. Prevention measures should start with empowering children individually to make them aware of SV, its risk factors for children and how to prevent it. For purposes of SV primary prevention, children should be educated on healthy relations (sexual behaviour, attitudes and practices) to avoid their romantic relationships becoming sexually abusive for them as they grow up. This can be done for children at school by adjusting existing curricula to integrate modules on sexual violence and its preventive measures. For children out of school, there is a need to design and implement special mass media and interpersonal communication programs that enhance their awareness of SV, associated risk factors, and how to prevent it.

Parents and other caregivers should be at the forefront of dealing with the child's family or household background factors that expose children to SV because they are the primary custodians of child protection. However, they should be supported by professionals and policymakers responsible for Rwanda's child protection. The latter should prioritise and build parents'/caregivers parenting skills and competencies by promoting healthy parent/caregiver-child relations as the backbone of child protection interventions. Many children were not attending school despite an overall national policy framework promoting free primary education for all in Rwanda. Policymakers should investigate barriers preventing children from attending schools and propose remedial interventions. Finally, tracking and prosecuting perpetrators of SV against children in communities is essential as a deterrence measure. Existing legal, institutional and policy frameworks to fight violence against children should also continue strengthening.

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Conflict of interest

There was no conflict of interest among authors regarding this study.

Authors' contributions

AN is the corresponding author. He did data analysis and drafted the manuscript. NF, VR, and MGI contributed to data analysis, interpretation of the data, and manuscript drafting. CM, LN, and PN guided the conceptualisation and design of the manuscript. JDN and KM reviewed the manuscript and provided comments for its improvements. NS proofread the manuscript. All authors have read and approved the final version of this manuscript.

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