HHS Public Access

Author manuscript

Violence Vict. Author manuscript; available in PMC 2019 May 06.

Published in final edited form as:

Violence Vict. 2019 April 01; 34(2): 229–242. doi:10.1891/0886-6708.VV-D-17-00182.

Effects of Poly-Victimization Before Age 18 on Health Outcomes in Young Kenyan Adults: Violence Against Children Survey

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Abstract

Children's exposure to poly-victimization, which is the experience of multiple types of victimization, has been found to be associated with negative health outcomes and risk behaviors. We examined the collective effects of childhood sexual, physical, and emotional violence on selected self-reported health outcomes among young Kenyan females and males using the Violence Against Children Survey (VACS). Overall, 76.2% of females and 79.8% of males were victims of sexual, physical, or emotional violence prior to age 18, and one-third (32.9% and 34.5%, respectively) experienced two or more types of violence. Poly-victimization was significantly associated with current feelings of anxiety, depression, and suicidal thoughts in females and males, as well as self-reported fair or poor health in males ($p < .05$) as compared to those who experienced no violence. The study data demonstrate an urgent need to reduce all types of violence against children, as well develop appropriate strategies for its prevention.

Keywords

violence; poly-victimization; mental health outcomes; global health; Kenya

Violence against children is pervasive, destructive, and costly. A recent study estimated that globally one billion children are exposed to violence every year (Hillis, Mercy, Amobi, &

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Disclosure. The authors have no relevant financial interest or affiliations with any commercial interests related to the subjects discussed within this article.

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Kress, 2016) and interpersonal violence is one of the top five leading causes of death for children (United Nations International Children's Fund [UNICEF], 2014). Violence against children has devastating consequences, from the impact on the individual child to the cumulative societal impact. Numerous studies have demonstrated the short and long-term health consequences of violence against children, including negative impact on mental health (Chen et al., 2010; Hillberg, Hamilton-Giachritsis, & Dixon, 2011; Kaplan, Pelcovitz, & Labruna, 1999), increased risk for HIV and other sexually transmitted infections (Chiang et al., 2015; Lewis, 2012; Richter et al., 2014), and increased risk for chronic diseases (Dube, Felitti, Dong, Giles, & Anda, 2003; Felitti et al., 1998). The consequences of violence are not restricted to victims alone; the global economic impact of violence against children is estimated to be as much as 7 trillion dollars per year (Pereznieto, Montes, Routier, & Langston, 2014).

The Violence Against Children Survey (VACS), a nationally representative survey, was conducted in Kenya in 2010 to measure sexual, physical, and emotional violence as well as risk and protective factors and consequences of violence. Concern regarding violence against children has been growing due to recent studies that highlight the immediate and long-term effects of the AIDS pandemic, community outbreaks of violence, and conflict in Kenya, including the growing number of orphans and vulnerable children, and a host of physical and psychological health outcomes (Fonck, Els, Kidula, Ndinya-Achola, & Temmerman, 2005; Lalor, 2004). The survey questionnaire was modeled after the Adverse Childhood Experiences Study (ACES), which has identified numerous associations between childhood abuse and negative health outcomes in adulthood (Anda et al., 2006; Chapman et al., 2004; Dube et al., 2001). Findings from the Kenya VACS highlight the burden of violence against children. Among 13–24 year old females and males, 32% and 18% had experienced sexual violence, 66% and 73% had experienced physical violence, and 26% and 32% had experienced emotional violence prior to age 18, respectively (Kenya National Bureau of Statistics, 2012). Only 21% of females and 24% of males did not experience any violence in childhood. Furthermore, the 2014 Kenya Demographic and Health Survey found that among 15–49 year old respondents, 45% and 14% of women and 44% and 6% of men experienced physical violence and sexual violence in their lifetime, respectively (Kenya National Bureau of Statistics, 2015). While these data suggest that children are often the most vulnerable populations and are most at risk for victimization, these national studies do not measure poly-victimization and its effect on health outcomes.

Poly-victimization is defined as "the experience of multiple victimizations" (Finkelhor, Ormrod, Turner, & Hamby, 2005) and in the present study specifically refers to multiple different types of violence victimization; several prior studies have found that it is associated with negative health outcomes (Finkelhor, Ormrod, & Turner, 2007; Le et al., 2016; Sabina & Straus, 2008; Simmons, Wijma, & Swahnberg, 2015; Turner, Shattuck, Finkelhor, & Hamby, 2017). For example, a study found that U.S. female children who had experienced physical, sexual, and emotional violence were four times more likely to report poor mental health than those who had only experienced one type of violence (Simmons et al., 2015). A recent meta-analysis found that 38.1% of children in low and middle income countries (eight were from Africa, four from South Asia, two from East Asia and Pacific region, one from South America, and one from Central America) experienced poly-victimization, which was

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associated with poor mental health, developmental problems, low cognitive development, increased health risk behaviors, and suicidal thoughts (Le et al., 2016). Poly-victimization was found to be associated with adverse health out-comes, including posttraumatic stress disorder, depression, and anxiety, which may be caused by higher levels of humiliation, shame, sadness, hopelessness, and low self-esteem experienced by poly-victimized children and adolescents (Turner et al., 2017). These findings suggest that experiencing more than one type of victimization may be associated with greater risk for more serious health consequences in children than any single type of victimization alone. However, previous studies were limited in that they had small sample sizes, were not population-based studies, may not be nationally representative, may not have examined poly-victimization as the primary aim of the study, or did not examine the multiple components of poly-victimization and its effect on various health outcomes such as depression, anxiety, suicide thoughts, and poor health.

The VACS is the largest survey on violence that is conducted among a representative sample of Kenyan children and young adults (Centers for Disease Control and Prevention [CDC] and Kenya National Bureau of Statistics, 2012). Because over 79% of females and 76% of males in Kenya experienced at least one type of violence in childhood, it is important to examine the prevalence of poly-victimization and its effects on young adults in Kenya so that strategies and programs geared toward prevention can be implemented. We defined poly-victimization as experiencing multiple different types of childhood violence, which aligns with how other violence researchers have defined poly-victimization since the concept was first introduced (Finkelhor, 2005). As such, we examined the collective effects of childhood sexual, physical, and emotional violence on self-reported health outcomes (anxiety, depression, suicidal thoughts, and fair/poor health) among Kenyan adults ages 19–24 years.

METHODS

The VACS methodology has been described in detail elsewhere (Nguyen, K., Kress, H., Villaveces, A., Massetti, G., 2018). Briefly, the VACS is a national population-based household survey of 13- to 24-year-old females and males and is designed to measure sexual, physical, and emotional violence as well as risk and protective factors and consequences of violence. The VACS core questionnaire was developed with input from scientific experts in the field of violence and was then reviewed and adapted for the Kenyan context by the stakeholders in-country. Further, the questionnaire was piloted in six communities and adjustments were made to the questionnaire after the pilot and prior to implementation. Data were collected in Kenya from October to December 2010 using a nationally representative cross-sectional household survey of 13-24 year old males and females. A total of 1,227 females and 1,456 males ages 13–24 years completed the survey for an overall response rate of 84.8% for females and 80.4% for males.

Data Collection

A trained interviewer, with the same gender as the respondent, conducted private face-to-face interviews in one of 13 languages: English, Borana, Kalenjin, Kikamba, Somali,

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Mijikenda, Meru, Masai, Luo, Luhya, Kiswahili, Kikuyo, and Kisii. Before being deployed in the field, the questionnaire was translated from English into each of the other languages, and then back-translated to English in order to assess consistency and make any necessary revisions. The VACS interview consists of two parts: the Household Questionnaire and the Individual Questionnaire. The Household Questionnaire is completed by the head of household and collects information on the social status of the household, such as house characteristics, house construction materials, and family member belongings. The Individual Questionnaire is completed by the selected respondent and includes questions about background characteristics, physical violence, emotional violence, sexual violence, potential health outcomes of violence, and risk and protective factors for violence.

Ethical Considerations

The standard VACS protocol involves obtaining informed consent from all participants (CDC and Kenya National Bureau of Statistics, 2012). For participants who are minors, informed consent was obtained from a parent or guardian and assent was obtained from respondents. The study was described to the parent or caregiver as a study on health and life experiences. The general description of the survey mentioned that the survey included questions about violence, but also mentioned other topics covered by the survey, such as family relationships and health behaviors. The topic of violence was not emphasized in the description in order to reduce the chance that perpetrators who are members of the household or community retaliate against participants if perpetrators believe they have been reported. If consent was given by a parent or guardian, the minor participant was asked to give assent to participate in a study on health and life experiences and was informed that the interview had to be conducted in a private place where the participant cannot be heard by anyone else. After a private space was identified, the interviewer read a full consent to the respondent that informed him or her that there would be questions about violence and other sensitive topics. If consent or assent was not provided at any time, the survey team left the household. The study was approved by the CDC’s Institutional Review Board and the Ethical Review Committee of the Kenya Medical Research Institute.

Measures

Respondent and Household Characteristics.—Descriptive variables included in the analyses were the respondent’s education status, whether the respondent was orphaned prior to age 18 (one or both parents), and whether the respondent has ever been married or lived with someone as if married. To assess socioeconomic status, respondents were asked about the number of meals consumed the day prior to the survey, whether the respondent has ever worked for money or goods, and whether the respondent believes the household has enough money for (a) basic items such as food, (b) important items such as clothing, school, and medical bills, and (c) extra items such as gifts and holidays.

Types of Childhood Violence.—Respondents were asked a series of questions related to sexual, physical, and emotional violence by any perpetrator and follow-up questions on the age of the respondent at each incident. Sexual violence was defined as having ever experienced (a) unwanted sexual touching (e.g., touching in a sexual way, kissing, grabbing, or fondling), (b) attempted unwanted sexual intercourse (perpetrator attempted intercourse

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but the act was not completed), (c) pressured intercourse (unwanted sex was completed through use of threats or nonphysical pressure), and (d) physically forced sex (unwanted intercourse completed through physical force). Physical violence was defined as being slapped, pushed, hit with a fist, kicked, or whipped, or threatened with a weapon such as a gun or knife. Emotional violence was defined as being called bad names, being made to feel unwanted, or being threatened with abandonment by a parent or caregiver. Respondents who indicated ever having experienced any of these types of violence prior to age 18 were categorized as having experienced childhood sexual, physical, or emotional violence. Each respondent received an ordinal score (0, 1, 2, or 3) depending on the total number of types of violence experienced.

Health Status.—Health status was measured through questions about mental health problems and a question about overall health. Mental health problems assessed included symptoms of anxiety ("How often during the last 30 days did you feel nervous, tense or worried?"), symptoms of depression ("During the past 30 days, how often did you feel so sad or unhappy that nothing could cheer you up?"), and suicidal thoughts ("Have you ever had thoughts of ending your life?"). For the anxiety and depression questions, those who responded "some," "most," or "all of the time" were categorized as having the indicated health outcome. Those responding "yes" to the suicidal ideation question (as opposed to "no" or "don't know") were categorized as having suicidal thoughts. Overall health status was determined from the following question: "In the last 30 days, would you say that in general your health is excellent, very good, good, fair, or poor?" Due to the low numbers of respondents reporting poor health, self-reported fair or poor health were combined into an overall fair/poor health category.

Data Analysis

Analyses were limited to female and male survey respondents ages 19–24 years to assess the relationship between exposure to violence in childhood and health status during early adulthood. A separate logistic regression model was used to evaluate the relationship between each measure of health status and the number of types of childhood violence experienced, controlling for whether respondents had enough money for basic items such as food and for orphan status. In the logistic regression analyses, the number of types of violence was analyzed as a classification variable (i.e., 1 type compared to 0 types, 2 types compared to 0 types, and 3 types compared to 0 types) and therefore ordinality was not assumed. The number of types of violence was also more strictly considered as a continuous variable, which assumes an equal influence with each unit change in the number of types of violence and thus ordinality as well. The results of this stricter trend model-based analysis generally conformed to the results of the initial analysis, and were therefore not included in this article. The analyses were performed using SAS 9.3 (SAS Institute Inc., Cary, North Carolina, USA). All inferential analyses were carried out using complex sample design procedures to properly incorporate the sample strata, clusters, and weights.

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RESULTS

Descriptive Characteristics

A total of 573 females (median age 22 years) and 552 males (median age 21 years) were included in the analyses. The most notable background differences between female and male survey respondents pertain to past/current marital status and paid employment history (Table 1).

Prevalence of Childhood Violence

Approximately 76% of female respondents and approximately 80% of male respondents reported experiencing one or more types of violence prior to age 18 (Table 2). Among females, 43.3% reported only one type of violence, 20.1% reported two types of violence, and 12.8% reported all three types of violence. Physical violence was the most common type of violence experienced by females, either alone or with other types (65.6%), followed by sexual violence (30.2%), and emotional violence (26.1%). Among males, 45.3% reported only one type of violence, 25.1% reported two types of violence, and 9.4% reported all three types of violence. Physical violence was the most common type of violence experienced by males (73.6%), followed by emotional violence (34.3%), and sexual violence (15.7%).

Health Status and Poly-Victimization

Over half of both female and male survey respondents reported feelings of anxiety, and similarly over half of females and males reported feelings of depression (Table 3). The percentages reporting suicidal thoughts were lower for both females (18.0%) and males (9.5%), as were the percentages reporting fair or poor health (22.1% and 17.8%, respectively).

After controlling for having enough money for basic items (e.g. food) and orphan status, experiencing multiple types of violence was significantly associated with negative health outcomes among both females and males (Table 4). Females who experienced two types of violence were more likely to report depression (odds ratio [*OR*] = 2.19,95% confidence interval [CI]: 1.10, 4.35) and suicidal thoughts (*OR* = 3.08, 95% CI: 1.36, 6.96) compared to those who did not experience any type of violence. Females experiencing all three types of violence were more likely than those without any victimization to report anxiety (*OR* = 3.19, 95% CI: 1.42, 7.20), depression (*OR* = 2.93, 95% CI: 1.22, 7.02), and suicidal thoughts (*OR* = 5.55, 95% CI: 1.66, 18.48) when compared against the same referent. For females, fair or poor health was not significantly associated with violence victimization. Females who experienced only one type of victimization were not found to be significantly more likely to report any of the negative health outcomes.

Males who experienced two types of violence were more likely to experience anxiety (*OR* = 2.16, 95% CI: 1.13, 4.13), suicidal thoughts (*OR* = 6.83, 95% CI: 1.54, 30.25), and fair/poor health (*OR* = 2.47,95% CI: 1.05, 5.78) compared to those who did not experience any type of violence. Experiencing all three types of violence was significantly associated with anxiety (*OR* = 5.20, 95% CI: 2.00, 13.51), depression (*OR* = 7.54, 95% CI: 2.84, 20.04), and suicidal thoughts (*OR* = 5.59, 95% CI: 1.05, 29.82), but was not significantly associated

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with self-reported fair or poor health. Males who experienced only one type of victimization were not found to be significantly more likely to report any of the negative health outcomes.

DISCUSSION

The VACS data indicate unacceptably high levels of violence experienced by children in a national population-based study in Kenya. Approximately three quarters of adults experienced some type of violence before age 18, with physical violence being the most commonly reported type. About one-third of both females and males experienced more than one type of violence before age 18, suggesting that poly-victimization is a concern in this population. Our results indicate that having different types of victimization is associated with anxiety, depression, and suicidal thoughts in young adults, after controlling for other factors such as having enough money for basic items and being an orphan. Among males, having two types of violence was significantly associated with fair/poor health; among females, the results were not significant. For both males and females, having one type of victimization was not significantly associated with any of the assessed health outcomes, which provides further evidence that having two or more types of victimizations is more detrimental to health than having only one type of victimization or no victimization.

In previous studies, researchers have found that mental health is a serious concern in Kenya. For example, one study found that the prevalence of psychiatric morbidity was 20% among children ages 5–15 years attending a primary healthcare facility in Nairobi (Kokonya et al., 2007). However, research, healthcare practitioners, and health services dedicated to mental health in Kenya are limited by available resources and a public perception that mental health services are not as important as other health services, as well as a lack of understanding of the causes of mental health disorders (Kokonya et al., 2007; Muga & Jenkins, 2008; Ndetei et al., 2008). This is the first national population-based study to find an association between childhood violence, poly-victimization, and negative mental health outcomes in Kenya.

Research globally has demonstrated that various types of victimization experiences among children and adolescents can lead to greater chronic stress and poor health outcomes (Finkelhor et al., 2007; Ford, Elhai, Connor, & Frueh, 2010). One possible explanation is the cumulative risk theory, which states that the higher the number of risk factors a person is exposed to, the higher the potential for a negative outcome (Appleyard, Egeland, Dulmen, & Alan Sroufe, 2005). Another theory is that the effects of poly-victimization are mediated by other factors, such as anger (Charak et al., 2016). Lastly, the most vulnerable children may be at risk for other types of adversity, such as poverty and the absence of nurturing relationships, in addition to poly-victimization (Jackson, Browne, & Joseph, 2016). Poly-victimization is associated with stress not only from the experiences of violence, but also from these other factors that amplify the stress that children experience, often resulting in increased depression, suicidal thoughts, and psychological distress (Charak et al., 2016; Finkelhor et al., 2005; Simmons et al., 2015; Turner et al., 2017). Although these studies were conducted in countries other than Kenya, associations between poly-victimization and health outcomes have been explored in numerous studies across the globe with similar findings reported, and given such geographic breadth it might be expected that the results are applicable to Kenya as well.

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Findings from the Kenya VACS report indicated that the most common perpetrators of sexual violence were boyfriends, girlfriends, or romantic partners and the most common perpetrators of physical violence were parents and teachers (Mwangi et al., 2015). This suggests that people closest to the child, such as a family member, teacher, or romantic partner, are most likely to be perpetrators of violence. Although children in Kenya who experience multiple types of violence are at higher risk for poor mental health outcomes than those who experienced no violence, protective factors may be associated with reduced risk and severity of mental distress resulting from childhood violence experiences. Resiliency factors, such as intelligence, temperament, parental attachment, external interests, coping skills, and relationships with peers have been shown to protect children against the effects of poly-victimization (Fergusson & Horwood, 2003; Gorman-Smith & Tolan, 2003; Thomas, Leicht, Hughes, Madigan, & Dowell, 2004).

Programs and policies can be implemented by key stakeholders in Kenya to help children and young adults who have experienced violence as well as to reduce the overall prevalence of violence against children. For example, the Parents/Families Matter! Program in Kenya is an intervention designed to promote positive relationships and effective communication between parents and children around issues such as sex, sexual risk reduction, HIV prevention, and physical, emotional, and sexual abuse (World Health Organization [WHO], 2016). An evaluation of the program demonstrated that more than 400,000 families attended the program sessions, and that parents and children both reported significant increases in parental monitoring and improved communications around sex and sex risk behaviors (WHO, 2016). The WHO released the INSPIRE technical package that provides seven strategies for preventing violence against children based on the best available scientific evidence (WHO, 2016). Some of these strategies include strengthening norms and values that support a nurturing and positive relationships for all children and youths, creating positive parent–child relationships, and improving access to good-quality health services for all children who need them—including for reporting violence—to reduce the long-term impact of violence.

In a country where there are growing concerns about violence against children due to the increasing number of orphans and vulnerable children, violence in the community, and the spread of AIDS and other sexually transmitted diseases, this study is relevant and important. These results are the first of its kind to measure childhood violence, poly-victimization, and health outcomes, in a national population-based study in Kenya, and demonstrates an urgent need to adopt and sustain evidence-based interventions to reduce childhood violence as well as to invest in response services for those who have been victimized. Given the high rates of childhood violence victimization in Kenya and the lack of evidence-based interventions that have been adapted and evaluated there, it should also be a priority to adapt and develop new interventions. Elucidating the risk factors for violence and specifically for poly-victimization is important for shaping global efforts to reduce all types of violence against children and adapting evidence-based prevention strategies to specific, local contexts. Researchers need to prioritize a better understanding of the impacts of childhood poly-victimization, which is a relatively new area of study, to inform the development of interventions that potentially impact health and other outcomes.

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Limitations

This study is subject to several limitations. First, as a household survey, VACS does not include data on children living outside of family care who may be most vulnerable to violence victimization. Second, the survey relied on self-reports and might underestimate the true prevalence of violence if some respondents did not remember or did not feel comfortable disclosing their experiences (Goodman-Brown, Edelstein, Goodman, Jones, & Gordon, 2003). Similarly, health outcomes were also self-reported, and may not reflect true diagnoses. However, the VACS core questionnaire was developed with input from scientific experts in the held of violence and was then reviewed and adapted for the Kenyan context by the stakeholders in-country. Further, the questionnaire was piloted in six communities and adjustments were made to the questionnaire after the pilot and prior to implementation. Third, due to the length of the survey questionnaire, the VACS data might not cover all possible types of sexual, physical, and emotional violence against children, so prevalence may be underestimated. Nonetheless, the questionnaire does cover the major forms of violence against children, thereby supporting work toward implementing appropriate strategies for treatment and prevention. Fourth, the VACS data are cross-sectional and as such the analyses reported here do not support conclusions about the causal relationship between violence and poor mental health outcomes. However, our study strived to include more recent health outcomes (last 30 days) so that exposures preceded the outcomes; however, our measure of suicide is ever having thoughts of suicide in a person's life; thus, we cannot determine if the exposure to violence occurred prior or after the thought of suicide.

CONCLUSIONS

Our findings show that approximately three quarters of young adult Kenyans ages 19–24 years have experienced childhood violence. Furthermore, poly-victimization is associated with increased risk for poor mental health in early adulthood, characterized in the present study by anxiety, depression, and thoughts of suicide. Improved surveillance as well as targeted interventions are essential to reducing violence against children in Kenya.

With the release of the Sustainable Development Goals, global leaders are committed to ending abuse, exploitation, trafficking, and all forms of violence against children by 2030 (SDG16.2), marking the first time that violence against children has been prioritized as a development goal (United Nations, 2015). The Kenya VACS has been shown to be effective in leading initatives to end violence against children through evidence-based policy and programs to prevent and respond to such violence.

Acknowledgments.

We would like to acknowledge the critical role of the child protection Technical Working Group for its commitment and leadership in the VACS; the technical expertise of the Kenya National Bureau of Statistics; the leadership of the Ministry of Gender; and UNICEF-Kenya for funding the data collection effort for the Kenya VACS.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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TABLE 1.

Estimated Percentages of 19–24 Year Old Females and Males With Selected Background Characteristics—Kenya Violence Against Children Survey (VACS), 2010

	Females (n = 573) %[a]	Males (n = 552) %[a]
Education Status		
Never attended school	6.2	4.7[b]
Completed less than primary	21.9	15.5
Completed primary or higher	71.9	79.9
Orphan Status		
Not an orphan	68.3	73.2
Single orphan	27.6	23.2
Double orphan	4.1	3.6
Food Sufficiency for the Day Prior to the Survey		
Reported eating no meals	0.0	0.5[b]
Reported eating one meal	5.8	9.3
Reported eating two meals	22.9	20.4
Reported eating three or more meals	71.3	69.8
Ever Been Married or Lived with Someone as if Married		
Yes	56.7	21.9
Ever Worked for Money or Goods		
Yes	48.6	69.0
Household Has Enough Money for:		
Basic items: food	66.4	61.5
Important items: clothing, school, medical needs	44.7	49.6
Extra items: gifts, holidays	18.7	16.3

Notes. Percentages might not sum to 100 due to rounding.

[a]Nationally representative weighted percentages.

[b]Estimated coefficient of variation (CV) exceeds 0.50, indicating statistical instability.

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TABLE 2.

Single and Multiple Types of Childhood Violence Victimization Reported by 19–24-Year-Old Females and Males—Kenya Violence Against Children Survey (VACS), 2010

		Females (n = 563)[a]		Males (n = 536)[a]	
Number of Types of Violence	**Types Reported**	***n***	**%[b]**	***n***	**%[b]**
1, 2, or 3	One or more of any type	429	76.2	427	79.8
1	Sexual only	25	4.9	4	0.4[c]
	Physical only	199	34.5	209	40.0
	Emotional only	21	3.9	26	4.9
	Total w/one type only	245	43.3	239	45.3
2[d]	Sexual + one other	75	12.5	32	5.9
	Physical + one other	111	18.3	130	24.2
	Emotional + one other	56	9.4	110	20.0
	Total w/two types	121	20.1	136	25.1
3	All three types	63	12.8	52	9.4

[a]Number of survey respondents answering questions concerning specific types of violence.

[b]Nationally representative weighted percentages.

[c]Estimated coefficient of variation (CV) exceeds 0.50, indicating statistical instability.

[d]Frequencies and percentages in this block do not represent mutually exclusive categories.

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TABLE 3.

Estimated Percentages of 19–24-Year-Old Females and Males Reporting Selected Health Outcomes—Kenya Violence Against Children Survey (VACS), 2010

	Females (*n* = 573) %[a]	**Males (*n* = 552)** %[a]
Health Outcome Reported		
Anxiety	57.0	53.8
Depression	61.2	59.6
Suicidal thoughts	18.0	9.5
Health fair/poor	22.1	17.8

[a]Nationally representative weighted percentages.

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TABLE 4.

Factors Associated With Selected Health Outcomes Reported by 19–24-Year-Old Females and Males—Kenya Violence Against Children Survey (VACS), 2010

	Health outcome							
	Anxiety		Depression		Suicidal Thoughts		Health Fair/Poor	
	Females	Males	Females	Males	Females	Males	Females	Males
Predictor	***OR* (95% CI)**	***OR* (95% CI)**	***OR* (95% CI)**	***OR* (95% CI)**	***OR* (95% CI)**	***OR* (95% CI)**	***OR* (95% CI)**	***OR* (95% CI)**
Enough Money								
Yes	0.77 (0.47, 1.27)	0.64 (0.38, 1.07)	**0.54 (0.32, 0.91)**	0.87 (0.54, 1.40)	0.99 (0.41, 2.38)	1.07 (0.45, 2.53)	**0.55 (0.33, 0.92)**	**0.48 (0.25, 0.93)**
No	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Orphaned								
Yes	1.35 (0.82, 2.23)	1.24 (0.65, 2.36)	1.15 (0.69, 1.92)	1.10 (0.67, 1.81)	1.53 (1.00, 2.34)	1.14 (0.53, 2.49)	1.12 (0.70, 1.79)	0.83 (0.42, 1.64)
No	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Number of Types of Violence								
None	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1 Type	0.83 (0.50, 1.36)	1.20 (0.64, 2.22)	0.93 (0.59, 1.48)	1.69 (0.88, 3.25)	1.27 (0.51, 3.17)	1.76 (0.36, 8.43)	1.40 (0.78, 2.50)	1.46 (0.69, 3.09)
2 Types	1.91 (0.93, 3.93)	**2.16 (1.13, 4.13)**	**2.19 (1.10, 4.35)**	1.95 (0.91, 4.17)	**3.08 (1.36, 6.96)**	**6.83 (1.54, 30.25)**	1.31 (0.50, 3.41)	**2.47 (1.05, 5.78)**
3 Types	**3.19 (1.42, 7.20)**	**5.20 (2.00, 13.51)**	**2.93 (1.22, 7.02)**	**7.54 (2.84, 20.04)**	**5.55 (1.66, 18.48)**	**5.59 (1.05, 29.82)**	1.56 (0.65, 3.76)	2.44 (0.87, 6.83)

Note: Estimated *OR*s shown in bold are statistically significant at $p < .05$.