The risk factors and health consequences of physical and emotional violence against children in Zimbabwe

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Risk factors and health consequences of physical and emotional violence against children in Zimbabwe: a nationally representative survey

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ABSTRACT

Introduction This study provides, for the first time, comparable national population-based estimates that describe the nature and magnitude of physical and emotional violence during childhood in Zimbabwe.

Methods From August to September 2011, we conducted a national population-based survey of 2410 respondents aged 13–24 years, using a two-stage cluster sampling. Regression models were adjusted for relevant demographics to estimate the ORs for associations between violence, risk factors and various health-related outcomes.

Results Respondents aged 18–24 years report a lifetime prevalence (before the age of 18) of 63.9% (among girls) to 76% (among boys) for physical violence by a parent or adult relative, 12.6% (girls) to 26.4% (boys) for humiliation in front of others, and 17.3% (girls) to 17.5% (boys) for feeling unwanted. Almost 50% of either sex aged 13–17 years experienced physical violence in the 12 months preceding the survey. Significant risk factors for experiencing physical violence for girls are ever experiencing emotional abuse prior to age 13, adult illness in the home, socioeconomic status and age. Boys' risk factors include peer relationships and socioeconomic status, while caring teachers and trusted community members are protective factors. Risk factors for emotional abuse vary, including family relationships, teacher and school-level variables, socioeconomic status, and community trust and security. Emotional abuse is associated with increased suicide attempts for both boys and girls, among other health outcomes.

Conclusion Physical and emotional violence often work in tandem causing poor mental and physical health outcomes. Understanding risk factors for violence within the peer or family context is essential for improved violence prevention.

Key questions

What is already known?

- Violence against children is prevalent and impacts on health and well-being, but no national estimates previously existed in Zimbabwe.

What are the new findings?

- Both boys and girls in Zimbabwe experience high rates of emotional and physical violence.
- Risk factors highlight negative interactions within the peer and family context.
- Emotional and physical violence bears a large burden of the poor mental and physical health outcomes for young people in Zimbabwe.

What do the new findings imply?

- Findings highlight that without a shift away from a focus on individual problems to a focus on nurturing environments, progress in reducing violence against children will continue at a slow pace.

INTRODUCTION

Child maltreatment and other early life adversities are significant public health problems globally.[1–3] Violence against children, including physical and emotional abuse, impacts the health and well-being of children and adults.[4 5] Research has also found physical and emotional abuse to be prevalent in the sub-Saharan African region.[3 5]

A review of studies on violence against children in Africa identified several individual-level, family-level and community-level risk factors for emotional and physical abuse.[6] At the individual level, younger children, male gender, child disability, school non-attendance and being unable to communicate with parents are significant correlates of physical abuse victimisation.[7 8] At the family level, children living with an adult with HIV/AIDS, other chronic illnesses or with a physical disability appeared to be at higher risk for physical abuse victimisation.[6] This may be caused by increased family stress from high levels of stigma that impact caregivers' experiences, as well as the financial and relational strain of prolonged illness.[9] According to a similar study conducted in Swaziland, poverty is also associated with physical violence

victimisation during childhood at the household level.[10] Evidence from high-income countries highlights the co-occurrence of poverty and physical violence victimisation, and often hypothesises family stress as a causal pathway between the two. Several studies show previous experiences of violence increase children's vulnerabilities to experiencing further physical and emotional violence.[6 10]

There are very few studies on emotional violence against children in sub-Saharan Africa[11–13] and no empirical studies published in Zimbabwe. These few studies highlight that family structure and environment are important determinants for emotional violence, including the presence of domestic violence, living with a stepfather, living with someone who is chronically ill, poor family functioning and poor caregiver mental health. These findings highlight that nurturing environments that foster successful development and prevent psychological and behavioural problems are critical to children's well-being.[14] Understanding risk factors within the peer or family context is essential for violence prevention. This study provides, for the first time, comparable national population-based estimates that describe the nature and magnitude of physical and emotional violence during childhood in Zimbabwe.

This paper synthesises what is known from this population-based survey by calculating the prevalence and magnitude of associations between experiencing violence and various preidentified risk factors, and the impact of experiencing violence on mental health and health risk behaviours. Findings will enhance understandings of children's relationships and interactions with others. It contributes to a *Multi-Country Study on the Drivers of Violence Affecting Children* led by Unicef Innocenti in collaboration with Unicef country offices in Zimbabwe, Peru and Vietnam, with researchers in Italy, and with the University of Edinburgh as the academic lead, with the goal of ultimately improving violence prevention programmes and policies.

METHODS

Study design and sampling procedure

A nationally representative sampling frame was drawn from the 2002 Zimbabwe Population Census Master Sample to develop a stratified two-stage sample, which included 7797 households in over 223 enumeration areas (EAs) for inclusion in the survey. Probability proportional to size, based on the number of households and population from the 2002 census, was used to select the master sample census EAs. A total sample size calculation of 1008.42 was calculated each for boys and girls to achieve a 0.04 margin of error and a design effect of 2. These EAs were grouped and separated by gender; 93 EAs targeted female respondents and 130 EAs targeted male respondents based on the sample size calculation and the cluster size of 35. This split sample approach was used in order to ensure confidentiality and to minimise the likelihood that a perpetrator and survivor of violence would both be interviewed in the same community. In the second stage, systematic random sampling was used to select 35 households from each of the male and female EAs.

When visited, 96% of the households were occupied; 30% of these had eligible respondents (eg, at least one young person between the ages of 13 and 24) who agreed to participate. Data collection took place over a 25-day period in August and September of 2011. The household response rate was 92.9% for boys and 91.5% for girls. If more than one eligible person was identified in a household, the respondent was randomly selected using the Kish method, a technique that allows for the random selection of one individual from a household.

A total of 2410 respondents were interviewed, of whom 1062 (44%) were female and 1348 (56%) were male. The individual response rates were similar between female (87.9%) and male (88.3%) respondents, and refusal rates were low in both male and female EAs.

The government-led study originally aimed to inform future national policy investments. The Zimbabwe National Statistics Agency (ZIMSTAT) conducted the study coordinated by an interministerial committee cochaired by ministries responsible for child protection and health. Unicef and the Centers for Disease Control and Prevention provided technical support.

Rigorous safeguarding and referral procedures were put in place, which were based on national protocol, international good practice and the United Nations guidelines for supporting survivors of violence. The study team coordinated with the district social services office prior to and during data collection; those respondents who were identified as requiring assistance (if they became upset during the interview, reported violence in the past year and/or did not feel safe in their current living situation) were referred to social services (n=62 cases during the survey period). A detailed study protocol are available at http://www.zimstat.co.zw/sites/default/files/img/publications/Culture/NBSLEA.pdf.

Measures

Physical and emotional violence

This study adhered to internationally recognised definitions of physical and emotional violence.[15] Physical violence was measured by asking respondents whether they had experienced any of the following: slapping, pushing, hitting with an object, kicking, beating, threatened with a weapon, or if a weapon was used against them by a parent or adult relative. It is important to note that moderate corporal punishment is legal under Zimbabwe Criminal Law,[16] although this is currently under review. Emotional violence included being humiliated in front of others, made to feel unwanted, and/or threatened with abandonment or told to leave home. Respondents aged 18–24 years were asked whether they had experienced any of these forms of violence before the age of 18 years, while the recall period for those aged 13–17 years old was the past 12 months. See the full National Baseline Survey

of the Life Experiences of Adolescents (NBSLEA) report for the survey instruments in English and Shona.[17]

Risk and protective factors

Respondents were asked a series of questions regarding factors hypothesised to put children at risk of emotional or physical violence, or that would serve as protective factors against these forms of violence. These factors include the death of a parent before the age of 13 (mother, father or both parents), absence of parent before the age of 13 (mother, father or both parents), if an adult has been ill in the home for more than 3 months in the past year, whether their father has more than one wife, experiencing other forms of child abuse before the age of 13, the closeness of respondents' relationship with both their mother and father, whether respondents felt that their family cared about them, and whether respondents felt they could talk to their family about important matters. The following school and peer-related variables were also included: school attendance at the time of the survey, feeling teachers care, feeling close to students at school, having friends that can be counted on for support and talking to friends about important matters. In addition, two community-related factors were explored: feeling safe and secure in the community and believing people in the community can be trusted. These factors were explored separately due to the lack of available data in this field for understanding how these variables interact with each other (eg, a school-level variable was not created, instead associations between violence and each of the school variables was explored).

Sociodemographic variables

Respondents' age and socioeconomic status were included as control variables in the regression models. To assess socioeconomic status, a quintile index variable was developed based on the type of toilet in the home, presence or absence of household electricity, ownership of various household items, ownership of means of transportation, source of energy used for cooking, number of rooms in the household used for sleeping, type of flooring and roofing materials, type of material used for walls, and source of drinking water.

Statistical analysis

The data analysis was conducted by ZIMSTAT with technical support from the University of Edinburgh. Data were double-entered, captured using CSPro V.4.0 and analysed initially using SAS V.9.3. A three-step weighting process was applied—calculating base weights, non-response adjustments and calibration. To generate nationally representative estimates, the data were weighted. The unweighted absolute number of participants are also included in this article; as a result, the percentages and absolute numbers presented in the tables below do not perfectly correspond. Weighted percentages without absolute numbers are presented in the text.

Regression analyses were conducted through STATA v. 14. We first examined each risk and protective factor in relation to childhood emotional and physical violence separately through bivariate logistic regression, and included only those risk factors and control variables that were significantly associated with each form of abuse at $p<0.10$ in the multivariate logistic regression. Multivariate logistic regression models were conducted by entering all the significant variables (model 1), and then we used backwards elimination approach to remove non-significant risk factors until all remaining factors were associated with victimisation (model 2). For health-related associations, we also used bivariate logistic regression adjusting for potential confounders (age and socioeconomic status) as these have been identified as confounders in other Violence Against Children Surveys.

RESULTS

A total of 1062 girls were included in the sample, 495 (47%) of whom were aged between 13 and 17 years and 567 (53%) were aged 18–24 years. For boys, 759 (47%) were 13–17 years and 589 (53%) were 18–24 years, for a total of 1348 male respondents (table 1).

Lifetime experiences of emotional and physical violence

Girls aged 18–24 years reported a lifetime prevalence during childhood of 2.9% for being threatened or attacked with a weapon, 63.9% for being slapped, pushed, punched or hit with an object, 12.6% reported being humiliated in front of others, 17.3% were made to feel unwanted, and 11.9% were threatened with abandonment, compared with boys who reported prevalence estimates of 5.4%, 76.0%, 26.4%, 17.5% and 10.9%, respectively.

Almost two-thirds of the girls and three-quarters of the boys aged 18–24 years experienced physical violence prior to 18 years. Almost 50% of either sex aged 13–17 years experienced physical violence in the 12 months preceding the survey (table 2).

Perpetrators of physical abuse

Parents were the most commonly reported perpetrators of physical violence among those who report violence perpetrated by a relative. Approximately 60% of girls aged 18–24 years old experienced physical violence from their mothers, while nearly half (46%) of the boys of the same age reported physical violence from their fathers; a similar pattern emerged among those aged 13–17 years old. Among authority figures, teachers were the primary perpetrators of physical violence against both girls and boys in both age groups.

Perpetrators of emotional abuse

Girls aged 18–24 years who reported experiencing humiliation prior to age 18 years reported aunts and mothers as the perpetrators, while teachers and uncles were most likely to humiliate boys of the same age group. Among the age group of 13–17 years old, 21% of either

Table 1 Demographic data of the sample (N=2410)

	Female (n=1062)		Male (n=1348)	
	Weighted percentage	CI	Weighted percentage	CI
Orphan status				
Single orphan	24.8	(20.1 to 29.6)	27.9	(23.6 to 32.1)
Double orphan	15.8	(11.6 to 19.9)	10.3	(7.4 to 13.2)
Not orphan	59.4	(53.9 to 64.9)	61.9	(57.5 to 66.2)
School attendance (18–24 years old)	**Female (n=567)**		**Male (n=589)**	
Never attended school	0.8	(0.1 to 1.5)	0.6	(0.0 to 1.3)
Not completed primary school	5.1	(2.6 to 7.6)	8.9	(6.1 to 11.7)
Completed primary school	94.1	(91.6 to 96.7)	90.5	(87.7 to 93.4)
School attendance (13–17 years old)	**Female (n=495)**		**Male (n=759)**	
Never attended school	0.4	(0.0 to 1.1)	0.2	(0.0 to 0.5)
Not completed primary school	18.8	(13.2 to 24.5)	32.2	(27.6 to 36.9)
Completed primary school	80.8	(75.0 to 86.6)	67.5	(62.9 to 72.2)

sex reported being humiliated by neighbours in the 12 months preceding the survey. Girls aged 18–24 years were made to feel unwanted by aunts (29.5%) and by uncles (20.6%). Fathers (25.0%) and uncles (30.4%) were most likely to make boys of the same age group feel unwanted. Girls and boys aged 13–17 years were mainly made to feel unwanted by grandparents and aunts in the 12 months preceding the survey.

Bivariate risk factors

In bivariate regression models, several factors were associated with the experience of emotional abuse in childhood (not shown in the tables). For both sexes, risk factors included not having people to trust in the community, not feeling safe or secure in the community, feeling their family does not care about them, not being close to students at school and not having friends to talk to while growing up. For girls only, risk factors included experiencing physical abuse before the age of 13, maternal orphanhood before the age of 13, not attending school, and having either their the mother or the father absent from the home before the age of 13. For boys only, bivariate associations with emotional abuse included having friends they could count on for support, illness of an adult in the home and being of a younger age (13–14 years), while having a close relationship with the mother was a protective factor.

There were fewer bivariate risk factors for physical abuse. For both sexes, low socioeconomic status and having experienced emotional abuse before the age of 13 were significant risk factors. For girls only, illness of an adult in the home and older age (23–24 years) were risk factors. For boys only, feeling they had friends they could talk to about important things was a risk factor, whereas feeling their teachers cared about them and having a close relationship with their father were protective factors.

Table 2 Prevalence of emotional and physical violence in childhood

	Female, % (95% CI)		Male, % (95% CI)	
Type of violence	Participants aged 18–24 years, lifetime prevalence (n=567)	Participants aged 13–17, 12-month prevalence (n=495)	Participants aged 18–24 years, lifetime prevalence (n=589)	Participants aged 13–17, 12-month prevalence (n=759)
Threatened or attacked with a weapon	2.9 (0.3 to 5.5)	1.9 (0.0 to 3.9)	5.4 (3.0 to 7.8)	1.8 (0.8 to 3.0)
Slapped, pushed, punched or hit with an object	63.9 (58.4 to 69.3)	46.8 (41.2 to 52.4)	76.0 (71.6 to 80.3)	48.0 (43.7 to 52.4)
Humiliated in front of others	12.6 (9.2 to 13.6)	7.8 (4.5 to 9.2)	26.4 (22.4 to 31.2)	8.8 (6.5 to 9.9)
Made to feel unwanted	17.3 (15.5 to 23.1)	10.2 (8.9 to 13.1)	17.5 (14.3 to 21.0)	7.1 (5.2 to 8.5)
Threatened with abandonment	11.9 (8.6 to 14.6)	7.3 (5.4 to 9.4)	10.9 (8.7 to 12.1)	5.2 (3.3 to 7.9)

By way of reference, according to the 2002 Zimbabwe Census, 31.45% of the male population is under the age of 25 (approximately 1.7 million boys aged 24 or younger) and 32.57% of the female population is under the age of 25 (approximately 1.9 million girls aged 24 or younger).

All risk factors associated with emotional and physical abuse in individual models were included in the full model, along with control variables (tables 3 and 4).

Multivariate risk factors

Risk factors for physical and emotional violence connected to family relations

After controlling for age and socioeconomic status in the multivariate models, many of the family-level risk factors were no longer significant. Family-level factors were only significant for emotional abuse. Boys who were paternally orphaned before the age of 13 were 1.33 times more likely to experience subsequent emotional abuse than their peers who did not have a father die when they were younger. Also, boys who reported having an adult in the home who was ill for more than 3 months in the last year were 1.5 times more likely to have reported experiencing emotional violence while growing up compared with those who did not have a sick family member.

Being extremely or quite close to their mother was a protective factor for boys against experiencing emotional abuse compared with boys who had no relationship with their mother. Closeness to either parent was not a significant predictor among girls. However, feeling they could talk to their family about things important to them and also feeling their family cared about them were both protective factors for girls against emotional abuse.

Significance of early childhood abuse and potential risk factors by age

The most significant risk factor for emotional violence among girls (but not boys) was previous experiences of physical abuse before the age of 13, with those girls being three times more likely to subsequently experience emotional abuse than their peers who have not experienced early childhood physical abuse. Similarly, the most significant risk factor for physical abuse was previous childhood abuse experiences (emotional abuse before the age of 13) for both boys and girls. Both boys and girls who experienced early emotional abuse are more likely to report being threatened or attacked with a weapon or slapped, pushed, punched or hit with an object by a parent or adult relative. Both boys and girls who report early experiences of physical abuse are more likely to report ever experiencing being humiliated in front of others, made to feel unwanted or threatened with abandonment.

While controlling for socioeconomic status, age was also a significant predictor of emotional abuse and physical abuse for girls, with those in the oldest cohort of respondents (22–24 years old) being most at risk. This may reflect more violence within intimate partner relationships. For boys, age was significant but only for emotional abuse, with those in the youngest cohort (ages 13–14 years) being at the highest risk.

School attendance and socioeconomic status

Not attending school was a significant predictor for emotional abuse for girls compared with their peers who did attend school. Socioeconomic status, while controlling for age, was a risk factor for having ever experienced any form of physical abuse for low-income and middle-income girls compared with the girls in the highest wealth quintile. Boys in all socioeconomic levels were at elevated risk of physical abuse, but boys in the first quintile were 2.1 times more likely to experience physical abuse than boys in the 5th quintile. Similarly, girls in the first quintile were 1.8 times more likely to experience physical abuse than higher income girls.

Connectedness with peers and teachers

Feeling teachers care about them was a significant protective factor for both boys and girls against experiencing emotional abuse while growing up, and for boys (but not girls) it was protective against experiencing physical abuse by a family member or adult relative. Those who did not have these caring relationships were more vulnerable to experiencing childhood emotional and physical abuse.

Peer relationships were not significant predictors of either emotional abuse or physical abuse, except unexpectedly, for boys, peer networks measured by having a close friend they could talk with were a risk factor for experiencing physical violence during childhood, which may reflect deeper gender norms around peer networks and confiding in peers.

Safety and trust in the community

Safety and trust in the community were important protective factors for both boys and girls against experiencing emotional abuse but in different ways. For boys, feeling safe and secure in the community was a protective factor. For girls, feeling people in the community could be trusted was protective. Although it is impossible from this cross-sectional survey to determine the directionality of the relationship, for those who did not report feeling safety and trust in their community was associated with experiencing childhood emotional abuse.

Health consequences and risk-taking behaviours

Tables 5 and 6 highlight the associations between experiencing physical violence and emotional violence (respectively) in childhood and various health behaviours. Boys and girls who have experienced physical violence in childhood are 1.5 and 1.7 times as likely to report being depressed in the last 30 days than their peers who have not experienced physical violence. Girls who have experienced physical violence are at a nearly two times increased risk to having suicidal ideation compared with girls who have not experienced physical violence during childhood. Boys who have experienced physical violence were at 2.3 times increased risk of having used drugs (marijuana, pills, ecstasy, or huffed/sniffed any chemical such as petrol or glue) 2.3 times more often, and used

Table 3 Multivariate regression of the associations between the experience of emotional and physical violence in childhood and risk factors for girls

	Emotional violence			Physical violence		
Factors	**Unadjusted**	**Model 1**	**Model 2**	**Unadjusted**	**Model 1**	**Model 2**
	OR (95% CI)	**OR (95% CI)**	**OR (95% CI)**	**OR (95% CI)**	**OR (95% CI)**	**OR (95% CI)**
Physical abuse <13	**2.985** (1.540 to 5.788)**	**2.949*** (1.488 to 5.847)**	**3.155*** (1.630 to 6.108)**			
Emotional abuse <13				**2.078** (1.285** to 3.361)	**2.199*** (1.358 to 3.561)**	**2.199*** (1.358 to 3.561)**
Paternal orphanhood <13	1.492 (0.915 to 2.435)	1.488 (0.914 to 2.423)				
Maternal orphanhood <13	0.745 (0.365 to 1.520)	0.639 (0.312 to 1.311)				
Currently attending school (ref: no)	0.855 (0.603 to 1.213)	**0.509*** (0.319 to 0.812)**	**0.521*** (0.330 to 0.825)**			
People in the community can be trusted (ref: strongly disagree/disagree) Strongly agree/agree	0.706 (0.482 to 1.034)	**0.674** (0.454 to 0.999)**	**0.631*** (0.448 to 0.888)**			
Feel safe and secure in the community (ref: strongly disagree/disagree) Strongly agree/agree	0.797 (0.541 to 1.173)	0.796 (0.536 to 1.180)				
Can talk to family about things important to me (ref: strongly disagree/disagree) Strongly agree/agree	**0.545* (0.331 to 0.896)**	**0.523** (0.316 to 0.865)**	**0.513** (0.302 to 0.870)**			
My family cares a lot about me (ref: strongly disagree/disagree) Strongly agree/agree	0.568 (0.283 to 1.142)	**0.527* (0.260 to 1.066)**	**0.454** (0.227 to 0.909)**			
Close to students at my school (ref: strongly disagree/disagree) Strongly agree/agree	0.674 (0.314 to 1.447)	0.711 (0.322 to 1.569)				
Teachers care about me (ref: strongly disagree/disagree) Strongly agree/agree	0.601 (0.323 to 1.119)	**0.532* (0.282 to 1.005)**	**0.522** (0.281 to 0.968)**			
Illness of an adult in the home				**1.727* (1.090 to 2.735)**	**1.696** (1.091 to 2.639)**	**1.696** (1.091 to 2.639)**
Father absent <13	1.449 (0.818 to 2.569)	1.501 (0.835 to 2.700)				
Mother absent <13	1.127 (0.718 to 1.768)	1.093 (0.694 to 1.722)				
SES (ref: fifth)						
First quintile		**0.486** (0.278 to 0.849)**	**0.489** (0.282 to 0.849)**		**1.897*** (1.183 to 3.043)**	**1.897*** (1.183 to 3.043)**
Second quintile		0.719 (0.422 to 1.225)	0.761 (0.445 to 1.300)		1.414 (0.870 to 2.296)	1.414 (0.870 to 2.296)
Third quintile		0.695 (0.401 to 1.202)	0.724 (0.420 to 1.247)		**1.869*** (1.176 to 2.972)**	**1.869*** (1.176 to 2.972)**
Fourth quintile		0.690 (0.407 to 1.172)	0.685 (0.401 to 1.169)		1.241 (0.790 to 1.951)	1.241 (0.790 to 1.951)
Age						
13–14		1.570 (0.836 to 2.947)	1.480 (0.774 to 2.830)		0.693 (0.418 to 1.146)	0.693 (0.418 to 1.146)
15–16		**1.642* (0.951 to 2.836)**	1.592 (0.905 to 2.801)		0.969 (0.592 to 1.587)	0.969 (0.592 to 1.587)
17–18 (ref)						
19–20		0.971 (0.531 to 1.776)	0.936 (0.509 to 1.720)		0.807 (0.478 to 1.362)	0.807 (0.478 to 1.362)
21–22		0.705 (0.390 to 1.274)	0.662 (0.365 to 1.199)		0.837 (0.504 to 1.392)	0.837 (0.504 to 1.392)
23–24		**0.543* (0.285 to 1.035)**	**0.495** (0.256 to 0.954)**		**0.468*** (0.274 to 0.798)**	**0.468*** (0.274 to 0.798)**

Continued

Table 3 Continued

Factors	Emotional violence			Physical violence		
	Unadjusted	Model 1	Model 2	Unadjusted	Model 1	Model 2
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)

*P<0.05, **P<0.01, ***P<0.001, controlled for age and SES.
Ref, reference; SES, socioeconomic status.
Bolded text indicates the result was significant.

alcohol 1.5 times more often, than boys who have not experienced physical abuse. Girls who have experienced physical violence experience an unwanted pregnancy 2.7 times more often than girls who have not experienced physical violence, whereas boys who report experiencing physical violence also report a nearly threefold likelihood of having a genital sore/ulcer, a symptom of a possible sexually transmitted infection.

Health outcomes related to experiencing childhood emotional violence are even more profound with high rates of reported depression among both girls and boys. Girls who experience emotional abuse are at a fourfold and boys at a fivefold increased risk for suicidal thoughts compared with those who reported never experiencing emotional violence. For boys, those who have experienced childhood emotional abuse are 10.5 times more likely to attempt suicide than those who have not. Both boys and girls who have experienced emotional abuse are also more likely to drink alcohol. Boys are at a 1.4 times higher risk of using drugs and 1.6 times higher risk for smoking in comparison with their peers who have not experienced emotional abuse while growing up. Both boys and girls who have reported emotional abuse are also more likely to report vaginal/penile discharge and genital sores or ulcers. This suggests these groups are also at high risk for sexually transmitted infections.

DISCUSSION

This is the first study to estimate the risk factors for childhood emotional and physical violence using nationally representative data in Zimbabwe. The associations with poor mental health and harmful behaviours are substantial and consistent with international research.[18 19]

Children develop social-emotional skills and relationship capacities through their interactions with others. Understanding where and how children suffer emotional and physical abuse—in the home, school or larger community—can provide insights on unhealthy relationships and therefore how to better prevent violence. Experiencing early childhood violence (before the age of 13)—especially emotional abuse—was found to be the strongest predictor of experiencing physical violence during childhood. Similarly experiencing early physical violence is associated with experiencing emotional violence in childhood. This is consistent with international literature on adverse childhood experiences that shows an increased risk effect when children face multiple types of maltreatment.[20] Even after controlling for confounding variables, lower socioeconomic status remains a significant predictor of physical violence for both boys and girls. This resonates with findings from previous research conducted in sub-Saharan Africa on physical abuse.[6]

Emotional abuse has the most varied and complex set of risk factors inclusive of the family, peer and school levels. Not feeling cared for by both teachers and friends, and the inability to reach out to family, were significant

Table 4 Multivariate regression of the associations between the experience of emotional and physical violence in childhood and risk factors for boys

Factors	Emotional violence			Physical violence		
	Unadjusted	Model 1	Model 2	Unadjusted	Model 1	Model 2
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Emotional abuse <13				1.707 (0.889 to 3.276)	1.594 (0.829 to 3.064)	
Paternal orphanhood <13	1.353 (0.976 to 1.877)	**1.358* (0.976 to 1.890)**	**1.331* (0.959 to 1.848)**			
People in the community can be trusted (ref: strongly disagree/disagree) Strongly agree/agree	0.961 (0.689 to 1.343)	0.996 (0.712 to 1.393)		0.812 (0.606 to 1.088)	**0.741* (0.548 to 1.003)**	**0.707** (0.528 to 0.946)**
Feel safe and secure in the community (ref: strongly disagree/disagree) Strongly agree/agree	**0.618* (0.424 to 0.902)**	**0.639** (0.439 to 0.932)**	**0.619*** (0.440 to 0.869)**			
Can talk to family about things important to me (ref: strongly disagree/disagree) Strongly agree/agree	**0.635 (0.397 to 1.013)**	**0.604** (0.378 to 0.966)**	**0.531*** (0.341 to 0.826)**			
My family cares a lot about me (ref: strongly disagree/disagree) Strongly agree/agree	0.638 (0.333 to 1.221)	0.623 (0.317 to 1.225)				
Close to students at my school (ref: strongly disagree/disagree) Strongly agree/agree	0.556 (0.210 to 1.469)	0.566 (0.213 to 1.502)				
Teachers care about me (ref: strongly disagree/disagree) Strongly agree/agree	**0.482* (0.267 to 0.870)**	**0.463*** (0.258 to 0.830)**	**0.458*** (0.258 to 0.814)**	**0.361*** (0.208 to 0.628)**	**0.369*** (0.213 to 0.641)**	**0.380*** (0.217 to 0.665)**
I have friends I can talk to about important things (ref: strongly disagree/disagree) Strongly agree/agree				**1.739** (1.166 to 2.594)**	**1.789*** (1.184 to 2.704)**	**1.543** (1.045 to 2.280)**
I have friends I can count on for support (ref: strongly disagree/disagree) Strongly agree/agree	0.842 (0.564 to 1.256)	0.853 (0.573 to 1.271)				
Illness of an adult in the home	1.386 (0.950 to 2.021)	**1.486** (1.012 to 2.183)**	**1.536** (1.045 to 2.256)**			
Relationship with mother (ref: no relationship)						
Extremely/quite close	0.459 (0.194 to 1.088)	0.470* (0.196 to 1.128)	0.451* (0.190 to 1.073)			
Somewhat or not close	0.714 (0.261 to 1.954)	0.767 (0.282 to 2.089)	0.830 (0.308 to 2.242)			
Relationship with father (ref: no relationship)						
Extremely/quite close				0.625 (0.369 to 1.059)	0.680 (0.398 to 1.163)	
Somewhat or not close				1 (0.526 to 1.900)	1.084 (0.566 to 2.077)	
SES (ref: fifth)						
First quintile		0.703 (0.434 to 1.137)	0.695 (0.430 to 1.124)		**2.248*** (1.426 to 3.545)**	**2.193*** (1.419 to 3.388)**
Second quintile		0.839 (0.536 to 1.313)	0.856 (0.551 to 1.331)		**1.504* (0.976 to 2.319)**	**1.524** (1.006 to 2.308)**
Third quintile		1.040 (0.663 to 1.633)	1.069 (0.687 to 1.661)		**1.890*** (1.212 to 2.947)**	**1.829*** (1.199 to 2.790)**
Fourth quintile		0.955 (0.605 to 1.507)	0.975 (0.622 to 1.530)		**1.536* (0.998 to 2.365)**	**1.505* (0.990 to 2.288)**
Age						
13–14		**0.417*** (0.269 to 0.648)**	**0.425*** (0.274 to 0.660)**		1.153 (0.747 to 1.780)	1.128 (0.743 to 1.711)
15–16		0.846 (0.553 to 1.293)	0.834 (0.547 to 1.271)		1.028 (0.674 to 1.568)	0.970 (0.649 to 1.451)

Continued

Table 4 Continued

Factors	Emotional violence			Physical violence		
	Unadjusted	Model 1	Model 2	Unadjusted	Model 1	Model 2
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
17–18 (ref)						
19–20		**0.655* (0.400 to 1.071)**	**0.663* (0.409 to 1.075)**		1.032 (0.632 to 1.685)	0.968 (0.604 to 1.551)
21–22		0.742 (0.434 to 1.268)	0.743 (0.438 to 1.261)		0.832 (0.494 to 1.400)	0.797 (0.484 to 1.315)
23–24		0.932 (0.547 to 1.588)	0.935 (0.554 to 1.580)		0.742 (0.427 to 1.289)	0.685 (0.405 to 1.160)

*P<0.05, **P<0.01, ***P<0.001, controlled for age and SES.
Ref, reference; SES, socioeconomic status.
Bolded text indicates the result was significant.

risk factors for both boys and girls, while caring relationships proved to be protective factors for children. A boy's close relationship with his mother is a protective factor against emotional abuse, whereas paternal orphanhood is a significant risk factor. This finding is similar to previous research conducted in Swaziland that showed father absence was a significant predictor for emotional abuse.[10] These caregiver relationships were not significant predictors for girls despite the main perpetrators being mothers and aunts, in contrast to findings from other countries that highlight the importance of the mother–daughter relationship as either a key risk or protective factor for girls.

Not attending school is a risk factor for girls but not for boys. This emphasises how out-of-school girls are particularly vulnerable; increasing girls' access to and attendance at school may help protect them. In Zimbabwe, the rate of primary school completion is high, with 94% of those aged 18–24 years old and 80.8% of those aged 13–17 year old reporting they have completed primary school. This may suggest that secondary school attendance may be a more important protective factor.

Emotional abuse and associated consequences in Africa are under-researched and not well understood. This study highlights that childhood experiences of emotional abuse vary by place and relationship. While the data analysis provides powerful insights, there are still inconsistencies. We argue that using more accurate measures of emotional violence in particular is important given context specificity. In Zimbabwe, for example, mental health was assessed using the Shona Symptom Questionnaire, a locally validated 14-item indigenous screening tool for affective disorders. Measuring depression and anxiety disorders is important for understanding the impact of violence on children. Abuse can be a significant burden on the health and well-being of children and young adults—affecting their mental health. Without a shift away from a focus on individual problems to a focus on nurturing environments, progress in reducing violence affecting children will continue at a glacial pace.

While the risk factors identified in the NBSLEA in Zimbabwe are important, more qualitative research might explain the social, gender and cultural norms underpinning the acceptance and perpetuation of emotional and physical violence. The gendered nature of relationships, such as the unexpected finding of closeness of boys to their peers as a risk factor for physical abuse and the humiliation girls suffer from their mothers and aunts, needs to be unpacked to explain why children's assumed social support networks are failing them.

The study had several limitations. First, the sample size is not large enough to provide estimates at the provincial or district levels and only provides nationally representative estimates. The experiences of adolescents likely vary between regions. Second, the true prevalence of violence is likely underestimated due to various reasons, including recall bias, under-reporting out of fear, not thinking the violence is a problem and/or associated stigma.[17] Third, data were cross-sectional and do not allow for causal inferences or establishing of temporal order. Lastly, the study did not use any internationally validated measures of child abuse victimisation.

Epidemiological patterns of risk factors for abuse provide an evidence base for improved interventions aimed at identifying and addressing the risk factors and negative health impacts caused by emotional and physical abuse. Despite gaps in the current evidence base, this study confirms the importance of preventing both physical and emotional violence and encourages the government of Zimbabwe to apply the findings of its work when developing key policy and programme guidance, such as within the National Action Plan for Children particularly around the Orphans and Vulnerable Children programmes and policies. It also underscores the need to steer resources towards better measurement and understanding the role of emotional abuse and family-level variables in driving violence and the protective role of families and schools for prevention. Buffering children from negative experiences by

Table 5 Associations between experiencing physical violence in childhood and various health outcomes for female and male respondents

	No history of physical abuse prior to age 18		History of physical abuse prior to age 18		Crude OR (95% CI)		Adjusted OR (95% CI)	
Health conditions	**Weighted frequency % (n) Female**	**Weighted frequency % (n) Male**	**Weighted frequency % (n) Female**	**Weighted frequency % (n) Male**	**Female**	**Male**	**Female**	**Male**
Felt depressed in the last month	17.3 (182)	11.6 (156)	22.2 (236)	25.1 (320)	**1.574*** (1.166 to 2.125)**	**1.526*** (1.147 to 2.030)**	**1.780*** (1.300 to 2.438)**	**1.532*** (1.139 to 2.061)**
Suicidal ideation	5.4 (57)	1.7 (23)	8.3 (95)	3.4 (55)	**1.724** (1.139 to 2.610)**	1.236 (0.693 to 2.204)	**1.818*** (1.187 to 2.785)**	1.205 (0.682 to 2.129)
Attempted suicide	1.4 (15)	0.4 (7)	1.9 (21)	0.9 (16)	1.458 (0.664 to 3.198)	1.271 (0.479 to 3.373)	1.430 (0.608 to 3.360)	1.231 (0.474 to 3.200)
Alcohol use†	2.3 (25)	9.3 (122)	2.8 (30)	18.1 (207)	1.270 (0.662 to 2.437)	1.259 (0.925 to 1.716)	1.277 (0.667 to 2.445)	**1.597*** (1.125 to 2.269)**
Drug use (marijuana, pills, ecstasy or huffed/ sniffed any chemical such as petrol or glue)	0.2 (2)	2.7 (35)	0.3 (1)	8.5 (90)	1.553 (0.139 to 17.32)	**2.009*** (1.215 to 3.324)**	1.307 (0.150 to 11.40)	**2.382*** (1.401 to 4.048)**
Smoking	0.1 (1)	5.5 (76)	0.3 (4)	9.4 (112)	2.929 (0.313 to 27.41)	1.038 (0.711 to 1.514)	2.600 (0.294 to 22.98)	1.174 (0.767 to 1.798)
Taken an HIV test	24.1 (248)	8.9 (124)	22.7 (251)	13.9 (169)	0.946 (0.711 to 1.258)	0.942 (0.686 to 1.294)	1.087 (0.765 to 1.545)	1.045 (0.734 to 1.487)
Ever had a sexually transmitted disease	1.1 (15)	0.7 (13)	0.7 (10)	0.6 (9)	0.674 (0.262 to 1.737)	0.504 (0.200 to 1.273)	0.806 (0.283 to 2.292)	0.522 (0.213 to 1.282)
Vaginal or penile discharge	2.6 (33)	2 (33)	3.1 (37)	4.4 (55)	1.250 (0.701 to 2.231)	1.356 (0.769 to 2.389)	1.299 (0.706 to 2.391)	1.365 (0.749 to 2.485)
Genital sore/ulcer	3.6 (38)	1.2 (21)	4.4 (40)	5.2 (71)	1.272 (0.741 to 2.186)	**2.762*** (1.577 to 4.840)**	1.151 (0.661 to 2.007)	**2.888*** (1.642 to 5.079)**
Unwanted pregnancy or impregnation	1.9 (19)	1.1 (14)	3.9 (39)	1.3 (20)	**2.212** (1.109 to 4.413)**	0.696 (0.319 to 1.517)	**2.714*** (1.343 to 5.486)**	0.750 (0.330 to 1.703)

*P<0.10, **P<0.05, ***P<0.001, controlled for age and socioeconomic status.
†More than a few sips.
Bolded text indicates the result was significant.

Table 6 Associations between experiencing emotional violence in childhood and various health outcomes for male and female respondents

	No history of emotional abuse prior to age 18		History of emotional abuse prior to age 18		Crude OR (95% CI)		Adjusted OR (95% CI)	
Health conditions	**Weighted frequency % (n) Female**	**Weighted frequency % (n) Male**	**Weighted frequency % (n) Female**	**Weighted frequency % (n) Male**	**Female**	**Male**	**Female**	**Male**
Felt depressed in the last month	21.6 (229)	17 (219)	17.8 (189)	19.7 (257)	**3.070*** (2.229 to 4.227)**	**3.218*** (2.398 to 4.319)**	**3.560*** (2.409 to 5.262)**	**3.221*** (2.389 to 4.345)**
Suicidal ideation	5.5 (63)	1.4 (25)	8.2 (88)	3.7 (53)	**4.183*** (2.757 to 6.344)**	**4.949*** (2.751 to 8.903)**	**3.827*** (2.302 to 6.365)**	**5.248*** (2.848 to 9.670)**
Attempted suicide	1.1 (14)	0.2 (4)	2.2 (22)	1.1 (19)	**4.563*** (2.065 to 10.08)**	**9.513*** (2.644 to 34.23)**	**3.630** (1.353 to 9.741)**	**10.59*** (2.905 to 38.62)**
Alcohol use†	2.4 (29)	15.4 (182)	2.7 (26)	12 (147)	**2.649*** (1.387 to 5.059)**	**1.529*** (1.122 to 2.085)**	**2.672** (1.250 to 5.709)**	**1.450** (1.031 to 2.040)**
Drug use (marijuana, pills, ecstasy or huffed/sniffed any chemical such as petrol or glue)	0.1 (1)	6 (67)	0.4 (2)	5.1 (58)	9.275* (0.754 to 114.0)	**1.508* (0.951 to 2.392)**	5.423 (0.314 to 93.64)	**1.488* (0.941 to 2.354)**
Smoking	0.3 (3)	7.8 (102)	0.1 (2)	7.1 (86)	1.049 (0.154 to 7.158)	**1.744*** (1.206 to 2.523)**	1.878 (0.242 to 14.59)	**1.676** (1.116 to 2.517)**
Taken an HIV test	31.5 (337)	13.4 (173)	15.3 (162)	9.3 (120)	1.202 (0.881 to 1.640)	1.276 (0.923 to 1.763)	1.330 (0.857 to 2.064)	1.131 (0.801 to 1.598)
Ever had a sexually transmitted disease	1 (14)	0.9 (14)	0.7 (11)	0.4 (8)	1.615 (0.637 to 4.098)	0.799 (0.309 to 2.062)	1.751 (0.693 to 4.427)	0.750 (0.286 to 1.969)
Vaginal or penile discharge	3.1 (36)	3 (38)	2.7 (34)	3.4 (50)	**2.062** (1.158 to 3.673)**	**2.097** (1.150 to 3.824)**	**1.837* (0.955 to 3.532)**	**2.101** (1.175 to 3.756)**
Genital sore/ulcer	3.7 (38)	2.5 (38)	4.3 (40)	3.8 (54)	**2.909*** (1.689 to 5.011)**	**2.847*** (1.720 to 4.711)**	**1.849* (0.950 to 3.601)**	**2.779*** (1.652 to 4.674)**
Unwanted pregnancy or impregnation	3.6 (34)	1.5 (22)	2.2 (24)	0.8 (12)	1.405 (0.731 to 2.701)	0.926 (0.426 to 2.012)	1.457 (0.694 to 3.059)	0.854 (0.380 to 1.919)

*P<0.10, **P<0.05, ***P<0.001, controlled for age and socioeconomic status.
†More than a few sips.
Bolded text indicates the result was significant.

improving the quality of relationships they share in these settings is an important call for future action.

CONCLUSION

This study provides, for the first time, national population-based estimates that describe the nature and magnitude of physical and emotional violence during childhood in Zimbabwe. We have shown that emotional and physical violence in childhood is a significant child welfare and protection issue which needs to be addressed. The study finds evidence for high lifetime prevalence of physical violence, affecting a large proportion of the community. Emotional violence in childhood is also prevalent and bears the majority of the health consequences for children and young people. This has serious consequences for children, including increased risk of suffering from depression and suicide, or exhibiting health risk behaviours such as drinking, smoking and high-risk sexual behaviours.

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