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## Research Paper

# Psychosocial adjustment of children affected by HIV/AIDS in Ghana

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**Objective:** The study was conducted to assess the psychosocial adjustment of children affected by HIV/AIDS in the eastern part of Ghana.

**Method:** Four groups of children (children who lost their parents to AIDS, children who lost their parents through other causes, children living with HIV infected, alive parents and the comparison children who were from the same community but did not have HIV/AIDS-related illness or death in their families) were interviewed on depressive symptoms, prosocial behaviours, hyperactivity, conduct and peer problems using the Strengths and Difficulties Questionnaire (SDQ).

**Results:** Orphans in general and children living with HIV-infected parents consistently demonstrated poorer psychosocial adjustment than comparison children in the same community.

**Conclusion:** The findings underscore the urgency and importance of culturally and developmentally appropriate intervention efforts targeting psychosocial problems among children affected by AIDS and call for more exploration of risk and resilience factors, both individual and contextual, affecting the wellbeing of these children.

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## Introduction

Projections by two United Nations agencies suggest that by 2010 there will be 53.1 million children younger than 18 years bereft of their parents, 15.7 million of whom will have had their parents died of HIV/AIDS. The report further indicated that currently 90% of the world's orphaned children (representing 48.3 million) live in Africa (ACCESS 2002). Loss of loved ones or their ill health has impacts on our mental health and emotional functioning (Shear and Shair 2005). These incidences, especially death may impose severe strain on everyone in the family and community but children comprise a particularly vulnerable group that requires special attention. Reactions of children to parental death have both short term and long term implications. Orphans and children affected by the HIV/AIDS pandemic are noted to show signs of stress, trauma and may become withdrawn and passive or develop sadness, anger, fear, antisocial behaviours and become violent or depressed (Makame, Ani and Grantham-McGregor 2002). In another study, Ntozi (1999) showed that orphans have several emotional and behavioural problems including exploitation, stigmatisation and even problems at school. AIDS is a stigmatised disorder and a discussion of it is often avoided in Africa (Atwine, Cantor-Graae and Bajunirwe 2005). Dowdney (2000) suggests that the death of a parent, regardless of its cause could place children at risk for internalising problems such as depression, anxiety, withdrawal, and low self-esteem. The expressions of externalising problems among

orphaned children are much less consistent. AIDS orphaned children might not only be traumatised by the loss of parents (whose physical deterioration they may often have witnessed), they may also lack the necessary parental guidance through crucial life-stages of identity formation and socialisation into adulthood amidst AIDS related stigma and discrimination.

Makame *et al.* (2002) interviewed 41 each of orphans and non-orphans using an adapted version of the Rand Mental Health and Beck Depression Inventories translated into Swahili. The translated measure with a reliability alpha of 0.83 revealed that orphaned children showed markedly higher internalising problems, increased suicidal ideation, often went to bed hungry and were more likely to be out of school. The researchers reported recruiting the children with community help, local leaders and some NGOs already doing some care and support interventions in the community.

Atwine *et al.* (2005) found that in Uganda children whose parents died of AIDS scored significantly higher on anxiety, depression and aggression than non-orphaned children. The researchers compared 123 children whose parents died of AIDS and 110 non-orphaned children using the Beck Youth Inventories translated into Runyankore (a Ugandan dialect). In contrast, Cluver and Gardner (2006) who interviewed 30 children whose parents died of AIDS and 30 non-orphaned children in South Africa using the Strengths and Difficulties Questionnaire found no such significant differences between the two groups. However, individual BYI analyses by Atwine *et al.* (2005) revealed that items particularly sensitive to depression (hopelessness and suicidal ideation) were significantly higher for orphaned children. Similarly, Cluver and Gardner's (2006) individual item analyses also showed some significant differences. Orphaned children were less likely to have a good friend ( $p = 0.002$ ), more likely to lose their temper quickly ( $p = 0.01$ ), and more likely to exhibit difficulty concentrating and have somatic symptoms and nightmares. Cluver and Gardner (2006) further noted that 73% of orphaned children scored above the cut-off for post-traumatic stress disorder when items from the Impact of Events Scale (IES-8) were administered to them.

More recently, two studies conducted in South Africa reported conflicting findings. Wild *et al.* (2006) assessed psychological well-being among 81 children whose parents died of AIDS children compared with 78 other orphaned and 43 non-orphaned children recruited through NGOs. Findings from the study revealed that other orphaned children exhibited higher depression and anxiety symptoms than non-orphaned children with children whose parents died of AIDS showing intermittent scores. Whilst no significant differences were found for antisocial behaviours (externalising problems), the Self-Esteem Questionnaire scores indicated that other orphaned children have lower self esteem than both non-orphaned and children whose parents died of AIDS. In the other study, Cluver, Gardner and Operario (2007) interviewed 1 025 children (425 orphaned by AIDS, 241 orphaned by other causes and 278 non-orphaned children). The main finding reported by the researchers was that orphanhood by AIDS is significantly associated with depression (after age and sex were adjusted), peer problems, post-traumatic stress, delinquency and conduct problems, but only marginally with anxiety. Orphanhood by other causes was moderately associated with post-traumatic stress in an unadjusted model.

Some researchers have argued that boys experience higher rates of psychological difficulties than girls (Makame *et al.* 2002). However several other studies held that there were no such gender differences in psychological reactions among children (Amato 1991, Glazebrook *et al.* 2003). Then there are others that found that psychological difficulties were higher for girls than for boys (Ntozi 1999, Oleke *et al.* 2006). Lien *et al.* (2005) in their study noted that of mental health problems, peer problems in boys differed significantly with age where younger boys scored the highest. They further found that older girls had higher scores on emotional problems than their younger class mates in a school sample. Clearly the literature is uncertain about the gender difference in the psychological difficulties for children. This study hoped to contribute to this debate and predicted that among the orphan groups, girls would exhibit more psychological problems than boys. Findings on the relationship between age and psychological problems were just as interesting and inconsistent as the views on gender (see Goodman, Gledhill and Ford 2003, Oleke *et al.* 2006). The present study contributes to attempts to clarify the age and gender differences in the impact of parental death or illness on young children. It is therefore hypothesised that younger children would differ from older children on the psychological outcomes.

In conclusion, the findings of the literature on children whose parents died of AIDS suggest higher internalising problems and some externalising problems among orphans. However, the evidence for these observations is not only limited, grey and scattered but also contradictory. Therefore, the question as to whether children orphaned by AIDS have unique needs and problems different from children orphaned by other causes is only partially answered, if answered at all. Further research is therefore necessary in this area. Cluver *et al.* (2007) cautioned about the danger of assuming that studies conducted in one part of Africa are transferable to other African contexts, and this study is the first quantitative study to examine the mental health of these vulnerable children in Ghana. Recognising that the impact of HIV/AIDS on children may start far before they are orphaned (Bauman *et al.* 2006, Forehand *et al.* 1998, Lester *et al.* 2006, Murphy *et al.* 2006, Poulter 1996, Reyland *et al.* 2002, Stein *et al.* 1999), the present study goes further to include children living with parents who infected with HIV/AIDS. To gain a better understanding about how children are affected by the HIV/AIDS pandemic research should compare groups of children whose parents died of AIDS, children whose parents died of causes other than AIDS, children living with parents infected with HIV/AIDS, and non-orphaned children whose parents are not known to be infected with HIV/AIDS in a single design to test the postulations reported by earlier researches. To date the present study is the first to do this.

In this study, 'an orphan' refers to a child below 18 years who lost one or both parents, 'other orphaned children' refer to children whose parents died of causes other than AIDS, and 'non-orphaned children' are children living with parents not diagnosed with HIV/AIDS. Similarly, 'children whose parents died of AIDS' refers to a child who has one or both parent died of AIDS.

## **Method**

### ***Participants***

The participants in the current study included 50 children who lost their parents to AIDS, 51 children who lost their parents through other causes, 48 children living with HIV-infected parents, and 51 comparison children who were from the same community but did not have HIV/AIDS-related illness or death in their families. Children 10–18 years of age were eligible to participate in the study. Children with HIV-infection were eligible to participate, although the number of such children was estimated to be very small and no HIV testing was conducted in the current study. The children were recruited through community household visits. However, a few of those living with parents who have HIV/AIDS were identified with the help of the Queen Mothers Association who happened to know their residences or households. Finally, some non-orphaned children and children made orphans by causes other than AIDS were also recruited through school visits. Foster children who were not orphaned but were living with relatives or caregivers other than their parents were excluded from the study. In the case of parental HIV/AIDS status and death, verbal autopsy, a well validated method of cause of death identification in Ghana and some other African countries (Anderson *et al.* 1994, Cluver *et al.* 2007, Hosegood, Vanneste and Timaeus 2004) was used. In this regard, a short inclusion criteria checklist with questions on cause of death or terminal illness, place and certification of death (if any), major signs and symptoms of HIV/AIDS were asked.

### ***Measure***

The Strengths and Difficulties Questionnaire (SDQ), used in 40 countries (Goodman 1997) was employed to assess children's psychological outcomes. The SDQ consists of 25 items rated on a three-point likert scale (Not True, Somewhat True, and Certainly True) divided on five subscales: emotional symptoms, conduct problems, hyperactivity, peer relationship problems and prosocial behaviours. The sum of the first four subscales gives the total psychological difficulties per child. The present study utilised only the self completion version. Although the SDQ is not validated for the Ghanaian culture, it is used in this study based on the fact the measure correlates well with other measures such as the Child Behaviour Checklist (Goodman and Scott 1999), the Rutter Child Scales (Goodman 1997) and the Child and Adolescent Burden Assessment (Goodman 1997) that were all validated for Ghana. The SDQ is also well established for its power to discriminate well

between community-based samples of children and adolescents (Goodman 1997). Finally, the use of the SDQ does not only permit quick assessment of the participants' psychological health that facilitates screening and identification of at-risk children, it is also cost-effective.

### **Procedure**

The recruitment process for the current study has been described in detail elsewhere (Doku 2009). Briefly, households in Odumase Township were approached to take part in the study. A series of meetings were arranged with the council of elders and opinion leaders in the township to discuss the details of the study. Starting from a purposefully selected house at a cross-road (Odumase junction), every twentieth house was approached at cardinal directions and the inclusion checklist (parental status, the age and English fluency of the child) assessed. First, the nature and purpose of the study were explained to both potential child and parent or caregiver (and practically every adult present). When both the child and parent or caregiver consented and signed the consent forms to take part in the study, then the researcher and the child moved away to a quiet place to maintain confidentiality and privacy of the data collection process. Thus, consent was signed where inclusion criteria were met, and the data collected. With a copy of the SDQ given to the child, the items were then read aloud and the child ticked their responses (Not True, Somewhat True, and Certainly True). Although the interview was conducted in English, some necessary clarifications were made in the child's local dialect. At the end of the interview each child was thanked and offered the chance to ask questions about the research. A few children were interviewed in their schools where consent was obtained from both the children and their teachers. The research protocol, including the consenting process, was approved by the institutional review boards of both the Norwegian Regional Ethics Committee for Medical Research, Trondheim branch and the Department of Psychology, University of Ghana.

### **Results**

#### **Age, sex and psychosocial outcomes**

A two-way MANOVA was conducted to explore the influence of age and sex on each of the psychological measures. Age and sex were the independent variables and the individual ratings of psychological SDQ subscale scores were the dependent variables. Participants were divided into two age groups (G1: preadolescents: ages 10–14 years, and G2: adolescents: 15–19 years).

For gender, there was a significant difference between the participants on the combined, total psychological difficulties scores [ $F(3, 196) = 4.897, p < 0.001, \text{Wilks' } \lambda = 0.88$ ]. When the psychological measures were considered separately, the difference between the gender groups was only significant for peer problems [ $F(1, 196) = 16.31, p < 0.001$ ]. A post hoc comparisons indicated that the mean score for males was significantly higher than females ( $t = 3.51, p < 0.001$ ). Specifically, the individual  $t$ -tests revealed that males reported significantly higher peer problems than females, with a large effect size ( $d = 0.83$ ). There were no further significant differences between the two gender groups on the other subscales, namely, emotional problems, conduct problems, hyperactivity and prosocial behaviours. Concerning age, no significant differences were found between the preadolescents and adolescents on any of the psychological outcomes. The interaction effect of age and sex on the psychological outcomes was not significant [ $F(9, 190) = 1.433, p = \text{n.s.}, \text{Wilks' } \lambda = 0.703$ ]. Separate analyses for orphanhood groups for sex and age supported the results for the total psychological difficulties from the MANOVA analysis. The significant differences between the sex groups were found for other orphaned children ( $t = 2.247, p < 0.03, d = 0.70$ ), children living with AIDS sick parents ( $t = 2.509, p < 0.02, d = 0.72$ ) and children living with healthy, non sick parents ( $t = 3.289, p < 0.001, d = 0.93$ ) when the orphanhood groups were analysed separately. However, the difference for the AIDS orphaned group did not reach significance. Although the MANOVA found no significant effect for age, the individual  $t$ -test results indicated that among the other orphaned children group, adolescents rated themselves higher than the preadolescents but this was only for the peer problems ( $t = 2.0790, p < 0.05, d = 0.59$ ).

**Table 1:** Means (M), standard deviations (SD) and MANOVA results of the four different groups on the SDQ subscales

Source	AIDS orphans A		Other orphans B		Children with HIV/AIDS- infected parents (C)		Non-orphans with uninfected parents (D)		Post hoc comparisons (Bonferroni test)		
	M	SD	M	SD	M	SD	M	SD	F(3, 196)	P	
Total difficulties	20.08	4.37	17.92	4.50	16.38	5.20	14.67	5.20	11.34	0.001	A > B = C = D
Emotional problems	6.84	1.39	6.61	2.09	6.33	1.64	5.47	2.27	5.10	0.001	A = B = C > D
Hyperactivity	3.14	2.20	2.82	1.63	2.98	2.19	2.67	2.05	0.51	0.68	-----
Conduct problems	5.30	2.02	4.84	1.74	3.79	2.03	2.86	2.24	14.85	0.001	A = B > C > D
Peer problems	4.80	1.76	3.65	1.79	3.27	1.71	3.67	1.59	7.34	0.001	A > B = C = D
Pro-social Behrs	8.00	1.86	8.03	1.64	7.88	1.77	8.20	1.76	0.28	0.84	-----

### **Group comparisons**

A MANOVA was conducted comparing the four groups (children whose parents died of AIDS, children whose parents died of causes other than AIDS, children living with parents infected with HIV/AIDS, and non-orphaned children whose parents are not known to be infected with HIV/AIDS) on their psychological outcomes with a .05 alpha level selected. In the analysis group was entered as the independent variable and the psychological outcomes as dependent variables. Results indicated that parental HIV/AIDS status was significantly related to overall psychological outcome [ $F(5, 196) = 2.42, p < 0.001, \text{Wilks' lambda} = 0.77$ ]. A follow-up univariate analysis showed that group was significantly associated with emotional problems [ $F(3, 196) = 5.10, p < 0.001$ ], conduct problems [ $F(3, 196) = 14.85, p < 0.001$ ] and peer problems [ $F(3, 196) = 7.34, p < 0.001$ ] but not hyperactivity [ $F(3, 196) = 0.51, p = \text{n.s.}$ ] and prosocial behaviours [ $F(3, 196) = 0.28, p = \text{n.s.}$ ]. These findings are presented in Table 1 along with summarised post hoc analyses.

Post hoc contrasts using bonferroni test showed that non-orphaned children whose parents are not known to be infected with HIV/AIDS expressed significantly less emotional problems than children whose parents died of AIDS ( $t = 1.37, p < 0.001, d = 0.73$ ), children whose parents died of causes other than AIDS ( $t = 1.14, p < 0.003, d = 0.52$ ) and children whose parents are infected or living with HIV/AIDS ( $t = 0.86, p < 0.024, d = 0.43$ ). However, the differences showed between the latter three groups could not reach significance.

Similarly, post hoc comparison indicated that children whose parents died of AIDS reported significantly higher conduct and anti-social problems than children whose parents are infected or living with HIV/AIDS ( $t = 1.508, p < 0.001, d = 0.75$ ) and non-orphaned children whose parents are not known to be infected with HIV/AIDS ( $t = 2.437, p < 0.001, d = 1.144$ ) but not children whose parents died of causes other than AIDS ( $t = 0.46, p = \text{n.s.}$ ). Subsequently, children whose parents died of causes other than AIDS in turn were significantly higher on conduct problems than children whose parents are infected or living with HIV/AIDS ( $t = 1.05, p < 0.01$ ) whilst the latter scored higher than non orphaned children ( $t = 0.93, p < 0.05$ ).

In addition, none of the paired multiple post hoc comparisons between groups of children whose parents died of causes other than AIDS, children living with parents infected with HIV/AIDS, and non-orphaned children whose parents are not known to be infected with HIV/AIDS on peer problems reached significance. However, children whose parents died of AIDS were significantly higher on peer problems than children whose parents died of causes other than AIDS ( $t = 1.153, p < 0.01, d = 0.65$ ), children whose parents are infected with HIV/AIDS ( $t = 1.529, p < 0.001, d = 0.88$ ) and non-orphaned children whose parents are not known to be infected with HIV/AIDS ( $t = 1.114, p < 0.01, d = 0.67$ ). Finally, on total difficulties (sum of emotional, conduct, hyperactivity and peer problems), it showed that children whose parents died of AIDS but not children whose parents died of causes other than AIDS and children whose parents are infected with HIV/AIDS, scored significantly higher than non-orphaned children whose parents are not known to be infected with HIV/AIDS.

### **Discussion**

The data from this study of children in Ghana are consistent with the global literature which indicates that orphans in general and children living with HIV-infected parents appear to have poorer psychosocial adjustment compared to children who do not experience HIV/AIDS in their family (Cluver *et al.* 2007, Cluver and Gardner 2006, Makame *et al.* 2002).

### **Pro-social behaviour**

There were no differences in total scores for pro-social behaviour or for any individual questions between children who lost their parents to AIDS, children who lost their parents through other causes, children living with HIV infected, alive parents and the comparison children who were from the same community but did not have HIV/AIDS-related illness or death in their families. In addition no sex differences were found for pro-social and helping out behaviours in the present study.

### **Hyperactivity**

Self-reported levels of hyperactivity among the groups did not differ significantly. This is consistent with Cluver and Gardner (2006) who found that children orphaned by AIDS and non-orphaned children did not differ on hyperactivity. Other studies, however, found higher hyperactivity and concentration difficulties among orphaned children (Forehand *et al.* 1999, Makame *et al.* 2002). In this study, there was approximately only a 4% prevalence of abnormal hyperactivity symptoms in the entire sample studied. Compared with a British community sample where abnormal rates of 19.5% and 9.9% were reported for boys and girls respectively (Glazebrook *et al.* 2003) the present finding on hyperactivity is encouraging. No sex differences were found in hyperactivity in the present study.

### **Emotional problems**

Considering emotional problems, taken together, children living with parents infected with HIV/AIDS, and both children whose parents died of AIDS and children whose parents died of causes other than AIDS, showed similarly higher symptoms of depression and anxiety than non-orphaned children whose parents are not known to be infected with HIV/AIDS. Summarised differently, indications are that 'orphanhood' and parental HIV/AIDS are associated with increased internalising problems in children. Although this contrasts with Cluver and Gardner (2006), the finding is consistent with Makame *et al.* (2002) and Cluver *et al.* (2007) who noted that orphans scored higher on adjustment problems such as depression and anxiety than children living with their parents. The finding indicates that the impacts that HIV/AIDS have on children's mental health start far before they are orphaned. Sandler *et al.* (2003) suggested that parental absence and its surrounding trauma are the principal causes of poor childhood adjustment in adolescents. However, in this study, the fact that children living with AIDS-infected parents also reported emotional problems similarly high to both children whose parents died of AIDS and children whose parents died of causes other than AIDS fails to support this claim. I could speculate that the present finding points to family process changes, disruptions to parent-child relationships, non- or reduced parental guidance, changes in parental moods, and perhaps socioeconomic conditions that characterise both orphaned families and those with sick parents that more accurately could account for higher rates of child conduct problems than the mere parental absence hypothesis (DiMatteo, Drotta and Weiss 2000). Approximately 37–52% of both orphaned groups and children living with parents infected with HIV/AIDS met the criteria for emotional disorders when the caseness cut-off points were considered for risks for abnormality. The present study noted that male adolescents did not differ from their female counterparts on self-reported emotional symptoms affirming the work of Glazebrook *et al.* (2003) who found no sex differences in psychological reactions among children. However this current sex observation contrasts sharply with observations made by Makame *et al.* (2002) that boys experience higher psychological difficulties than females.

### **Conduct problems**

The relationship between parental death and HIV/AIDS illness on children's conduct problems was mixed, but similar to observations found on the emotional problems. Both orphaned groups scored significantly higher on conduct problems than children whose parents are infected with HIV/AIDS and non-orphaned children whose parents are not known to be infected with HIV/AIDS. However, children living with parents infected with HIV/AIDS expressed significantly higher conduct problems than non-orphaned children whose parents are not known to be infected with HIV/AIDS. Makame *et al.* (2002) noted that the possibility of psychopathic behaviours due to children raised without supervision was the greatest fear that relates to the unknown psychosocial effects of orphanhood in Africa. Bray (2004) questioned this claim and others such as Cluver and Gardner (2006) failed to find any such evidence. However, the current finding yields support for increased self-reported conduct problems among orphans in general and children living with parents infected with HIV/AIDS. The orphaned children reported fighting frequently, stealing, were often accused of cheating, and more quickly lost their temper. They were more likely to engage in violent behaviours and develop antisocial attitudes. Consistent with Glazebrook *et al.* (2003) no sex differences were found among the children in their self-reported conduct problems.



### **Peer problems**

The study also found that children whose parents died of AIDS showed more peer problems than all other children. This supports previous and growing evidence (Cluver *et al.* 2007, Ntozi 1999, Nyambedha, Wandibba and Aagaard-Hansen 2003) which suggest that orphanhood by AIDS is significantly associated with increased peer relationship problems. Perhaps in Ghana, the stigma and discrimination that people infected with HIV/AIDS face are passed on to their children after the former's death, making their struggle for survival precarious. Stigma is a powerful tool of social control which is often used to marginalise and isolate others. AIDS-orphaned children may form their own self-schemata based on their daily stigmatised social interactions which then influence multiple aspects of their lives, and result in problems such as the loneliness they reported. Most of these children reported that they have just one or no friends at all and expressed concerns that their peers generally do not like them. The majority of the AIDS orphaned children also noted that they get on well with older people rather than their peers. We reasoned that it is cumulative effects of HIV/AIDS-related stigma and discriminations that underline the higher scores of peer problems in AIDS-orphaned children over children living with AIDS parents. Compared to girls, boys reported higher peer problems in the present study. The overall female lower peer problems score than males is somewhat promising compared with evidence that in Africa women and girls are often economically, culturally and socially disadvantaged and readily stigmatised and discriminated. Ntozi (1999) and Oleke *et al.* (2006) concluded that girls suffer more peer problems and total psychological difficulties than boys. In contrast, the present study found that boys rather than girls reported significantly higher peer problems. The sex differences, however, support Makame *et al.*'s (2002) observation that in Africa, boys experience higher peer problems than girls.

When age was categorised as preadolescent and adolescent, the finding was that no significant differences were noted for the two groups on all the symptomatic subscales. This present finding contrasts with Lien *et al.*'s (2005) observation that younger children scored higher than older ones on mental health problems. Similarly the present finding also varies from Goodman *et al.*'s (2003) conclusion that age is an independent risk factor for mental health problems. Concerning children's age, growing research evidence that adolescents and preadolescents differ significantly on symptoms of hyperactivity, peer problems, emotional and conduct problems conflicts with the present finding. A correlation analysis also showed no association between age and any of the assessed symptoms. This implies that in the present study even when the age grouping is dropped there is still no relationship between children's age and adjustment behaviours.

There are several potential limitations in the current study. Time constraints and inaccessibility of appropriate informants for orphaned children led to reliance on children's self-reports and no other informants recruited. The study recruited small samples of children and no data was collected on how long children were made orphaned. The present findings should also be understood in the context that several demographic characteristics such as the family socioeconomic background, place of residence and prior parent-child relationships were not controlled for. Finally, practitioners should be careful when drawing conclusions about clinical levels of distress reported as the SDQ cut-offs used in the present study have been determined on the basis of research with children in Western Europe and the USA, and that these norms have not been validated in Ghana.

Despite these limitations, the study used a well established emotional and behavioural measure (Strength and Difficulties Questionnaire) with strong psychometric properties validated for several African countries (Goodman 1997). The conclusion from the study is that orphaned children and children living with parents infected with HIV/AIDS are at heightened risk for psychological disorders, and in this study, exhibited signs of conduct, peer and emotional problems. The main implication is therefore the need to recognise the increased risk of emotional and behavioural disturbance in these children. Orphans and children affected by HIV/AIDS are a growing population and so it is urgent that their short and long term psychological needs are cared for. Parallel to this and in the context of the limitations of the study, researchers must see the findings as generated hypotheses rather than conclusions. Further studies are needed to empirically examine larger populations to clarify the specifics of parental HIV/AIDS status or death on children's mental health. Such

future studies must engage multiple informants including caregivers, parents, teachers and other immediate family relatives to generate data to be triangulated.

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