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Parental Absence as an Adverse Childhood Experience among Young Adults in sub-Saharan Africa

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Abstract

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Background: Parental absence in childhood has been associated with multiple negative consequences, such as depression and anxiety in young adulthood.

Objective: To assess whether parental absence for six months or more in childhood is associated with poor mental health and substance use in young adulthood and whether parental absence accounts for additional variance beyond those explained by other adverse childhood experiences (ACEs) among youth in sub-Saharan Africa.

Participants and settings: We used combined Violence Against Children and Youth Survey (VACS) data from Cote d'Ivoire (2018), Lesotho (2018), Kenya (2019), Namibia (2019), and Mozambique (2019). Analyses were restricted to 18-24-year-olds ($n_f=7,699$; $n_m=2,482$).

Methods: We used logistic regression to examine sex-stratified relationships between parental absence in childhood (defined as biological mother or father being away for six months or more before age 18) and mental health problems and substance use and whether parental absence explained additional variance beyond those explained by other ACEs.

Results: In sub-Saharan Africa, parental absence in childhood was common (30.5% in females and 25.1% in males), significantly associated with poor mental health and substance use among females and males and accounted for additional variance beyond those explained by conventional ACEs. For example, after controlling for study covariates and other ACEs, females who experienced any parental absence had 1.52 (95% CI=1.02–2.26) higher odds of experiencing moderate/serious psychological distress compared with those who did not.

Conclusion: The observed association between parental absence and poor mental health suggests that this experience has significant adverse consequences and merits consideration as an ACE.

Keywords

Parental	absence;	parental	separati	on; ac	lverse	childhoo	od exper	riences;	mental	health	; sub-	Saharan
Africa												

Introduction:

Although no exact global estimates exist on the number of children who have been separated from their parents, it is believed that hundreds of millions of children are separated from their parents globally, and this number is increasing (Fellmeth et al., 2018). In the research literature, parental separation or absence has been broadly defined as short-term or extended absence of one or both parents for reasons such as parental death (orphanhood), divorce, migration, incarceration, abandonment, and evacuation (Bevan & Kumari, 2021; Lacey et al., 2018; Mao et al., 2020). In sub-Saharan Africa, children commonly live away from their parents, with studies estimating between 8% and 40% of children not living with one or both parents (Central Statistical Office [CSO] [Swaziland] & Macro International Inc, 2008; Gaydosh, 2015). Within the context of sub-Saharan Africa, reasons that account for parental absence include marriage-related absence such as union dissolution, union formation, nonmarital childbearing, parental or child migration, orphanhood, and abandonment (Beegle, de Weerdt, & Dercon, 2010; Beegle et al., 2010; Crespin-Boucaud & Hotte, 2021; Gaydosh, 2015; Raturi & Cebotari, 2023).

Several studies have found that the absence of one or both parents from the home during childhood could be detrimental to the long-term health and wellbeing of the child (Alastalo et al., 2012; Bohman et al., 2017; Chen et al., 2019; Fellmeth et al., 2018; Hailey Maier & Lachman, 2000; Mok et al., 2018; Schroeder et al., 2010; Waddoups et al., 2019). Parental absence in childhood has been associated with increased risk of poor mental health outcomes such as depression and anxiety (Chen et al., 2019; Fellmeth et al., 2018; Waddoups et al., 2019). For example, a Finnish study observed significantly poor mental health in adulthood among both females and males who were separated from their parents in childhood (Lindström & Rosvall, 2016). Similarly, parental absence in childhood has been associated with risk-taking behaviors such as substance use, alcohol consumption, and smoking (Fellmeth et al., 2018; Lacey et al., 2018), elevated risk for delinquency and violent offending (Mok et al., 2018; Schroeder et al., 2010), physical health problems (Hailey Maier & Lachman, 2000), chronic disease development such as Type 2 diabetes or cardiovascular disease, and even mortality (Alastalo et al., 2012). Important to this relationship are other factors such as gender, exposure dose, and developmental timing at which parental absence may occur (Brown & Jernigan, 2012; Yang et al., 2022).

Different pathways have been proposed to explain how parental absence may impact long-term health and risk-taking behaviors, including attachment theory, biological mechanisms, and associations with relational and economic disadvantage. Evidence from previous studies has demonstrated that parental absence in childhood could disrupt the process of establishing a secure bond between parent and child and change the attachment circuitry in the brain (Morgan et al., 2012; Sobolewski & Amato, 2007). Insecure attachments due to parental absence could lead to unhealthy coping mechanisms such as self-medication through smoking and alcohol use (Lacey et al., 2017).

Parental absence also results in stress that may alter the biological stress-regulation mechanism, leading to increased blood cortisol levels that could lead to a number of health issues (Bevan & Kumari, 2021; Sullivan, 2012). For example, Bevan and Kumari demonstrated that hair cortisol level among adults reporting childhood maternal absence for one year or longer was significantly higher compared to those who did not after controlling for important covariates (Bevan & Kumari, 2021). Liu and colleagues have also noted elevated inflammatory burden in adolescents who had been separated from parents in childhood which could have implications on long-term disease vulnerability (Liu et al., 2021).

Similarly, economic or relational pathways due to parental absence may affect long-term health and wellbeing. For example, parental absence due to separation or divorce may result in a decline in living standards, material availability, and parental support (Lacey et al., 2013; Lacey et al., 2014). Reduced provision of material needs and declines in standard of living due to parental absence have been linked to decreased school attendance, poor school performance, low educational attainment, and children dropping out of school to work (Lacey et al., 2014). In addition to changes in material availability, parental absence could lead to reduced quality in child-parent interactions and relationships that could impact mental health (Lacey et al., 2014). However, some evidence suggests that the economic benefit of parental absence due to a parent leaving for better economic opportunity that

improves the family economic standing may mitigate the negative effect of their absence (Zhao & Egger, 2020). Similarly, children being sent away to boarding school is common in several sub-Saharan African countries and being sent to boarding schools has been found to improve academic achievements (Maphoso & Mahlo, 2014). Research thus suggests that parental absence due to work and improved educational benefit of children in boarding schools results in distinct developmental pathways; these types of absences may not have similar effects to other types of absence and should be treated separately in research on parental absence.

The associations between parental absence in childhood – including orphanhood – and mental and physical health outcomes, parental absence seems to contribute to long-term negative health outcomes that have been observed in studies of adverse childhood experiences (ACEs). ACEs are potentially traumatic events such as experiencing violence or neglect, witnessing violence in the home or community, or orphanhood (Centers for Disease Control and Prevention, 2019). The definition of parental absence in the literature has consistently included orphanhood, which has been established as an ACE by previous studies, including studies that used Violence Against Children and Youth Survey (VACS) data (Cheval et al., 2019; Mian et al., 2022; VanderEnde et al., 2018). While it is recognized that orphanhood is a form of parental absence or separation and defined as an ACE, the present study aimed to examine other forms of parental absence in childhood in lowand middle-income countries (LMICs). In addition, informed by the HIV epidemic that resulted in high adult mortality and its attendant orphanhood in sub-Saharan Africa, several publications have examined orphanhood and their relationships with some health outcomes in the region (Andrews et al., 2006; Beegle et al., 2010; Gaydosh, 2015), but other types of parental absence have been less studied.

To the best of our knowledge, no previous studies used data from sub-Saharan Africa to evaluate childhood parental absence – independent of orphanhood – as an ACE. VACS data provide a unique opportunity to examine whether parental absence independent of orphanhood has health consequences similar to established ACEs. VACS questionnaires measure several ACE types as well as maternal and paternal absence for six months or more in childhood. These provide a valuable data source to assess the relevance of parental absence as an ACE. The association between parental absence and wellbeing and health of young adults in sub-Saharan Africa has not been previously examined. To date, most ACEs studies have focused on populations in high-income and developed Western countries. The form of parental absence most studied in high-income countries has primarily been exposure to parental divorce, incarceration, or bereavement; these forms of parental absence are associated with several negative health, behavioral, and social outcomes later in life (Jones et al., 2022; Tebeka et al., 2016). To date, all VACS data have been collected from LMICs. Therefore, using VACS data to examine parental absence as an ACE and its association with selected mental health problems and substance use will fill an important gap in the ACEs literature.

The objectives of this study were to examine (1) the associations between parental absence for six months or more, ACEs, mental health problems, and substance use among young adults in sub-Saharan Africa, (2) whether parental absence and other ACEs are

independently associated with mental health outcomes and substance use, (3) and if parental absence explains additional variance above and beyond those explained by other ACEs. For the mental health outcomes, we focused on psychological distress and suicidal/self-harm behaviors. We hypothesize that parental absence in childhood is associated with poor mental health outcomes and that parental absence explains additional variance beyond those explained by other ACEs.

Methods:

We used VACS data from five LMICs in Sub-Saharan Africa: Lesotho, Cote d'Ivoire, Kenya, Namibia, and Mozambique (Instituto Nacional de Saúde [INS] et al., 2022; Ministry of Gender Equality Poverty Eradication and Social Welfare et al., 2020; Ministry of Labour and Social Protection of Kenya & Department of Children's Services, 2019; Ministry of Social Development of Lesotho et al., 2020; Ministry of Women Family and Children of Côte d'Ivoire et al., 2019). Data collection in Lesotho and Cote d'Ivoire occurred in 2018 while that of Kenya, Namibia, and Mozambique occurred in 2019. These five countries were selected due to data collection years being close in time (2018 and 2019) to ensure differences in violence in the pooled estimates was not due to changes in overall prevalence of violence over time. Furthermore, these countries are all in sub-Saharan African region, and all have experienced persistent generalized HIV epidemics that reflect similar underlying social and structures of HIV and violence. VACS are nationally representative, cross-sectional household surveys of persons aged 13-24 years. VACS use a three-stage clustered sample selection approach, with selection of primary sampling units as the first stage, selection of eligible households as the second stage, and selection of eligible respondents as the third stage. Detailed information about sampling, methodology, and survey implementation including interviewer training can be found elsewhere (Centers for Disease Control and Prevention, 2017; Chiang et al., 2016; Nguyen et al., 2019). Sampling design, inclusion, and exclusion criteria for VACS in each of the countries included in this study have been summarized by Amene and colleagues (Amene et al., 2023) and can be found in each country's final VACS report. In summary, protocols and processes for protocol adaptation, methodology, criteria, sampling, use of multi-stage approach for participant selection, graduated informed consent, and intensive training of field staff, and questionnaires were consistent for VACS in each of the countries included in this study (Chiang et al., 2016; Nguyen et al., 2019). Following the data collection process, the VACS data were weighted to represent the population of 13–24-year-olds in each country using a three-step weighting approach: calculation of base weight, adjustment for unequal non-response, and calibration of post-stratification weight.

The VACS data included in this study used comparable methods of data collection. Each used electronic data collection forms that were programmed into tablets or netbooks for data collection. The use of electronic data collection allowed for the inclusion and navigation of complex skip patterns without compromising data quality. The questions that were combined for this multi-country pooled analysis were worded similarly and were also placed at similar locations in the questionnaire. Study participants were not compensated for participation.

Measures

Parental absence was defined as answering yes to the question "Has your biological mother/father ever lived away from you for 6 months or more before you were 18 years old?". These questions were asked separately about mother and father. Those who answered "yes" received a follow-up question about the reason for their mothers/fathers living away, which included: (1) child left or was sent away for work, (2) child left or was sent away for school, (3) mother/father left for work/study, (4) mother/father remarried, (5) child got married, (6) mother/father got divorced/separated, (7) child was abandoned, and (8) other. Previous studies suggest that when a parent is absent due to work, the economic benefit to the family may mitigate the negative impact of their absence (Zhao & Egger, 2020). Similarly, children being sent away to boarding school is common in several sub-Saharan African countries and staying in boarding schools has been found to improve academic achievements (Maphoso & Mahlo, 2014). Because of the potential positive impact of a parent being away for work/study or the positive impact for a child to pursue education by being sent away for school found in the literature, an a-priori decision was made to exclude these reasons from the current definition of parental absence. We defined three parental absence variables based on the high potential for negative consequences: (1) child left/sent away for work; (2) parent remarried/got divorced/separated; and (3) child got married/abandoned/other. Each of these three variables was defined for maternal and paternal absence, thus making this a total of six variables. For the rest of this study, any mention of parental absence refers to these six variables only. Any parental absence was defined as endorsing maternal or paternal absence for any of the six items, any maternal absence was defined as endorsing any of the three reasons a mother was away, and any paternal absence was defined as endorsing any of the three reasons a father was away.

Other ACEs.—Six ACE types which are part of the broader VACS questionnaire were included in this study. The selected ACE types have been used in previous ACE studies using VACS data (Amene et al., 2023; Denhard et al., 2023; VanderEnde et al., 2018). ACE types were measured using questions drawn from the ISPCAN Child Abuse Screening Tool-Retrospective (ICAST-R) and the Juvenile Victimization Questionnaire (JVQ) (Dunne et al., 2009; Finkelhor et al., 2005). Each of the ACE items were coded to only include experiences before age 18 (childhood). Childhood physical violence included experiences such as being slapped, pushed, shoved, shaken, or intentionally thrown something at; punched, kicked, whipped, or beaten with an object; choked, smothered, attempted to drown or burnt; or used or threatened with a knife, gun or other weapons. Childhood sexual violence included experiencing unwanted sexual touching, unwanted attempted sex, physically forced sex, or coerced or pressured sex. Childhood emotional violence included being told by a parent, adult caregiver, or other adult relative that they were not loved, did not deserve to be loved, wished they were dead or never been born, or being ridiculed or put down. Witnessing interparental violence in childhood was defined as seeing or hearing father/stepfather/mother/stepmother being hit, punched, kicked, or beaten by the other parent/stepparent. Witnessing violence in the community in childhood was defined as witnessing anyone get attacked outside of the home and family environment. Orphanhood was defined as death of one or both parents before age 18. As noted earlier, in this study, orphanhood was considered separately from parental absence due to its consideration as

an ACE throughout the literature (Cheval et al., 2019; Mian et al., 2022; VanderEnde et al., 2018). To generate an ACES score, an integer count of these six ACEs was created by summing the total number reported by respondents. The score was dichotomized to define those who reported no ACE (0) versus those who experienced one or more ACEs.

Mental health problems.—Two mental health-related outcomes were assessed in this study. (1) Moderate/serious psychological distress was assessed using the Kessler (K-6) scale (Kessler et al., 2002), with scores above 5 being considered as having experienced moderate/serious psychological distress and scores below 5 being considered as no/low psychological distress (Prochaska et al., 2012). The internal consistency of the K6 scale in this study was good (α =0.84). (2) Suicidal/self-harm behaviors included responding 'yes' to having any lifetime suicidal ideation, suicide attempt, or self-harm behaviors.

Substance use included responding 'yes' to one or more of the following: binge drinking (drinking four or more or five or more drinks of alcohol in a row for females and males, respectively), using tobacco, or other drugs in the past 30 days.

Demographic characteristics.—Educational attainment and food insecurity were included as covariates in analyses. Educational attainment was categorized into completed primary school or less and completed secondary school or more. Food insecurity (used as a proxy for household socio-economic status) was defined as the household not having enough money for food.

Statistical analyses

Due to the multi-stage sampling design of the VACS, all descriptive and logistic regression analyses included country-specific survey weight, strata, and cluster variables. All analyses were restricted to those aged 18-24 years old and those with valid response to any of the parental absence variables. Estimates from the pooled multi-country data were achieved by using the estimated sample weight for each observation from each VACS country. There were very few data missing for any of the variables included in the current study (less than 5%). Given the low levels of missing data, we used pairwise deletion approach to only include observations with complete data for any given analyses, however, missing data were used in the estimation of the variance by using the 'NOMCAR' option in SAS. Descriptive statistics examined the weighted prevalence of any parental absence (both overall and for each parent and by reason) as well as demographics, mental health problems, and ACEs. Differences between groups in the descriptive statistics were assessed using Pearson chisquare test. Logistic regression analyses assessed the relationship between parental absence and the three types of mental health problems (moderate/serious psychological distress, suicidal/self-harm behaviors, and substance use). Each logistic regression model included a fixed effect for country. Adjusted logistic regression models controlled for educational attainment and food insecurity (used as a proxy for socio-economic status) based on existing literature (VanderEnde et al., 2018; Walsh et al., 2019). For models where parental absence was the main predictor, fully adjusted models controlled for ACEs in addition to educational attainment and food insecurity. Due to sample size limitations, the relationships between individual reasons for parental absence and the mental health problems were not estimated;

only the relationship with any parental, any maternal, and any paternal absences were estimated. All descriptive and logistic regression analyses were conducted in SAS v 9.4. P-value of <0.05 was used to indicate statistical significance.

Results

Across the five countries, the total analytic sample for this study was 10,181 (7,699 females and 2,482 males). Any parental absence was common among both females (30.5%) and males (25.1%) but significantly higher in females compared to males (p=0.0144; Table 1). Significantly more females than males experienced any maternal absence (21.9% in females and 17.3% in males, p=0.0292) or any paternal absence (25.2% in females and 18.8% in males, p=0.0017). For females, the prevalence of the various reasons for maternal or paternal absence ranged between 2.9% (for child leaving or being sent away from mother for work) and 12.4% (for child getting married or abandoned/other reasons from mother). The prevalence of the reasons for maternal or paternal absence among males ranged between 4.2% (for child left/sent away for work from mother) and 7.9% (father remarried/got divorced/separated) in males. Maternal or paternal absence due to child getting married, abandoned, or other reasons were significantly higher in females than in males (Table 1).

Associations between parental absence, ACEs, and demographic characteristics, mental health problems, and substance use

Among both females and males, the prevalence of any parental absence by the various demographic characteristics ranged between 19.5% (for males who did not experience any food insecurity) and 39.7% (for females who experienced food insecurity), whereas the prevalence by mental health outcomes, substance use, and ACEs ranged between 22.3% (for males who experienced physical violence) and 47.1% (for females who experienced emotional violence; Table 2). For both females and males, experiencing any parental absence was significantly higher among those who had primary education or less, those who experienced food insecurity, those who experienced moderate/serious psychological distress, those who had experienced sexual violence, those who had experienced emotional violence, and those who had experienced three or more ACEs than their counterparts who did not experience those factors (Table 2). Additionally, among females, experiencing parental absence was significantly higher among those who had suicidal/ self-harm behaviors (36.6% vs. 29.1%, p=0.0241) than those who did not and among those who witnessed community violence than those who did not (33.1% vs. 27.5%, p=0.0294). Among males, parental absence was higher among those who used substances than those who did not (32.0% vs. 23.1%, p=0.0145) and among those who witnessed interparental violence than those who did not (31.5% vs. 23.2%, p=0.0487).

Results of adjusted analyses on association between parental absence, ACEs, and mental health problems and substance use

Table 3 presents the results from the logistic regression analyses of the association between parental absence, ACEs, and the three study outcomes. Among females, any parental absence (adjusted odds ratio [aOR]=1.64 [95% CI=1.11–2.43]), any maternal absence (aOR=1.94 [95% CI=1.20–3.14]), and ACEs (aOR=1.96 [95% CI=1.30–2.95]) were each

associated with moderate/serious psychological distress, with both any parental absence and any maternal absence remaining significant after controlling for ACEs in addition to educational attainment and food insecurity in the same model. In females, any paternal absence (aOR=1.67 [95% CI=1.02–2.74]) was associated with suicidal/self-harm behaviors. In females, any parental absence, any maternal absence, and any paternal absence, were not significantly associated with substance use.

In males, any parental absence (aOR=2.41 [95% CI=1.26–4.61]) and any maternal absence (aOR=3.37 [95% CI=1.64–6.96]) were associated with moderate to serious psychological distress and they remained significant after controlling for ACEs. Among males, after controlling for ACEs, any parental absence was significantly associated with suicidal/self-harm behaviors (aOR=2.22 [95% CI=1.09–4.55]) and substance use (aOR=1.60 [95% CI=1.09–2.34]). Similarly, any maternal absence was significantly associated with suicidal/self-harm behaviors (aOR=3.01 [95% CI=1.39–6.53]) and substance use (aOR=1.57 [95% CI=1.06–2.32]) after controlling for ACEs. However, in males, any paternal absence was not significantly associated with any of the three mental health problems examined.

Discussion

Since the publication of the original ACE study findings in the U.S. (Dube et al., 2003; Felitti et al., 1998), childhood adversity definitions have been expanded. Compared to high-income countries, where parental absence is primarily measured by growing up with divorced or separated parents, LMICs present a vastly different context through which to understand parental absence. Using pooled nationally representative data from young adults in five LMICS in sub-Saharan Africa, the findings of this study provide preliminary evidence that can inform whether parental absence during childhood can be considered an ACE. This is evident by the high prevalence of parental absence and the observed associations with negative health outcomes.

We found that parental absence was common among both females and males in sub-Saharan Africa, with significantly more females than males experiencing parental absence. We also found that parental absence was significantly associated with mental health problems and substance use among females and males after controlling for other ACEs as well as demographic characteristics. These findings are consistent with those from systematic reviews and meta-analyses that found that parental absence, including orphanhood in childhood, was associated with drug use disorders, increased risk of mood disorders, and psychosis (Ayerbe et al., 2020; Sands et al., 2017). Our study also found that the context within which parental absence occurred was also important to the relationship with mental health problems and substance use. In this study, we observed that among both females and males, maternal absence was significantly associated with all outcomes assessed — mental health problems and substance use. However, other than a significant association between paternal absence and suicidal/ self-harm behaviors in females, no significant association was observed between paternal absence and moderate/serious psychological distress, or substance use in females or in males.

The null findings observed between paternal absence and most of the mental health outcomes or substance use was in contrast with findings from a systematic review and meta-analysis that noted that paternal absence during childhood was associated with mental health outcomes and other social-emotional problems later in life (McLanahan et al., 2013). Notably, most of the studies were from Western high-income countries. Culpin and colleagues (2013) also found paternal absence in early childhood to be associated with mental health outcomes during adolescence among a United Kingdom cohort, although the authors noted that the relationship was not significant when father left the child after age five (Culpin et al., 2013). However, within the context of African society and the gendered roles of mother and father in several countries, the finding that paternal absence was not associated with most of the outcomes assessed in this study may not be unexpected. The expectation of fathers in sub-Saharan Africa is to be the breadwinners based on cultural norms and therefore, it is not unusual for them to be away for greater periods of time to provide for the family (Lesch & Grötzinger, 2022; Olawoye et al., 2004). Mothers, on the other hand, tend to be the ones expected to provide care for the child, thus, it was not a surprise that when mothers are absent in childhood, children tend to be negatively impacted by their absence (Doucet, 2020; Madhavan et al., 2008).

Finally, parental absence accounted for additional unique variance in these models above and beyond those explained by other ACEs. This is important because it suggests that other forms of parental absence besides orphanhood and other commonly recognized ACEs seems to have potentially harmful effect on the mental health of children (Chandra et al., 2010; Lee et al., 2013) and may need to be conceptualized as ACEs. The findings also underscore the importance of greater investments in evidence-based programs that supports families to build healthy parent-child relationships and promote resilience (WHO, 2022; Kennison & Spooner, 2023) to help mitigate against the long-term consequence of parental absence when they occur.

One major strength of this study is the use of VACS data from five LMICs from sub-Saharan Africa to examine the relationship between parental absence, ACEs, and mental health problems. Most previous studies on ACEs have come from high-income countries, most notably the United States and the United Kingdom. Pooled data from the five countries provided a large sample size to examine the various associations. Additionally, VACS data were collected from young adults, thus addressing one important limitation in the ACE literature where childhood experiences are usually collected from much older adults, when the ability to recall events that happened decades ago is usually hampered.

Despite the strengths of the study, the results will need to be interpreted within the context of some limitations. First, the VACS relies on self-report of the events which could have limitations of recall bias. Test-retest reliability is important when you cannot establish validity through substantiated cases of maltreatment or do not have a gold standard by which to validate your measure, especially for a measure that would not change over time. However, the inclusion of young adult participants limits the potential for recall bias by reducing the amount of elapsed time between any childhood adversity and survey responses. Second, the VACS is a cross-sectional survey, therefore, only associations could be established but not causation. Third, there may be other ACEs that respondents were

exposed to but were not measured in this study. Therefore, this study may be omitting other important ACEs, such as household dysfunction. Fourth, we are limited in our measurement of parental absence as the current questionnaire does not evaluate duration of absence (beyond a 6-month cut-off), multiple absences, or timing which are all important to this relationship. It is possible parents and children were reunited after separation, may have experienced variation in duration of absence, or may have been separated multiple times, but we could not account for those situations in our analyses. In addition, for two-parentheaded households, endorsement of parental absence may overlap, which has implications on the relationship observed between mental health problems, substance use, and parental absences. Lastly, ACEs were dichotomized, therefore, we did not access dose response of ACEs for the outcomes accessed.

Conclusion

Parental absence was common among young female and male youth aged 18–24 in five in Sub-Saharan African countries and was associated with mental health outcomes and substance use in both females and males. These findings have important implications for measurement of ACEs. Parental absence may need to be considered as a childhood adversity especially within the LMICs in sub-Saharan African countries that were included in this study. Gaining an understanding of the consequences of different forms of parental absence will provide us important context and knowledge for the development of interventions and prevention programs to promote these children's well-being. Primary prevention of ACEs and promoting resilience of young people exposed to ACEs and parental absence may require efforts to promote family connectedness and family strengthening that support resilience and mental well-being among youth in sub-Saharan Africa.

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Table 1.

Parental absence for six months or more in childhood and reasons for absence among male and female youth aged 18–24 years, Cote d'Ivoire, Kenya, Lesotho, Mozambique, and Namibia Violence Against Children and Youth Surveys (VACS).

	Femal	es	Males		
	n ¹	Weighted prevalence (%, 95% CI)	n ¹	Weighted prevalence (%, 95% CI)	p-value
Any parental absence	7699	30.5 (27.9–33.0)	2482	25.1 (21.9–28.3)	0.0144
Any maternal absence	6960	21.9 (19.8–24.1)	2245	17.3 (14.2–20.4)	0.0292
Reasons for maternal absence					
Child left/sent away for work	6960	2.9 (2.0–3.8)	2245	4.2 (2.6–5.8)	0.1746
Mother remarried/got divorced/separated	6960	6.6 (5.2–8.1)	2245	5.5 (4.2–6.8)	0.3178
Child got married/abandoned/other	6960	12.4 (10.7–14.1)	2245	7.6 (5.2–9.9)	0.0054
Any paternal absence	5506	25.2 (22.6–27.8)	1874	18.8 (15.9–21.6)	0.0017
Reasons for paternal absence					
Child left/sent away for work	5506	4.0 (2.3–5.6)	1874	4.7 (3.3–6.2)	0.5086
Father remarried/got divorced/separated	5506	9.7 (7.8–11.6)	1874	7.9 (5.9–9.8)	0.2271
Child got married/abandoned/other	5506	11.5 (9.8–13.2)	1874	6.2 (4.7–7.6)	<0.001

 n^1 =unweighted sample. CI = Confidence interval. Bold typeface denotes statistically significant differences at the p < 0.05 level. All analyses accounted for the complex survey design of the VACS.

Table 2.

Parental absence for six months or more in childhood by demographic characteristics, mental health problems, and other adverse childhood experiences (ACEs) among male and female youth aged 18–24, Cote d'Ivoire, Kenya, Lesotho, Mozambique, and Namibia Violence Against Children and Youth Surveys (VACS).

	Femal	es		Males			
	n ¹ % (95% CI)		p-value	n ¹	% (95% CI)	p-value	
Demographic Characteristics							
Age							
18–21	4788	30.1 (26.833.3)	0.6844	1564	25.7 (21.6–29.8)	0.3604	
22–24	2911	31.1 (27.135.1)		918	24.0 (19.7–28.3)		
Education							
Primary school or less	2044	39.1 (35.343.0)	<0.001	782	33.2 (28.1–38.3)	< 0.001	
Secondary school or higher	5642	23.8 (20.127.4)		1700	21.0 (17.3–24.6)		
Experienced food Insecurity							
Yes	4309	39.7 (35.643.7)	<0.001	1342	33.2 (27.8–38.6)	< 0.001	
No	3275	25.2 (21.828.5)		1117	19.5 (15.7–23.3)		
Mental Health Problems/substance use							
Moderate/Serious Psychological Distress							
Yes	434	43.5 (35.051.9)	<0.001	98	41.9 (26.1–57.7)	0.0140	
No	7251	29.3 (26.632.0)		2380	24.2 (21.0–27.4)		
Suicidal/Self-harm behaviors							
Yes	1074	36.6 (30.243.0)	0.0241	251	30.2 (20.2–40.2)	0.2459	
No	6622	29.1 (26.431.8)		2230	24.2 (20.9–27.6)		
Substance use							
Yes	806	25.4 (17.633.2)	0.2418	666	32.0 (25.0–39.1)	0.0145	
No	6873	30.9 (28.133.7)		1806	23.1 (19.7–26.5)		
Adverse Childhood Experiences (ACEs)							
Physical violence							
Yes	2326	32.8 (28.936.6)	0.1892	1185	27.8 (23.1–32.6)	0.0301	
No	5353	29.2 (25.732.7)		1283	22.3 (18.9–25.7)		
Sexual violence							
Yes	956	43.1 (36.050.2)	<0.001	184	43.6 (27.6–59.5)	0.0042	
No	6738	28.0 (25.430.6)		2297	23.4 (20.4–26.5)		
Emotional violence							
Yes	723	47.1 (38.955.2)	<0.001	207	45.0 (30.2–59.7)	<0.001	
No	6861	28.7 (26.031.4)		2226	23.5 (20.6–26.3)		
Witnessed interparental violence							
Yes	1853	31.8 (27.036.6)	0.1929	498	31.5 (23.4–39.7)	0.0487	
No	5741	28.3 (25.431.2)		1942	23.2 (20–26.5)		
Witnessed community violence							

Annor et al.

Females Males n^1 % (95% CI) p-value n^1 % (95% CI) p-value 2531 25.4 (21.4-29.4) 0.7556 Yes 33.1 (28.937.4) 0.0294 1231 5105 1221 24.3 (18.6-30) No 27.5 (24.430.6) Orphan Yes 2069 28.2 (23.233.2) 0.4428 618 24.9 (18.4-31.3) 0.9796 5154 No 30.6 (27.533.7) 1770 24.8 (21.6-28) ACE exposure 1 None 1980 25.3 (20.330.3) 0.1118428 22.3 (14.8-29.8) 0.4913 3781 1-227.2 (23.630.7) 0.2000 22.3 (18.4-26.2) 0.0464 1380 3 or more 1244 38.5 (32.844.3) < 0.001 489 33.6 (26.6-40.5) < 0.001

Page 18

Note: ACEs include childhood physical violence, childhood sexual violence, childhood emotional violence, witnessed interparental violence in childhood, witnessed violence in the community in childhood, and being an orphan.

 n^1 =unweighted sample. CI = Confidence interval. Bold typeface denotes statistically significant differences at the p < 0.05 level. All analyses accounted for the complex survey design of the VACS.

¹ACE exposure p-value represents the comparison of the prevalence of any parental absence at each level of ACEs with the prevalence of any parental absence among those who did not experience ACEs at that level (estimates not shown on table).

Table 3.

Associations between parental absence, adverse childhood experiences (ACEs), and mental health problems among male and female youth aged 18–24, Cote d'Ivoire, Kenya, Lesotho, Mozambique, and Namibia Violence Against Children and Youth Surveys (VACS).

		Females						
		Model 1	Model 2	Model 3	Model 4			
		aOR, 95% CI	aOR, 95% CI	aOR, 95% CI	aOR, 95% CI			
Moderate/serious psychological	Any parental absence	1.64 (1.11–2.43)	1.52 (1.02–2.26)					
distress	Any maternal absence	1.94 (1.20-3.14)		1.65 (1.02-2.68)				
	Any paternal absence	1.39 (0.93–2.08)			1.39 (0.9–2.14)			
	ACEs	1.96 (1.3-2.95)	2.00 (1.32–3.01)	2.03 (1.35–3.05)	1.86 (1.21–2.86)			
Suicidal behaviors/ self-harm	Any parental absence	1.40 (1.01-1.93)	1.39 (0.96–2.02)					
	Any maternal absence	1.23 (0.86–1.75)		1.07 (0.72–1.58)				
	Any paternal absence	1.51 (0.97–2.36)			1.67 (1.02–2.74)			
	ACEs	1.54 (1.01–2.34)	1.54 (1.01–2.34)	1.53 (1.00–2.35)	1.41 (0.90–2.21)			
Substance use	Any parental absence	0.67 (0.43–1.04)	0.67 (0.43–1.05)					
	Any maternal absence	0.72 (0.45–1.14)		0.71 (0.45–1.12)				
	Any paternal absence	0.92 (0.59–1.45)			0.94 (0.59–1.51)			
	ACEs	1.35 (0.79–2.31)	1.38 (0.8–2.39)	1.51 (0.85–2.69)	1.19 (0.70–2.05)			
		Males						
Moderate/ serious psychological	Any parental absence	2.41 (1.26-4.61)	2.22 (1.09–4.55)					
distress	Any maternal absence	3.37 (1.64–6.96)		3.01 (1.39-6.53)				
	Any paternal absence	1.41 (0.72–2.76)			1.33 (0.64–2.79)			
	ACEs	4.68 (2.38–9.17)	4.2 (2.15–8.23)	4.09 (2.07–8.08)	3.89 (1.79–8.43)			
Suicidal behaviors/ self-harm	Any parental absence	1.62 (0.9–2.92)	1.67 (0.88–3.18)					
	Any maternal absence	1.88 (0.86–4.11)		1.90 (0.80-4.53)				
	Any paternal absence	1.03 (0.65–1.65)			0.99 (0.60–1.63)			
	ACEs	3.3 (1.79–6.06)	3.35 (1.83–6.16)	3.60 (1.96-6.62)	3.89 (2.13–7.13)			
Substance use	Any parental absence	1.52 (1.07–2.16)	1.60 (1.09-2.34)					
	Any maternal absence	1.56 (1.09-2.22)		1.57 (1.06–2.32)				
	Any paternal absence	1.31 (0.85–2.03)			1.38 (0.85–2.22)			
	ACEs	2.19 (1.40–3.42)	2.27 (1.43–3.60)	2.36 (1.47-3.80)	2.38 (1.48–3.83)			

CI = Confidence interval. aOR = Adjusted odds ratio (adjusted for education level and food insecurity). Bold typeface denotes statistically significant differences at the p < 0.05 level. All analyses accounted for the complex survey design of the VACS.

Model 1 = logistic regression model with any parental absence, maternal absence, paternal absence, and conventional ACEs as predictors in separate models; Model 2 = full logistic model with both any parental absence and conventional ACEs; Model 3 = full logistic model with both any maternal absence and conventional ACEs; Model 4 = full logistic model with both any paternal absence and conventional ACEs.