

Long-Term Health Outcomes of Early Parental Loss: A Case Study of African Adults

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ABSTRACT: Early Parental Loss, a type of Adverse Childhood Experiences (ACEs) has been reported to have long-term effects on the mental health of adults. This systematic review aimed to investigate the long-term mental health effects of early parental loss among African adults, and coping mechanisms adopted by the affected. Literature searches were done using Google Scholar, PubMed as well as manual Searches with the aid of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) using the following search terms in conjunction with Boolean operators (OR/AND): “African adults”, “adverse childhood events”, “early parental death”, “parental death”, “orphaned children”, “parental absence”, “orphaned adults”, “health effects”, and “health outcomes”. 13 studies were included in the review and the results showed that early parental loss was significantly associated with high risk of mental health issues like depression, anxiety, substance abuse, suicidal ideation and psychological distress. Early maternal loss was associated with more severe psychosocial challenges, internalized emotional distress, and prolonged bereavement. Resilience to mental health effects due to early parental loss were based on coping strategies such as effective communication, social support and preferring solutions or engaging as well as participating in productive activities such as farming. Male adults were more resilient to ACE-related mental health effects compared to females. ACE-related mental health effects were worsened by factors such as poverty, educational disruptions (or lack) parental illness (e.g., HIV/AIDS). There is an urgent need to provide psychosocial support systems, targeted mental health interventions and policy frameworks to help mitigate the long-term impacts of early parental loss.

KEYWORDS: Adverse childhood experiences, coping mechanisms, early parental loss, mental health implications

1. INTRODUCTION

Adverse childhood experiences (ACEs) refer to stressful and traumatic events which occur during childhood and these experiences include sexual abuse, physical and emotional bullying, parental loss as a result of abandonment, death or divorce (Soares et al., 2021). ACEs can also happen when a child lives with an adult who is mentally ill or a drug addict (Sacks, & Murphey, 2018). ACEs reflect various components of family dysfunction which occur as a child is growing from childhood through adolescence to adulthood. These childhood experiences cause children to suffer, affects their stability, sense of safety and bonding as well as their development and growth (Frederiksen, 2018; Nelson, et al. 2020). Statistics indicate that globally, over 40 million children have faced one form of ACE or the other and this often results in an increased risk of developing psychological disorders (Kostic, et al. 2019). Furthermore, ACE has been identified to be strongly associated with depression, drug abuse, obesity, alcoholism as well as poor physical and mental health (Bethell, et al. 2014; Ding, et al. 2019; Petrucci, et al. 2019; Wang, et al. 2019). Other studies have shown ACEs to be associated with an elevated life-time risk of stress-related health and psychopathology problems (Kalmakis & Chandler, 2015; Hughes et al. 2017; Chang et al. 2019; Sheffler, et al. 2020). Additionally, exposure to ACEs has been strongly linked to increased chances of occurrence of cancer, diabetes, ischemic heart disease, stroke and even pre-mature death (Kelly-Irving, et al. 2013; Nelson, et al. 2020). Although these adulthood health impacts have been traced to ACEs, actual underlying molecular mechanisms have not been fully explained (Rutter, 2012). Some proposed mechanisms include the fact that these experiences tend to get imprinted in the child's mind indirectly leading to outcomes such as adoption of unhealthy behaviours like poor diet, sedentary behaviour, and smoking, which predispose the child to adulthood diseases. Another likely pathway is the direct physiological disruption of regulatory pathways responsive to stress caused by adverse experiences. Consequently, ACEs may lead to a variety of physiological changes during childhood such as alteration of neural function and structure increased activation of neurobiological systems like the hypothalamic-pituitary adrenal (HPA) axis or the sympathetic nervous system (Soares, et al. 2021).

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An increased activation of these underlying physiological processes at adulthood was linked to development of central fat, dis-regulation of carbohydrate metabolism and blood lipids accumulation along the arterial lining, all of which exacerbate the development of chronic disease (Kelly-Irving, et al. 2019). Research has also shown that exposure to adversities during the early years of life may be already biologically embedded well before adult life. It is thus evident that exposure to stressful circumstances between childhood and adolescent years cause a chain of physiological responses that may modify a person's biology in the long term in a way that makes them vulnerable to develop disease later in life (Soares, et al. 2021). Psychological effects have been observed in youths who experienced ACE in their childhood. These changes include neurophysiological changes which makes them susceptible to behavioural changes, substance abuse and other risky behaviours (Wang, et al. 2019; Hochberg, & Konner, 2020). ACEs have also been associated with higher risks of psychosis and schizophrenia (Tognin, et al. 2025). The emotional and psychological development of an individual may be impacted by early parental loss (EPL), one of the primary ACEs (Jones, Merrick, & Houry, 2020).

The term "early parental loss" (EPL) describes when a parent, or both, leaves their child's life too soon, which frequently has detrimental effects. According to Ellis et al. (2013), some adverse effects of EPL include decreased employability rate, poor academic achievement, and increased susceptibility of adults to drug misuse, criminal behavior, and depression. According to research, 'EPL may have substantial emotional and psychological repercussions, which may raise the chance of later-life illnesses including schizophrenia, bipolar disorder, and severe depression' (Agid et al., 1999; Appel et al., 2013; Abel et al., 2014). When the loss happens before the age of nine, the effects of EPL are typically more noticeable (Breier et al., 1988; Tennant, 1988).

EPL may have an impact on social and economic results in addition to mental health; those who are impacted are more likely to live alone, have lower salaries, and divorce rates are greater. Research has examined the long-term neurological impacts of EPL, specifically how it affects the function of the hypothalamic-pituitary-adrenal axis and stress response (Tyrka et al., 2008). For African adults, early parental loss (EPL) can have a significant impact on their long-term wellbeing, emotional fortitude, and social integration. According to research, those who suffer from EPL could have less familial ties and fewer social resources in later life (Høeg et al., 2018). But according to other research, the detrimental effects of early parental loss can be lessened by certain protective variables such as robust community support and cultural coping strategies (Jaaniste et al., 2017).

This systematic review answers questions on the long-term impact of early parental loss on physical, psychological and mental health outcomes of African adults. Another question to be answered is on the coping mechanisms to alleviate the negative physical, psychological and mental health effects of early parental loss on African adults.

2. METHODS

2.1 Search strategy

Articles were searched on Google Scholar, PubMed as well as manual Searches using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) while manual searches were done in Google Scholar. The selected databases boast of a rich array of publications and is easily accessible. These database were selected because they are accessible and convenient. The following search terms were used in this study: "African adults", "adverse childhood events", "early parental death", "parental death", "orphaned children", "parental absence", "orphaned adults", "adults with intact parents", "non-orphaned adults", "health effects", "health outcomes". These search terms were used in conjunction with the Boolean operators (OR/AND). This was done to increase relevance of search results.

2.2 Inclusion and exclusion criteria

Search results were examined based on titles and abstracts to ensure they meet the inclusion requirements for this review. The search was limited to the period from 2010 up to 31st December, 2024 focused on articles which investigated the relationship between ACEs and EPL with the health status of African Adults. Studies were excluded if the aim was not on ACEs or EPL among African adults and if full articles were not accessible. Only primary studies were considered in this review, thus systematic reviews or secondary research articles were excluded. All authors independently assessed and screened the studies which met the inclusion criteria prior to final synthesis. The CASP checklist was used to assess each included article (appendix I).

Table 1: Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline	20150101-20241231	Publications outside the chosen dates
Article type	Articles on ACEs and EPL in Africa	Articles not focused on ACEs and EPL
Availability	Full articles available for download.	Articles unavailable for download.
Study type	Primary studies	Secondary studies

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ETHICAL CONSIDERATION

Studies included in this systematic review on long-term health outcomes of early parental loss: A case study of African Adults adhered strictly to the provision of ethics standards. All studies included were duly approved by relevant ethical standards boards. To ensure the integrity of the paper and to avoid issues of plagiarism, every included article was cited and referenced appropriately. The process of selection of studies to include, determination of inclusion and exclusion criteria, extraction of data and explanation were conducted in an objective and transparent manner so as to minimize any form of bias. Furthermore, the authors declared all likely conflicts of interests.

RESULTS AND DISCUSSION

The systematic search for literature yielded a total of 13 articles (appendix II) which met the inclusion criteria and were subsequently subjected to data extraction and interpretation (table 2). Oladeji, et al. (2010) investigated the association between ACEs and mental health problems in adult life in Nigeria. They aimed to clarify the link between childhood adverse life experiences and adulthood mental health disorders in a Sub-Saharan country (Nigeria). The study involved a multistage random sampling study in which participants were interviewed face-to-face by a team of researchers. Family-related adverse childhood experiences and lifetime mental health disorders were conducted with the Composite International Diagnostic Interview (CIDI 3.0). The findings of the study showed that at least 50% of the respondents had experienced ACEs before the age of 16 with over 40% experiencing death of parent. ACEs were associated with increased chances of substance abuse at adulthood. ACEs were thus shown to have significant impact on adult life of children who experience them.

A study by Cluver, et al. (2013), aimed at examining the relationship (direct or indirect) between household poverty, orphan-hood and parental illness (by AIDS or other causes) children health, development and HIV-infection risks. The study involved participants aged 10-17 years and was localized in three provinces in South Africa. The study reported that AIDS orphan-hood and parental AIDS (or other) illness increased likelihood of mental health disorder independently of each other and of socio-demographic co-factors. Children who were simultaneously AIDS-orphaned or living with an AIDS-ill parent, and living in severe poverty, reported more mental health disorders. Furthermore, the presence of poverty was identified as a contributing factor to the increased risk of mental health disorder.

According to Sherr, et al. (2014), Africa has experienced increased levels of orphan-hood as a result of violence, wars and HIV/AIDS. The differential effects of single and double parental death on child emotional functioning and daily life in South Africa was investigated in the study. In a sample of 381 participants, 17.5% had experienced single parent death while 6% had experienced both parents' death. Children who experienced double parent death had higher levels of depression and worse psychosocial functioning. They were also more likely to experience being sent home from school and slapped compared to those with single parent death. In a related study, Du Plooy & Van Rensburg (2015) conducted a retrospective study to investigate the perception of young adults on coping with parental divorce during childhood or adolescence. The study adopted interview method and found out that young adults identified effective communication in relationships and social support as very valuable methods of coping with childhood or adolescence parental divorce. Another coping mechanism identified in this study was purposive cognitive coping strategy which involved deliberately persisting throughout the change and associated impact of parental divorce. Participants also identified problem solving or participation in problem solving as a coping mechanism.

Macedo, et al. (2018) conducted research to assess parental bereavement in young children living in South Africa and Malawi. The study aimed to compare the resilience of orphaned and non-orphaned children to bereavement of parents due to HIV/AIDS. By using interviews for data collection, they reported that among the demographic, over 60% had experienced parental loss with a quarter of orphaned children showing no mental health problems. These were called resilient children since the parental loss did not result to any mental health problems. Baseline predictors of resilience included being a quick learner, aiding ill family members, positive caregiving, household employment, higher community support, and lower exposure to domestic violence, physical punishment, or stigma. Age of child, gender, country of residence as well as orphaned or not did not significantly affect resilience levels. This study thus concluded that in orphaned children resilience to mental health problems as a result of bereavement were affected by certain psychosocial and environmental factors.

In a study by Amone-P'Olak, & Letswai (2020) on the relationship between adverse childhood experiences and depression, a cross-sectional survey was utilized on university students in Botswana. The study aimed to assess the influence of ACEs on incidence of depression in young adults in Botswana. The study reported that 73% participants had experienced one or more ACEs while 15% had experienced over five ACEs. Loss of parent through separation or divorce was reported in 36.3% of participants.

Ntuli, et al. (2020) investigated the psychosocial wellbeing of orphans in the case of early school leavers in socially depressed environment in Mpumalanga Province, South Africa. The study adopted the interview method of collecting data from participants who were recruited through social workers, community-based organisations, and tribal authorities in a rural local municipality of Mpumalanga Province, South Africa. The findings of the study showed that death of parent (especially mothers) had significant psychological effect on the children most especially their psychosocial wellbeing. This resulted in the development of internalising depressive symptoms and the children suffered emotional distress and prolonged bereavement characterised by perpetual yearning

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for the mother. Silence was identified as a coping mechanism adopted by the children. The study also showed that in some cases they left school and leaving school exacerbated the mental health issues.

Agbaje, et al. (2021) studied on adverse childhood experiences and psychological distress among higher education students in Southeast Nigeria. The study employed an institutional-based cross-sectional design that focused on the prevalence of ACEs and psychological distress and explores the association between ACEs and psychological distress and demographic factors among young adults. The study involved 330 students who completed the Adverse Childhood Experiences International Questionnaire (ACE-IQ), Kessler Psychological Distress Scale (K10), and the socio-demographic profile scale. Over 86.7% of participants had experienced one form of ACEs or the other (15.3% had experienced death of parent). ACEs showed significant influence on psychological distress in adulthood.

In a cross-sectional, population-based study, Satinsky, et al. (2021) investigated the adverse childhood experiences, adult depression, and suicidal ideation in rural Uganda. The study involved 1,626 adults in rural Uganda, eliciting ACEs, current depression, and suicidal ideation through face-to-face interviews. The findings showed that experiencing ACEs before the age of 18 was highly associated with mental health disorders including depression, suicidal ideation, and major depressive disorder. In a similar study Tani, et al. (2023) investigated the coping strategies of orphans in Makarfi Local Government Area, Kaduna State, Nigeria. They adopted a systematic sampling procedure with a study sample of 370 and interview methods. The study reported that psychological health of orphans was greatly affected by mastery of environment, autonomy and personal growth factors. Orphans without secondary education were shown to have the poorest mental health compared to those who had secondary education. Coping mechanisms of orphans in this study include peer relationships and farming.

In a cross-sectional study by Byansi, et al. (2023) investigated adverse childhood experiences, traumatic events, and mental health among adults at two outpatient psychiatric facilities in Johannesburg, South Africa. The study involved 309 participants and examined the impact of traumatic events and ACEs on depression, anxiety, and stress scores among outpatients receiving psychiatric care at two public mental health treatment facilities in Johannesburg, South Africa. Participants completed screening measures for mental health outcomes, including the 9-item Patient Health Questionnaire (PHQ-9), the 7-item General Anxiety Disorder scale (GAD-7) and the 10-item Perceived Stress Scale. The participants were positive with having traits of anxiety, depression and severe stress with higher prevalence of anxiety, depression and stress. ACEs showed at least 10% increased risk of depression, anxiety and risk of stress. Male generally showed a lower risk of the mental health issues of focus in this study. In another recent study by Muwanguzi, *et al.* (2023) which explored adverse childhood experiences (ACEs) among Ugandan university students and how it associated with academic performance, depression, and suicidal ideations. The study was a cross-sectional and integrated the Adverse Childhood Experiences International Questionnaire for assessing ACEs, the Patient Health Questionnaire for assessing depression symptoms and suicidal ideations, and questions assessing the family structure and academic performance as adopted from similar studies. Of 653 undergraduate university students who participated 99.8% reported to have experienced one or more ACEs, with physical abuse being the common ACE reported. While ACEs were associated with severity of symptoms of depression, no relationship was observed with respect to academic performance. Cumulative effects of ACEs were observed to be positively related to severity of symptoms of depression as well as elevated likelihood of suicidal ideations.

Brown et al. (2024) investigated the association between ACEs (including orphan-hood) and mental health outcomes, substance use, and violence perpetration among young adults in Sub-Saharan African countries including Cote d'Ivoire, Kenya, Lesotho, Mozambique, and Namibia. ACEs were prevalent and often resulted in some level of mental health issue. The findings indicate that orphaned females had significantly higher chances of psychological distress compared to those who were not orphaned; amongst males, no significant association was observed. Thus, the study concluded that in Sub-Saharan African countries there was high level of prevalence of ACEs and were associated with adverse mental health, substance use, and violence perpetration.

CONCLUSION

Early parental loss can have significant long-term effects on African adults, influencing their social networks, emotional fortitude, and financial security. Many people deal with psychological anguish, identity issues, and sorrow as a result. The findings of this study have shown that a significant relationship exists between ACEs and long-term mental health problems in African adults. This study also revealed that there is a high prevalence of ACEs and EPL (single and double parent) in Africa. Death of mother was also shown to have more effects on the child than that of father. ACEs were associated with increased likelihood of depression, substance abuse, poor psychosocial functioning, psychological distress, suicidal ideation, anxiety and major depressive disorder and perpetration of violence at adulthood. Although most children who experienced ACEs had one form of mental effect or the other, some studies in this review also showed that some showed no negative impacts (these are often referred to as resilient). Male children were also observed to be more resilient to mental health issue related to ACEs and EPL. Children who experienced EPL also internalised depressive symptoms, suffered emotional distress and features of prolonged bereavement. Some factors which have been associated with worsening the effects of ACEs on mental health include household poverty, HIV/AIDS or other illnesses, mentally ill parents. Lack of proper education as well as dropping out of school as a result of EPL also worsened mental health issues. There was however no relationship between ACEs and self-reported academic performance. Some coping mechanisms

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identified from the studies included in this review include effective communication in relationships, social support, purposive cognitive coping strategy, problem solving or participation in problem solving as a coping mechanism, silence, peer relationships and farming. ACEs and EPL are prevalent in African countries and there must be interventions to ensure that the negative impacts are minimized on the populace.

DISCLOSURE OF INTEREST

The authors report no conflict of interest.

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Appendices

Appendix I: CASP scores for included articles

Author(s)/year	CASP criterion ^a										Total Score ^b
	1	2	3	4	5	6	7	8	9	10	
Oladeji, et al. 2010	2	2	2	2	2	0	2	2	2	2	18
Cluver, et al. 2013	2	2	2	2	2	2	2	2	2	2	20
Sherr, et al. 2014	2	2	2	2	2	0	2	2	1	2	17
Du Plooy, K. & Van Rensburg, E. 2015	2	2	2	2	2	0	2	1	2	2	17
Macedo, et al. 2018	2	2	2	2	2	1	2	2	2	2	19
Amone-P'Olak, K. & Letswai, N. K. 2020	2	2	2	2	2	0	2	2	2	2	18
Ntuli, et al. 2020	2	2	2	2	2	1	2	2	2	2	19
Satinsky, et al. 2021	2	2	2	2	2	1	2	2	2	2	19
Agbaje, et al. 2021	2	2	2	2	2	0	2	2	2	2	18
Tani, et al. 2023	2	2	2	2	2	0	0	2	2	2	16
Byansi, et al. 2023	2	2	2	2	2	1	2	2	2	2	19
Muwanguzi, et al. 2023	2	2	2	2	2	0	2	2	2	2	18
Brown et al. 2024	2	2	2	2	2	0	2	2	2	2	18

^a **CASP criterion:** 1. Did the research state the aim clearly? 2. Appropriateness of methodology? 3. Appropriateness of design of research to address research aims? 4. How appropriate was the method recruitment of participants aimed at achieving the purpose of the research? 5. Was data collection done appropriately to address the research objectives? 6. Was researcher-participant relationship put into proper consideration? 7. Were ethical issues considered? 8. How sufficient and rigorous was the data analysis? 9. Were the findings clearly stated? 10. Is the research valuable?

^b **CASP critical score:** a score of 2 is allotted if a particular criterion is totally met; 1 for partial and 0 if the criterion is not applicable to the study, it is not mentioned or is not met. Usually, a maximum score is 20 is possible however, values equal to or less than 15 are considered low quality while values above 19-19 are graded as moderate quality while 20 is high quality

Appendix II: Summary of findings

S/No	Title	Author(s)/year	Country	Population	Age (yrs)	Method	Key findings
1.	Family-related adverse childhood experiences as risk factors for psychiatric disorders in Nigeria	Oladeji, et al. 2010	Nigeria	6752	>18	Interview	ACEs leads to family violence, criminality, mental illness, substance abuse.
2.	Poverty, AIDS and child health: Identifying highest-risk children in South Africa	Cluver, et al. 2013	South Africa	6,002	10-17	Interview	Loss of parent due to AIDS significantly affected child mental health, educational risks, and HIV-infection risks.
3.	Differential Effects of Single and Double Parental Death on Child Emotional Functioning and Daily Life in South Africa	Sherr, et al. 2014	South Africa	381	8-19	Questionnaire	EPL was associated with dysfunctional emotions and daily life of young adults. Double orphans had elevated depression, worsened psychosocial dysfunction, were more likely to be kept home from school for household chores, and were more likely to be slapped.
4.	Young Adults' Perception of Coping with Parental Divorce: A Retrospective Study	Du Plooy, K. & Van Rensburg, E. 2015	South Africa	15	20-34	Semi-structured retrospective interviews	Parental divorce during childhood had significant effects on quality of life of young adults. Effective communication in relationships was highlighted as a particularly valuable coping method.
5.	Parental bereavement in young children and resilience Parental Bereavement in Young Children Living in South Africa and Malawi: Understanding Mental Health Resilience	Macedo, et al. 2018	Malawi & South Africa	989	4-13	Interview	Some orphaned children showed no mental health problems due to EPL and were termed resilient.

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6.	The relationship between adverse childhood experiences and depression: A cross-sectional survey with university students in Botswana	Amone-P'Olak, K. & Letswai, N. K. 2020	Botswana	392	18–25	Cross-sectional	ACEs are highly prevalent and are key determinants of depression in young adulthood.
7.	The psychosocial wellbeing of orphans: The case of early school leavers in socially depressed environment in Mpumalanga Province, South Africa	Ntuli, et al. 2020	South Africa	50	>18	Interview	Early loss of mother negatively impacted the psychosocial wellbeing of the participants even after they have crossed the 18 years threshold of orphan hood. Their inability to cope led to sadness, isolation, fear of an uncertain future, lack of peace and hopelessness.
8.	Adverse childhood experiences, adult depression, and suicidal ideation in rural Uganda: A cross-sectional, population-based study	Satinsky, et al. 2021	Uganda	1,626	16-18	Cross-sectional	There was a statistically significant relationship between ACEs and depression symptom severity, major depressive disorder, and suicidal ideation.
9.	Adverse childhood experiences and psychological distress among higher education students in Southeast Nigeria: an institutional-based cross-sectional study	Agbaje, et al. 2021	Nigeria	330	16-25	Cross-sectional	There is high prevalence of ACEs among young adults and this was associated with psychological distress in adulthood.
10.	Psychological coping strategies of orphans in Makarfi Local Government Area, Kaduna State, Nigeria	Tani, et al. 2023	Nigeria	370	11-18	Questionnaire	Psychology of orphans is greatly affected especially autonomy, environment mastery, and personal growth. Orphans who had secondary education had better psychological well-being than those who didn't. farming and peer relationships were identified as coping strategies adopted by the participants.
11.	Adverse childhood experiences, traumatic events, and mental health among adults at two outpatient psychiatric facilities in Johannesburg, South Africa: a cross-sectional analysis	Byansi, et al. 2023	South Africa	309	18–71	Interview	ACEs and experiences of traumatic events were associated with significantly increased risks of anxiety, depression, and severe stress.
12.	Exploring adverse childhood experiences (ACEs) among Ugandan university students: its associations with academic performance, depression, and suicidal ideations.	Muwanguzi, et al. 2023	Uganda	653	18-25	Cross-sectional	ACEs is prevalent in Uganda and results in significant mental sickness. There is urgent need to strengthen effective child protection strategies to protect children from ACEs.
13.	Adverse childhood experiences and associations with mental health, substance use, and violence perpetration among young adults in sub-Saharan Africa	Brown et al. 2024	Cote d'Ivoire, Kenya, Lesotho, Mozambique, and Namibia	11,498	18–24	Cross-sectional	ACEs are associated with adverse mental health, substance use, and violence perpetration in sub-Saharan Africa. Orphaned females had significantly higher chances of psychological distress compared to those who were not orphaned; amongst males, no significant association was observed.